



Manufacture and Supply Agreement

Docklands Light Railway Limited

and

Construcciones y Auxiliar de Ferrocarriles S.A.

for the delivery of the Trains procured as part of
the DLR Rolling Stock Replacement Project

2019

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THIS MANUFACTURE AND SUPPLY AGREEMENT is made on 2019

BETWEEN:

- (1) **DOCKLANDS LIGHT RAILWAY LIMITED** (Registered Number 02052677) a company incorporated under the laws of England and Wales whose registered office is at 55 Broadway, London, United Kingdom, SW1H 0BD ("**Purchaser**"); and
- (2) **CONSTRUCCIONES Y AUXILIAR DE FERROCARRILES S.A.** (Registered Number 239, on sheet number SS-329, Folio 144, Volume 983 of the Companies Register of the province of Guipúzcoa, Spain) a company incorporated under the laws of Spain whose registered office is at Jose Miguel Iturrioz 26, 20200 Beasain, Spain ("**Manufacturer**").

WHEREAS:

- (A) The Purchaser is the owner of the Network.
- (B) The Purchaser has determined that new rolling stock will be required to replace its existing fleet of Class B92 light rail vehicles and to support an expected increase in passenger numbers on the Network.
- (C) The Purchaser has held a competition, in accordance with the Utilities Contracts Regulations, to identify the most economically advantageous means of procuring the supply of the rolling stock which meets the necessary technical, financial and operational requirements.
- (D) The Parties wish to enter into this Agreement to record the terms on which the Manufacturer will design, build, test, commission and supply rolling stock and the related equipment for use in the provision of passenger services on the Network, and provide other related services.

IT IS AGREED:

1. **DEFINITIONS AND INTERPRETATION**

1.1 **Definitions**

In this Agreement the following words and expressions shall have the following meanings save where the context requires otherwise:

"Acceptance" means:

- (a) in respect of any Train, Provisional Acceptance or Qualified Provisional Acceptance of that Train; and
- (b) in respect of any Equipment, Equipment Acceptance of that Equipment,

and **"Accept"** and **"Accepted"** shall be construed accordingly;

"Acceptance Criteria" means the Pre-Provisional Acceptance Criteria, the Provisional Acceptance Criteria, the Final Acceptance Criteria, the Fleet Acceptance Criteria and the Equipment Acceptance Criteria and all or any of them as the context requires;

"Acceptance for Operations" or **"AfO"** has the meaning given in the TAP;

"Acceptance for Trial Operations" or **"AfTO"** has the meaning given in the TAP;

"Acceptance of Asset" or **"AoA"** has the meaning given in the TAP;

"Acceptance of Design" or "AoD" has the meaning given in the TAP;

"Acceptance Liquidated Damages" means liquidated damages payable by the Manufacturer pursuant to clauses 16.1 to 16.8;

"Acquired WIP" has the meaning given to such term in paragraph 4.1(e)(i) of schedule 20 (Termination Payments);

"ACS Date" means each of the First ACS Date, the Second ACS Date and the Third ACS Date in respect of each type of ACS/Overhaul Component;

"ACS/Overhaul Component" means each Part which has a maintenance interval of three (3) years or more as described and set out in the Train Maintenance Regime (including the Train Maintenance Plan);

"ACS Services" means the performance of asset condition surveys and related repair and/or replacement activities in respect of each type of ACS/Overhaul Component, as is more particularly described in paragraph 8 of part B of schedule 1 (The Services) of the FSA;

"Actual Mass" means the actual mass (measured under the conditions for which design mass is defined in BS:EN 15663: 2017) of a complete Train as presented for Acceptance;

"Additional Infrastructure Information" has the meaning given to such term in clause 8.4(a)(iii) (Documentation);

"Adjudicator" has the meaning given to such term in paragraph 4.3 of schedule 19 (Dispute Resolution Procedure);

"Advance Payment Bond" means an Advance Payment Bond issued by an Advance Payment Bond Provider in the form set out in appendix 1 to part A (Advance Payment Bond) of schedule 10 (Milestones and Security);

"Advance Payment Bond Provider" means a financial institution providing an Advance Payment Bond in accordance with the requirements of part A (Advance Payment Bond) of schedule 10 (Milestones and Security);

"Affiliate" means in relation to any person, any Holding Company or subsidiary of that person or any subsidiary of such Holding Company and subsidiary is to be construed in accordance with section 1159 of the Companies Act 2006, save that for the purposes of determining whether one entity is an Affiliate of another any transfer of shares by way of security or to a nominee of the transferor shall be disregarded;

"Agreement" means this Agreement including the schedules;

"Alternative Supplier" has the meaning given to such term in paragraph 4.3(a) of part A (Advance Payment Bond) of schedule 10 (Milestones and Security);

"APB Bond Amounts" means, in respect of each Advance Payment Bond from time to time, the maximum amounts that may be demanded under that Advance Payment Bond at such time;

"APB Provider Downgrade" means the long-term credit rating of any Advance Payment Bond Provider falls below "A" from Standard and Poor's Rating Services or the equivalent of "A" from any of the entities of equivalent international reputation that provide a long-term credit rating for such Advance Payment Bond Provider;

"APB Step-Down Date" has the meaning given to such term in paragraph 3.1 of part A (Advance Payment Bond) of schedule 10 (Milestones and Security);

"Applicable Laws and Standards" means, as the context may require, all or any Laws and Applicable Standards at any time or from time to time in force in the United Kingdom or the European Union and which are or may become applicable to this Agreement, any agreement or document referred to herein, any Purchased Item, the Training Services and/or the Manufacturer's obligations (including their performance) under this Agreement including, without prejudice to the generality of the foregoing, the requirements of the ORR, Environmental Laws, HSWA and ROGS;

"Applicable Standards" means:

- (a) the Specified Standards; and
- (b) all other Standards (but excluding DLR Standards) which apply to this Agreement, any agreement or document referred to in this Agreement, any Purchased Item, the Training Services and/or the Manufacturer's obligations (including their performance) under this Agreement and with which the Manufacturer should comply under Good Industry Practice, in each case to the extent that they do not conflict with the Specified Standards;

"Approval" means approval given by the Purchaser in accordance with the process set out in appendix 2 to schedule 5 (Contract Management) and **"Approved"** and **"Approval Process"** shall be construed accordingly;

"Approved Party" has the meaning given to such term in clause 5.1(b);

"As New Condition" means that the aesthetic condition (including branding) of:

- (a) the exterior of the Train is clean, has no corrosion, chips, scratches or dents, has no colour discolouration or fading, no labelling is missing, damaged or defaced and is free from Graffiti; and
- (b) the interior of the Train is clean with no chewing gum, litter or detritus, is free from Graffiti, has no colour discolouration or fading, has no corrosion, chips, scratches or dents, the flooring has no delamination, bubbles or ripples, no labelling is missing, damaged or defaced, all fixtures and fittings, arm rests and hand rails are in place, intact and in good condition and all seats are in as new condition with no detached or otherwise damaged or displaced upholstery;

"Assurance" means the provision of evidence given to the Purchaser to demonstrate that the requirements defined in this Agreement are being and have been fully realised and to obtain the Approval of the Purchaser, all in accordance with the procedure described in schedule 6 (Assurance) and **"Assure"** and **"Assured"** shall be construed accordingly;

"Assurance Period" means the period from the Commencement Date until the date of Fleet Acceptance, or as otherwise agreed between the Parties;

"Assurance Regime" means the regime for Progressive Assurance as set out in the TAP and as supplemented by each MTAP Approved by the Purchaser in accordance with the requirements of schedule 6 (Assurance) in relation to the Manufacturer's performance of its obligations under this Agreement as set out in schedule 6 (Assurance);

"Authorisation" has the meaning given to such term in paragraph 2 of schedule 5 (Contract Management) and Authorised shall be construed accordingly;

"Automatic Train Scanning System" means the automatic train scanning system to be provided by the Manufacturer to the Purchaser, as described in section 34.2 of the Train Technical Specification;

"AWE" means the Average Weekly Earnings: K5AE – manufacturing engineering and allied industries (excluding bonuses) index published on a monthly basis by the Office of National Statistics;

"Base Order" has the meaning given to such term in clause 6.1;

"Bid Costs" means [REDACTED];

"Bid Maintenance Cost" means the net present value of the cost of maintenance by the Purchaser of the Fleet with respect to the [REDACTED] design life of the Trains in accordance with the Train Maintenance Regime, being [REDACTED];

"Bill of Materials" means the document provided or to be provided by the Manufacturer in accordance with the terms of this Agreement, substantially in the form set out in part D of schedule 8 (Spares and Special Tools), and which shall include:

- (a) a description of each Part, Spare, Consumable and Special Tool;
- (b) quantity;
- (c) minimum order quantities required for Consumables;
- (d) price per Part, Spare and Special Tool and price per relevant quantity of Consumables;
- (e) part number;
- (f) warranty period; and
- (g) lead time for purchase after the initial build period;

"Bond Event" means:

- (a) an Insolvency Event of any Advance Payment Bond Provider;
- (b) an Advance Payment Bond ceases to be in full force and effect; or
- (c) any Advance Payment Bond Provider's obligations under an Advance Payment Bond are or become wholly or partly invalid or unenforceable;

"British Standards" means those standards produced by the British Standards Institution of 389 Chiswick High Road, London, United Kingdom;

"Business Hour(s)" means any hour on which banks are open for domestic business in the City of London;

"Cancellation Costs" has the meaning given in clause 4.5(a)(ii)(B);

"Capital Expenditure" means any expenditure which is treated as capital expenditure in accordance with generally accepted accounting principles in the United Kingdom from time to time;

"Capital Spares" means the list of Parts set out in part A of schedule 8;

"CCTV System" means the train-carried CCTV system for the Trains, as further described in Section 25 of the Train Technical Specification;

"Certificate of CP Satisfaction" means the certificate issued by the Purchaser in relation to the Base Order in the form, or substantially in the form, set out in schedule 21 (Pro Forma Certificates);

"Certificate of Technical Conformance" means a certificate issued by the Purchaser which records that the Train to which the certificate relates (or part of that Train, as the case may be) conforms with the relevant Train Technical Requirements;

"Change" means a change (whether by addition, amendment, substitution, omission or otherwise) of whatever nature to this Agreement including to:

- (a) any of the Train Technical Requirements;
- (b) the Trains or any item of Equipment; or
- (c) any term of this Agreement;

"Change Appraisal" means any written report delivered by the Manufacturer in accordance with paragraph 4.1 of part B (Purchaser Changes) of schedule 12 (Change Procedure) and containing the information specified in paragraph 4.2 of part B of schedule 12;

"Change Appraisal Instruction" means a written notification provided by the Purchaser pursuant to paragraph 3.3 of part B (Purchaser Changes) of schedule 12 (Change Procedure) and containing the information specified in paragraph 3.5 of part B of schedule 12;

"Change Confirmation Notice" means a notice issued (and counter-signed as appropriate) by the Purchaser to the Manufacturer pursuant to paragraph 5.4 of part B (Purchaser Changes) of schedule 12 (Change Procedure) instructing the Manufacturer to proceed with the implementation of a Change or part of a Change in accordance with paragraph 6 (Implementation of Purchaser Change) of part B of schedule 12;

"Change in Costs" means in respect of any Relevant Event, the effect of that Relevant Event (whether of a one-off or recurring nature, and whether positive or negative) upon the actual or anticipated costs, losses or liabilities of the Manufacturer (without double counting), including, as relevant, the following:

- (a) the reasonable costs of complying with the requirements of clauses 17 (Relief Events and Compensation Events) and 29 (Change in Law) and/or part B (Purchaser Changes) or part D (Compensation Changes) (save where such parts have an alternative mechanism for dealing with such costs) of schedule 12 (Change Procedure), including the reasonable costs of preparation of design and estimates;
- (b) the costs of employing additional staff;
- (c) the effects of costs on implementation of any insurance reinstatement in accordance with this Agreement, including any adverse effect on the insurance proceeds payable to the Manufacturer (whether arising from physical damage insurance (or its equivalent)) in respect of that insurance reinstatement and any extension of the period of implementation of the insurance reinstatement;
- (d) Capital Expenditure;
- (e) any deductible or increase in the level of deductible, or any increase in premium under or in respect of any insurance policy;
- (f) Direct Losses; and

- (g) the mark-up to be earned by the Manufacturer (as determined in accordance with appendix 3 (Manufacturer's Mark-up) to schedule 12 (Change Procedure),

provided that all costs other than limb (g) above shall be calculated in accordance with the principles set out in appendix 2 (Calculation of Change in Costs) to schedule 12 (Change Procedure);

"Change in Law" means the coming into effect after the date of this Agreement of:

- (a) Legislation (whether by means of any enactment, repeal or amendment), other than Legislation which on or before the date of this Agreement has been published in substantially the same form or with substantially the same effect as the relevant Legislation finally takes when it has legal effect:
 - (i) in a draft Bill as a part of a government department consultation paper;
 - (ii) in a Bill;
 - (iii) in a draft statutory instrument; or
 - (iv) published as a proposal in the Official Journal of the European Union or as a Common Position adopted by the European Parliament;
- (b) any Applicable Standards; or
- (c) any applicable judgment of a relevant court of law made after the date of this Agreement which creates or changes a binding precedent,

which in any such case affects the Purchaser, TfL, the Manufacturer, any Purchased Item or the Network;

"Change of Control" means if a person (or persons acting in concert) who directly or indirectly controls the Manufacturer (or any person having a direct or indirect interest in the Manufacturer) as at the date of this Agreement ceases to do so or if a person (or persons acting in concert) obtains directly or indirectly control of the Manufacturer (or any person having a direct or indirect interest in the Manufacturer) after the date of this Agreement and control for the purposes of this definition means:

- (a) the holding and/or possession of the legal or beneficial interest in, and/or the ability to exercise the majority of the voting rights applicable to, shares or securities of the Manufacturer (or any person having a direct or indirect interest in the Manufacturer) by the relevant person (or persons acting in concert); or
- (b) the power of the relevant person (or persons acting in concert) (directly or indirectly) to secure that the business and/or affairs and/or policies of the Manufacturer (or any person who has a direct or indirect interest in the Manufacturer) are conducted in accordance with the wishes of that person (or persons); or
- (c) the right of the relevant person (or persons acting in concert) to receive (directly or indirectly) on a winding up the greater part of the assets of the Manufacturer (or any person having a direct or indirect interest in the Manufacturer) which are available for distribution;

"Change Procedure" means the procedure for implementing Changes set out in schedule 12 (Change Procedure);

"Claim Appraisal" means any written report delivered by the Manufacturer in accordance with paragraph 3.1 of part D (Compensation Changes) of schedule 12 (Change

Procedure) and containing the information specified in paragraph 3.2 of part D of schedule 12;

"Claim Appraisal Instruction" means a written notification provided by the Purchaser pursuant to paragraph 2.1 of part D (Compensation Changes) of schedule 12 (Change Procedure) and containing the information specified in paragraph 2.2 of part D of schedule 12;

"Claim Confirmation Notice" means a notice issued by the Purchaser pursuant to paragraph 2.1 or 4.4 of part D (Compensation Changes) of schedule 12 (Change Procedure), setting out the agreed or determined position in respect of a Compensation Event;

"Commencement Date" means the date specified in the relevant Notice to Proceed as the date this Agreement becomes fully effective pursuant to clause 2.2(b);

"Compensation Event" means any of the following events:

- (a) the Purchaser's failure to issue a Notice to Proceed by the Commencement Date pursuant to clause 4.3(a);
- (b) the Purchaser's failure to comply with or delay in complying with its obligations to serve notices or documents pursuant to clause 7.9(a);
- (c) the Purchaser's failure to submit or delay in submitting the applications referred to in clause 11.2(d);
- (d) the Purchaser's failure to carry out or procure or delay in carrying out or procuring those things required by clause 11.4(b);
- (e) the Purchaser's failure to provide operators for testing in accordance with clause 14.2(b)(ii) and paragraph 7.6(b)(ii) of part 1 (Testing Requirements) of schedule 7 (Testing);
- (f) the Purchaser's failure to make available access to the Depot by the dates set out in the Key Programme Dates for the purposes of Provisional Acceptance of a Train where required pursuant to clause 15.1(a) on the basis set out in clause 15.3(b) (except to the extent that the Manufacturer has failed to comply with its obligations in clause 7.11 in relation to the Manufacturer Depot Warranty Works);
- (g) the Purchaser's breach of its obligations contained in clause 39.2 in respect of confidentiality;
- (h) the Purchaser's failure to give the Manufacturer the required notice pursuant to clause 46.1(e);
- (i) the Purchaser's failure to provide the access required for Network Testing in accordance with clause 14.2(a)(i) and paragraph 7.6(b)(i) of part 1 (Testing Requirements) of schedule 7 (Testing); and
- (j) subject to the terms of clause 29 (Change in Law), a Qualifying Change in Law,

except to the extent that any of the events listed above arises (directly or indirectly) as a result of any breach, wilful default or wilful act of the Manufacturer, the Service Provider or any of its Subcontractors, and provided that each of the events above shall be subject to the provisions of the relevant clause(s);

"Competent Authority" means any legislative, judicial, regulatory or administrative body or agency (or any subdivision of them) of the United Kingdom or the European Union

or any supranational body which has rule-making power or whose directions, instructions, rulings, laws or regulations are directly enforceable against a Party in connection with the performance of this Agreement (including, for the avoidance of doubt, the Purchaser);

"Competitor" means any person conducting large-scale manufacturing of rolling stock and supply of such rolling stock in or into the United Kingdom and who directly competes with the Manufacturer in the United Kingdom in such business;

"Component Life Warranty" means, in respect of each Major Component, the corresponding warranty period set out in column 2 of the table in clause 20.2;

"Component Overhaul Option" means the option for the Purchaser to require the Manufacturer to carry out an overhaul of each ACS/Overhaul Component or type of ACS/Overhaul Component in the manner specified for that type of ACS/Overhaul Component in the Train Maintenance Regime, at the price specified in appendix 7 of schedule 11 of the FSA, as is more particularly described in paragraph 9 of part B of schedule 1 (The Services) of the FSA;

"Concession Agreement" means the agreement dated 1 October 1996 and made between the Purchaser and the Concessionaire, together with the Project Documents as defined therein;

"Concessionaire" means City Greenwich Lewisham Rail Link plc;

"Confidential Information" means information of a technical, commercial or financial nature received from a Party to this Agreement or its agents, representatives or advisers including information received by the Manufacturer from the Purchaser, the Franchisee, the Concessionaire, TfL or its Affiliates;

"Consumables" means single use items that are routinely used in maintenance activities which wear out or are otherwise depleted and cannot be repaired;

"Contract Manager(s)" means either or both, as the case may be, of the Purchaser Contract Manager and/or the Manufacturer Contract Manager;

"Contract Price" means:

- (a) in relation to a Train forming part of the Base Order, the price to be paid in respect of such Train as set out in appendix 2 (Total Contract Price) to part B (Milestones) of schedule 10 (Milestones and Security);
- (b) in relation to any Purchased Items forming part of the Base Order (other than the Trains), the price to be paid in respect of such Purchased Items as set out in appendix 2 (Total Contract Price) to part B (Milestones) of schedule 10;
- (c) in relation to any Option Train Change, the Option Price to be paid in respect of that Option Train Change in accordance with clause 6.6 (Options),

as the same may be amended, supplemented or varied from time to time pursuant to the Change Procedure, together in each case with any VAT chargeable in accordance with clause 26.2;

"Contract Year" means each 12-month period starting on 1 April with the exception of the first Contract Year which shall commence on the Commencement Date and end on 31 March first occurring thereafter (the **"First Contract Year"**);

"Contracted Design Mass" means the Design Mass (as defined in BS:EN 15663: 2017) of a Train as specified in the Manufacturer Train Proposal, being a tare mass of [REDACTED];

"Contractual Acceptance Date" means:

- (a) in relation to a Train forming part of the Base Order, the intended date of issue of a Provisional Acceptance Certificate for such Train as set out in the relevant Key Programme Dates;
- (b) in relation to the Fleet, the intended date of issue of the Fleet Acceptance Certificate (excluding any Option Trains, unless the Contractual Fleet Acceptance Date has been amended to accommodate any such Option Trains) as set out in the relevant Key Programme Dates;
- (c) in relation to an item of Equipment, the intended date of issue of an Equipment Acceptance Certificate as set out in the relevant Key Programme Dates; and
- (d) in relation to an Option Train Change, the intended date for the item which is the subject of the Option to be Accepted by the Purchaser as set out in the relevant Key Programme Dates,

in each case as may be amended, supplemented or varied from time to time in accordance with this Agreement;

"Contractual Final Acceptance Date" means the intended date for Final Acceptance of each Train as set out in the relevant Key Programme Dates;

"Contractual Fleet Acceptance Date" means the date for Fleet Acceptance set out in the relevant Key Programme Dates;

"Contractual Provisional Acceptance Date" means in relation to a Train forming part of the Base Order, the intended date of issue of a Provisional Acceptance Certificate for such Train as set out in the relevant Key Programme Dates;

"Corporate IPRs" means the IPR owned by, or licensed to, the TfL Group described in part B (Corporate IPR) of schedule 23 (Intellectual Property) together with the standards specified in relation to the colour, sizing, quality, etc. of any logo or branding referred to in the document titled 'Docklands Light Rail Signs standard (Issue 2)';

"Corrective Action" has the meaning given to such term in clause 9.8(a);

"Court" has the meaning given to such term in paragraph 5.1 of schedule 19 (Dispute Resolution Procedure);

"CP Satisfaction Date" means the date specified in the relevant Certificate of CP Satisfaction as the date on which the First Payment Provisions becomes fully effective pursuant to clause 2.2(a);

"Currency Element" means, with respect to APB Bond Amounts, Required APB Bond Amounts, Initial APB Bond Amounts, any Milestone Payment or any other sum specifically expressed to be constituted by amounts in more than one currency, the total of the constituent amounts of such sum in each of Pounds Sterling, Euros and Canadian Dollars (as applicable);

"Data Subject" has the meaning given to such term in the European DP Legislation;

"DECC" means the Department of Energy & Climate Change;

"Declaration of Ineffectiveness" has the meaning given to such term in the Utilities Contracts Regulations;

"Default Interest" means interest on late payment at the Default Rate;

"Default Rate" means the Bank of England Base Rate plus two (2) per cent;

"DEFRA" means the Department for Environment, Food & Rural Affairs;

"Depot" means the facilities at Beckton depot where the Service Provider may undertake stabling, cleaning and maintenance of the Trains in accordance with the FSA, and/or such other facility or facilities as may be agreed between the Manufacturer and the Purchaser from time to time;

"Depot Contractor" means the contractor appointed by the Purchaser to undertake works to the Depot;

"Depot Testing Facilities" means the test facilities at the Depot for testing the Trains and Systems and for systems integration testing away from the Network, which simulate the conditions of the relevant parts of the Network, access to which is to be provided by the Purchaser as further described in schedule 7 (Testing);

"Design Authority" means the body with sufficient technical knowledge and capability to assess and assure the implementation of all works to an asset over and above those set out in the Train Maintenance Regime and which also has the authority to analyse, assess and make changes to the Train Maintenance Regime in relation to that asset;

"Design Authority Services" means the services to be performed by the Manufacturer as specified in part A of schedule 17 (Technical Services);

"Design Freeze Date" means in relation to a Permitted Design Change the date specified as the Design Freeze Date for that Permitted Design Change in appendix 1 (Permitted Design Changes) to schedule 6 (Assurance);

"Design Management Plan" has the meaning given to such term in paragraph 9 of schedule 5 (Contract Management);

"Design Submission" means the submission of design evidence in relation to a part of the Train or item of Equipment;

"Detailed Design Phase" has the meaning given to such term in schedule 6 (Assurance);

"Detailed Design Submissions" has the meaning given to such term in schedule 6 (Assurance);

"Direct Agreement" means each of:

- (a) the Thales Direct Agreement; and
- (b) each agreement to be entered into between each other relevant Key Subcontractor, the Purchaser and the Manufacturer, to be procured by the Manufacturer, in a form to be approved by the Purchaser, to include (i) warranties relating to work undertaken, (ii) Purchaser access to IPR, and (iii) step-in rights, as appropriate (and provided that the Manufacturer shall use all reasonable endeavours to negotiate each agreement with each Key Subcontractor and, in giving its approval to the form of each agreement, the Purchaser shall take into account the negotiated position of the Manufacturer). For the purposes of this definition the Parties acknowledge that the rights and obligations under such agreements may not mirror the rights and obligations under this Agreement;

"Direct Losses" means all Losses excluding Indirect Losses;

"Disclosed Contract" means each of:

- (a) the Franchise Agreement;
- (b) the FSA; and
- (c) the Concession Agreement;

"Disclosed Data" has the meaning given to such term in clause 53.2;

"Discriminatory Change in Law" means a Change in Law:

- (a) the terms of which apply expressly to:
 - (i) the Project and not to similar projects; and
 - (ii) the Manufacturer and not to other persons; or
- (b) which specifically refers to the design, manufacturing, supply, testing, commissioning, approval or maintenance of rolling stock;

"Disposal Notice" has the meaning given to such term in clause 23.2;

"Dispute" means a dispute or difference of whatsoever nature between the Manufacturer and the Purchaser in relation to the formation, operation or interpretation of, or otherwise in connection with, or arising out of, this Agreement;

"Dispute Resolution Procedure" means the procedure for resolving Disputes or Expert Disputes set out in schedule 19 (Dispute Resolution Procedure);

"DLR Database" means the Purchaser's asset management system, being a database containing, as a minimum, the following information relating to the Trains and Equipment provided or to be provided by the Manufacturer in accordance with clause 15 (Acceptance of Trains and Equipment):

- (a) each Train's car numbers; and
- (b) the maintenance and modification status of all Trains, Equipment, Systems, Major Components, Recurrent Defect Extension Components and Parts, with the Manufacturer's part numbers, to the extent that these are identified by the Manufacturer's part number;

"DLR Franchise" means the franchise for the operation of, inter alia, the DLR Train Services, awarded by the Purchaser from time to time;

"DLR Health, Safety and Environment Policy" means the Purchaser's Safety Management System: Management of HSE on Projects (Issue 3) (July 2016) set out in appendix 1 to schedule 16 (Health, Safety and Environment) as updated from time to time;

"DLR Infrastructure" means all of the Railway Infrastructure on the Network;

"DLR Operating Conditions" means an aspect of, or factor relating to, the operational environment of the Network and/or the Purchaser's business and operations, of which the Manufacturer is or becomes aware (or should have been aware as a prudent manufacturer and maintainer of rolling stock), including those relating to:

- (a) the interfaces set out in Section 1 of the Train Technical Specification;
- (b) the usage, operation and maintenance practices applied to the Trains by the Purchaser in accordance with the Manuals and the Train Maintenance Regime; and

- (c) any other aspect of the operational environment of which the Purchaser has made the Manufacturer aware either in the Train Technical Specification or otherwise,

which will, or is reasonably likely to, have an adverse impact on the performance, use, maintenance or design-life of a Train, item of Equipment, Major Component or Recurrent Defect Extension Component;

"DLR Rolling Stock Replacement Project" means the programme for the upgrade or replacement of railway assets, including rolling stock, on the Network;

"DLR Standards" means:

- (a) technical standards with which railway assets, or equipment used on or as part of railway assets, must conform; and
- (b) operating procedures with which the operators of railway assets must comply,

in each case as issued and maintained by on or behalf of the Purchaser;

"DLR Train Services" means the services (including all passenger services and diversionary routes) to be operated on the Network by the Franchisee as set out in the Franchise Agreement from time to time or any other services specified by the Purchaser;

"DLR Working Timetable" means the working timetable issued and updated by the Purchaser from time to time specifying the times of all the movements on the Network;

"DP Legislation" means the data protection laws and regulations applicable to the use and processing of Personal Data (including the European DP Legislation and the Data Protection Act 2018);

"ECT Bid" means the expected energy consumption of a Train, being [REDACTED] KWh/Train/km;

"ECT WLC" means the energy consumption in KWh/Train/km of a particular Train as determined by the Energy Consumption Test;

"Emergency Change" has the meaning set out in paragraph 1.3 of part B (Purchaser Changes) of schedule 12 (Change Procedure);

"Emergency Change Interim Payments" has the meaning set out in paragraph 1.4(a) of part B (Purchaser Changes) of schedule 12 (Change Procedure);

"Energy Consumption Test" or **"ECT"** means a test carried out in accordance with paragraph 8 of part 1 (Testing Requirements) of schedule 7 (Testing) which calculates the energy consumption of a Train thereby allowing measurement of the difference between (i) the ECT WLC for such Train; and (ii) the ECT Bid;

"Engineering Safety Management Plan" has the meaning given to such term in schedule 6 (Assurance);

"Enhanced Capital Allowances" means those allowances that are part of the capital allowances regime (specifically Sections 45A and 45H of the Capital Allowances Act 2001) with respect to expenditure incurred on energy-saving and water conserving plant and machinery, appearing on either:

- (a) the Energy Technology List (for energy saving technologies) managed on behalf of DECC by the Carbon Trust; or

- (b) the Water Technology List (for water conserving technologies) managed on behalf of DEFRA by AEA Technology,

each such list as may be updated from time to time;

"Environment" means all gases, air, vapours, liquids, water (whether above or below surface and including controlled waters as defined in section 104(1) of the Water Resources Act 1991 and within drains and sewers), land, property, surface and sub-surface soils, rocks, flora, fauna and other living organisms including man, wetlands, ecosystems and all other natural resources or part thereof including artificial or man-made buildings, structures or enclosures and electricity and human health and **"Environmental"** shall be construed accordingly;

"Environmental Damage" means any material injury or damage to the Environment resulting from the discharge, emission, escape or migration of any substance, energy, noise or vibration;

"Environmental Laws" means all Applicable Laws and Standards and all orders, regulations, ordinances, decrees or regulatory codes of practice, circulars, guidance notes and equivalent controls relating to or concerning the Environment;

"Equipment" means:

- (a) the Simulator;
- (b) the Capital Spares;
- (c) the Warranty Spares;
- (d) the Purchaser Fault Spares;
- (e) the Maintenance Spares;
- (f) the Special Tools;
- (g) the Mock-up;
- (h) the Portable Saloon Door Training Rig;
- (i) the Automatic Train Scanning System; and
- (j) the Manufacturer Depot Equipment;

"Equipment Acceptance" means, in relation to an item of Equipment, that such item complies fully with the relevant Equipment Acceptance Criteria as evidenced by and occurring upon the issue of an Equipment Acceptance Certificate for the relevant item of Equipment and **"Equipment Accepted"** shall be construed accordingly;

"Equipment Acceptance Certificate" means a certificate in the form or substantially in the form set out in part A of schedule 21 (Pro Forma Certificates) issued by the Purchaser in respect of an item of Equipment;

"Equipment Acceptance Criteria" means the criteria in clause 15.20 setting out the requirements to be satisfied in order for items of Equipment to achieve Acceptance;

"Equipment Acceptance Tests" means those tests to be carried out by the Manufacturer to demonstrate compliance of each item of Equipment with the relevant parts of this Agreement in accordance with schedule 7 (Testing);

"ERU" means the emergency response unit organisation within the Purchaser responsible for, amongst other things, recovering derailed and damaged trains that can no longer move without mechanical intervention;

"Escrow Agent" means NCC Group Escrow Limited or any successor or replacement to all or any of its functions or any other escrow agent as may be notified by the Purchaser to the Manufacturer;

"Escrow Agreement" means an agreement in the form or substantially in the form set out in part A (Software Escrow Agreement) of schedule 23 (Intellectual Property) between the Manufacturer, the Purchaser and the Escrow Agent;

"Escrow Material" has the meaning given to such term in clause 30.12(b);

"Escrow Release Event" means a release event designated as such in the Escrow Agreement;

"European DP Legislation" means the General Data Protection Regulation (Regulation (EU) 2016/679);

"European Standards" means those standards ratified by the European Committee for Standardization (CEN) of Rue de Stassart, 36, B 1050 Brussels, Belgium, the European Committee for Electrotechnical Standardization (CENELEC) of F-06921, Sophia Antipolis Cedex, France or the European Telecommunications Standards Institute (ETSI) of Rue de Stassart, 36, 1050 Brussels, Belgium;

"Event of Loss" means, with respect to a Train:

- (a) the actual or constructive total loss, or destruction of such Train or its being damaged beyond repair or rendered permanently unfit for normal use for any reason whatsoever, including any destruction or damage caused by a Force Majeure Event or requisition for use or hire which, in either case, results in an insurance settlement on the basis of a total loss;
- (b) the requisition of title, or other compulsory acquisition, requisition, expropriation or confiscation for any reason of such Train by any Competent Authority, other than the Purchaser or any member of the TfL Group, but excluding acquisition for use or hire not involving requisition of title; or
- (c) the condemnation, confiscation, capture, deprivation, seizure or requisition for use or hire of such Train (other than requisition for use or hire by any Competent Authority) which deprives any person permitted by this Agreement to have possession and/or use of such Train for more than 180 days;

"Exception Report" has the meaning given to such term in paragraph 7.1 of schedule 5 (Contract Management);

"Excluded Liabilities" has the meaning given to such term in clause 38.6;

"Expert Dispute" means a Dispute that has been designated by the Parties as an Expert Dispute pursuant to this Agreement, to be resolved by the procedure set out in paragraph 3 (Expert Determination) of schedule 19 (Dispute Resolution Procedure);

"Expiry Date" means, in respect of each Advance Payment Bond, the date specified as such in that Advance Payment Bond;

"Exterior Features" means those elements of the visible exterior design of the Trains (including branding, the overall shape, colours, materials, form and configuration and

constituent parts thereof) that are original and distinctive (meaning not commonplace in the relevant design field);

"FAB Alternative Supplier" has the meaning given to such term in paragraph 4.3(a) of part A2 (Fleet Acceptance Bond) of schedule 10 (Milestones and Security);

"FAB Step-Down Date" has the meaning given to such term in paragraph 3.1 of part A2 (Fleet Acceptance Bond) of schedule 10 (Milestones and Security);

"Fault" means in relation to a Train, item of Equipment or Part, that the Train, item of Equipment or Part is not Fault Free;

"Fault Free" means, in relation to any asset or service to be provided under this Agreement:

- (a) that it does not have a Technical Failure;
- (b) that it complies with all applicable requirements and provisions of this Agreement including the Train Technical Requirements;
- (c) that it complies with all Applicable Laws and Standards, Relevant Approvals or, to the extent that there is non-compliance with any Applicable Laws and Standards, that there is a valid derogation from such Applicable Laws and Standards;
- (d) where the item is a Train, that it is fit for operation and/or use in Unrestricted Passenger Revenue Earning Service and all Relevant Approvals have been obtained in respect of that Train; and
- (e) where the item is a Part, Spare, Consumable, any Major Component and/or any Recurrent Defect Extension Component, that if such Part, Spare, Consumable, Major Component and/or Recurrent Defect Extension Component is incorporated into a Train, such incorporation does not prevent such Train from complying with (a) to (d);

"Final Acceptance" means, in respect of each Train, that the Train complies with the Final Acceptance Criteria as evidenced by and occurring upon the issue of a Final Acceptance Certificate for that Train;

"Final Acceptance Certificate" means a certificate in the form or substantially in the form set out in part A of schedule 21 (Pro Forma Certificates) issued by the Purchaser in respect of any Train;

"Final Acceptance Criteria" means each of the criteria for issue of a Final Acceptance Certificate set out in clause 15.13;

"Final Purchaser Depot Works" means the works to be carried out by or on behalf of the Purchaser as set out in paragraph 2 of schedule 9 (Maintenance Facilities);

"Financiers" means any financiers providing finance to the Owner for the purposes of the Project;

"First ACS Date" means the date on which 30 per cent of the Overhaul Interval for the relevant type of ACS/Overhaul Component has elapsed;

"First Payment Provisions" means:

- (a) the obligations of the Manufacturer and the Purchaser in relation to the payment of the first Milestone Payment by the Purchaser to the Manufacturer in accordance with clauses 25 and 26 and schedule 10 (Milestones and Security); and

(b) the Manufacturer's obligations pursuant to Part A (Advance Payment Bond) of schedule 10 (Milestones and Security);

"Fixed Price Quotation" means a fixed price provided by the Manufacturer to the Purchaser for any Change in Costs, which may consist of a single lump sum payment, a number of payments or a change to the Milestone Payments;

"Fleet" means all of the Trains supplied or to be supplied pursuant to this Agreement;

"Fleet Acceptance" means satisfaction of the Fleet Acceptance Criteria in relation to the Fleet as evidenced by and occurring upon the issue of a Fleet Acceptance Certificate;

"Fleet Acceptance Bond" means a retention bond issued by a Fleet Acceptance Bond Provider in the form set out in appendix 1 to part A2 (Fleet Acceptance Bond) of schedule 10 (Milestones and Security);

"Fleet Acceptance Bond Event" means:

- (a) an Insolvency Event of the Fleet Acceptance Bond Provider;
- (b) a Fleet Acceptance Bond ceases to be in full force and effect; or
- (c) the Fleet Acceptance Bond Provider's obligations under a Fleet Acceptance Bond are or become wholly or partly invalid or unenforceable;

"Fleet Acceptance Bond Provider" means a financial institution providing a Fleet Acceptance Bond in accordance with the requirements of part A2 (Fleet Acceptance Bond) of schedule 10 (Milestones and Security);

"Fleet Acceptance Bond Provider Downgrade" means the long-term credit rating of the Fleet Acceptance Bond Provider falls below "A" from Standard and Poor's Rating Services or the equivalent of "A" from any of the entities of equivalent international reputation that provide a long-term credit rating for the Fleet Acceptance Bond Provider;

"Fleet Acceptance Bond Required Amount" means the minimum amount for which the Manufacturer is required to provide a Fleet Acceptance Bond from time to time in accordance with part A2 (Fleet Acceptance Bond) of schedule 10 (Milestones and Security), as specified in appendix 2 (Fleet Acceptance Bond Required Amounts) to part A2 (Fleet Acceptance Bond) of schedule 10 (Milestones and Security);

"Fleet Acceptance Certificate" means a certificate in the form or substantially in the form set out in part A of schedule 21 (Pro Forma Certificates) issued by the Purchaser in respect of the Fleet as to compliance of the Fleet with the Fleet Acceptance Criteria;

"Fleet Acceptance Criteria" means each of the criteria for issue of a Fleet Acceptance Certificate set out in clause 15.17;

"Fleet Maintenance Cost" has the meaning given to such term in clause 15.15(b);

"Fleet Support Agreement" or "FSA" means the agreement under which the Service Provider provides additional spares and consumables and undertakes certain technical support services in respect of the Trains dated on or around the date hereof;

"FM Affected Party" has the meaning given to such term in clause 33.2;

"FOI Information Request" means a request under the FOI Legislation for information recorded in any form held by the Purchaser or held by the Manufacturer on behalf of the Purchaser;

"FOI Legislation" means the Freedom of Information Act 2000, all regulations made under it and the Environmental Information Regulations 2004 and any amendment or re-enactment of any of them and any guidance issued by the Information Commissioner in relation to such Legislation;

"Force Majeure Event" means the occurrence after the date of this Agreement of:

- (a) act of terrorism;
- (b) war, invasion, acts of foreign enemies, hostilities, civil war, revolutions, insurrection, riots or civil unrest;
- (c) nuclear, chemical or biological contamination unless the source or cause of the contamination is the result of actions of the Manufacturer;
- (d) pressure waves caused by devices travelling at supersonic speeds;
- (e) earthquake, fire, explosion, lightning, storm, tempest, flood, or other similar weather conditions; and/or
- (f) strike, blockade, lock-out or labour dispute of whatever nature (provided that a strike, blockade, lock-out or labour dispute involving any staff or employees of the FM Affected Party or any Subcontractor shall not be treated as a Force Majeure Event unless it is part of a nationwide or rail industry-wide strike),

save to the extent that such event is caused by the Manufacturer, any Subcontractor, or their respective agents, officers and/or employees;

"Foreseeable Changes in Law" means any Change in Law which was reasonably foreseeable by a prudent manufacturer of rolling stock as at the date of this Agreement with such a degree of certainty and detail as to be reasonable for such manufacturer to have reflected the effects of such Change in Law in the supply of the Trains and Equipment, as set out in schedule 30;

"Franchise Agreement" means the franchise agreement entered into between the Purchaser and the Franchisee for inter alia the operation of the DLR Train Services on the Network, as amended or replaced from time to time;

"Franchisee" means the person(s) appointed by the Purchaser to deliver, inter alia, the DLR Train Services;

"FSA IPR" has the meaning given to such term in clause 30.3;

"FSA Purchased Items" has the meaning given to such term in the FSA;

"FSA Services Commencement Date" means the Services Commencement Date (as defined in the FSA);

"Free Issue Materials" means those materials provided by the Purchaser to the Manufacturer at no cost to the Manufacturer for inclusion in the Trains on the basis set out in clause 24.1;

"General Change in Law" means a Change in Law which is not a Discriminatory Change in Law;

"Ghost Operations Testing" means testing of the Trains on the Network, as more specifically described in paragraph 7 of part 1 (Testing Requirements) of schedule 7 (Testing);

"Good Industry Practice" means the exercise by the Manufacturer of that degree of skill, care, diligence, prudence, foresight and practice which would ordinarily be expected of a skilled and experienced contractor engaged in the relevant discipline;

"Graffiti" means painted, written, sprayed, etched or scratched graffiti and/or stickers;

"Greater London Authority" or "GLA" means the Greater London Authority, a body corporate established by section 1 of the Greater London Authority Act 1999 and its successors;

"Group" means, in relation to any company (which for the purposes of this Agreement shall include Tfl), that company and any group undertaking of that company from time to time and all of them and each of them as the context admits; for which purposes group undertaking has the meaning given to such term by section 1161 of the Companies Act 2006;

"Guarantee" means a guarantee provided or to be provided by the Guarantor in favour of the Purchaser in the form set out in schedule 22 (Form of Parent Company Guarantee);

"Guarantee Event" means, at any time at which Construcciones y Auxiliar de Ferrocarriles S.A. is not the Manufacturer:

- (a) the Guarantee ceases to be in full force and effect; or
- (b) the Guarantor's obligations under the Guarantee are or become wholly or partly invalid or unenforceable;

"Guarantor" means, at any time at which Construcciones y Auxiliar de Ferrocarriles S.A. is not the Manufacturer, Construcciones y Auxiliar de Ferrocarriles S.A., a company incorporated in Spain, whose registered office is at 26 José Miguel Iturrioz Street, 20200, Beasain (Guipúzcoa), Spain;

"HMRI" means Her Majesty's Railway Inspectorate and any successor body;

"Holding Company" has the meaning given to such term in section 1159 of the Companies Act 2006, save that for the purposes of determining whether one entity is a Holding Company of another, any transfer of shares by way of security or to a nominee of the transferor shall be disregarded;

"HSWA" means the Health and Safety at Work Act 1974;

"Immediately Effective Clauses" means clauses 1 (Definitions and Interpretation), 2 (Commencement and Conditions Precedent), 3 (Representations and Warranties), 4 (Notice to Proceed and Voluntary Termination), 30 (Intellectual Property Rights), 33 (Force Majeure), 34 (Force Majeure Termination/Declaration of Ineffectiveness), 35 (Prohibited Act and Safety Breach Termination), 36 (Consequences of Termination), 38 (Indemnities and Limitations on Liability), 39 (Confidentiality), 40 (Freedom of Information), 41 (Dispute Resolution), and 43 (Safety, Quality and Environmental Plan) to 63 (Governing Law and Jurisdiction);

"Indemnified Parties" means:

- (a) the Purchaser;
- (b) the Owner;
- (c) any Franchisee;
- (d) the Concessionaire; and

(e) TfL,

and, in each case, all or any of their respective Affiliates, employees, servants, agents, directors, officers, contractors and subcontractors and **"Indemnified Party"** shall mean either of them, as appropriate;

"Indemnifying Party" means a Party that has agreed under the terms of this Agreement to indemnify another person on the basis set out in this Agreement;

"Independent Auditor" has the meaning given to such term in paragraph 7.6 of schedule 20 (Termination Payments);

"Indexation Base Month" means April 2017;

"Indexed" means indexed in accordance with clause 1.2(p);

"Indirect Losses" means loss of profits, loss of use, loss of production, loss of business, loss of business opportunity, consequential loss and indirect loss of any nature;

"Ineffective" and **"Ineffectiveness"** have the meanings given to such terms in the Utilities Contracts Regulations and shall be construed accordingly;

"Information Security Policy" means the Purchaser's information security policy as may be updated from time to time;

"Infrastructure Manager" means the person taking on the role of infrastructure manager in respect of Railway Infrastructure under the ROGS;

"Infringement" shall have the meaning given to such term in clause 30.9;

"Initial APB Bond Amounts" shall have the meaning given to such term in paragraph 1.1 of part A (Advance Payment Bond) of schedule 10 (Milestones and Security);

"Initial Change Appraisal" means any written report delivered by the Manufacturer in accordance with paragraph 2.1 of part B (Purchaser Changes) of schedule 12 (Change Procedure);

"Initial Claim Appraisal" means any written report delivered by the Manufacturer in accordance with paragraph 1.1 of part D (Compensation Changes) of schedule 12 (Change Procedure);

"Initial Purchaser Depot Works" means the works to be carried out by or on behalf of the Purchaser as set out in paragraph 1 of schedule 9 (Maintenance Facilities);

"Insolvency Event" in relation to any person means any of the following:

- (a) such person stopping or suspending or threatening to stop or suspend payment of all or a material part of its debts, or becoming unable to pay its debts, or being deemed unable to pay its debts under section 123(1) or (2) of the Insolvency Act 1986;
- (b) any step being taken by any person with a view to the winding up of such person or any person presenting a winding-up petition in respect of such person which is not dismissed within seven (7) days;
- (c) any step being taken to enforce security over or a distress execution or other similar process being levied or served out against the whole or a substantial part of the assets or undertaking of such person;

- (d) a receiver, administrative receiver, administrator, compulsory manager or other similar officer being appointed in respect of such person;
- (e) such person ceasing or threatening to cease to carry on all or a material part of its business, except for the purpose of and followed by a reconstruction, amalgamation, reorganisation, merger or consolidation on terms approved by the Purchaser (in its absolute discretion) before that step is taken;
- (f) the making by such person of a general assignment or an arrangement or composition with or for the benefit of creditors; or
- (g) any event occurring which, under the laws of any relevant jurisdiction other than England and Wales, has an analogous or equivalent effect to any of the events listed above;

"Insolvent" means:

- (a) in the case of a company that it has suffered, or is the subject of, an Insolvency Event that is current and/or has not been dismissed or fully remedied; or
- (b) in the case of an individual that:
 - (i) he has had a bankruptcy order or an interim order made against him and such order has not been discharged;
 - (ii) he has entered into a composition with his creditors or a scheme of arrangement of his affairs; or
 - (iii) there is current an appointment of an interim receiver in respect of his property; or
- (c) in either case that circumstances exist or proceedings have been instituted (and not dismissed) or events have occurred or are occurring outside the jurisdiction of the courts of England which have an analogous effect to any referred to in paragraphs (a) and (b) above;

"Integration Testing" has the meaning given to such term in paragraph 4 of schedule 7 (Testing);

"Intellectual Property Rights" or "IPR" means all rights in or in relation to any and all patents, utility models, trade and service marks, rights in designs, get-up, trade, business or domain names, copyrights, topography rights (whether registered or not and any applications to register or rights to apply for registration of any of the foregoing), rights in inventions, know-how, trade secrets and other confidential information, rights in databases and all other intellectual property rights of a similar or corresponding character which may now or in the future subsist in any part of the world;

"Interior Features" means those elements of the visible interior design of the Trains (including the overall internal layout, seating positions, layout, fittings, "look and feel", colours, materials and branding) that are original and distinctive (meaning not commonplace in the relevant design field);

"Internal Depot Fit-Out Minimum Specification" means the minimum specification required for the internal fit-out of the Final Purchaser Depot Works as set out in part C of schedule 9 (Maintenance Facilities);

"International Standards" means those standards produced by the International Standards Organisation of 1, ch. de la Voie-Creuse, CP56, CH-1211 Geneva 20,

Switzerland or the International Electrotechnical Commission of 3 Rue de Varembe, PO Box 131, CH1211, Geneva 20, Switzerland;

"Item Code" has the meaning given to such term in part D (Pro Forma Bill of Materials) of schedule 8 (Spares and Special Tools);

"Irrecoverable VAT" has the meaning given to it in clause 29.6;

"Joint Development" means a project or development relating to the DLR Rolling Stock Replacement Project and the performance of (i) the Manufacturer's obligations under this Agreement; and/or (ii) the Service Provider's obligations under the FSA, which:

- (a) is jointly undertaken by the Parties;
- (b) is agreed in writing by both Parties in advance of its commencement to be a joint development;
- (c) involves contributions from both Parties throughout the development, including the provision of staff from each Party to work directly on the development; and
- (d) requires sign off from both Parties before the development is complete;

"Key Posts" means those key roles within the Manufacturer organisation listed in appendix 1 (Key Posts) to schedule 5 (Contract Management) to be undertaken only by other persons where approved by the Purchaser in advance in accordance with paragraph 3.4 of schedule 5 (Contract Management);

"Key Programme Dates" means the agreed programme of key dates and milestones relating to the Manufacturer's obligations under this Agreement set out in part A of schedule 3 (Project Programme);

"Key Subcontract" means a Subcontract for the supply of a system listed in schedule 11 (Subcontracts);

"Key Subcontractor" means each counterparty to a Key Subcontract (other than the Manufacturer);

"Law" means any Legislation or common law of the United Kingdom, any exercise of the Royal Prerogative, and any enforceable community right within the meaning of section 2 of the European Communities Act 1972 in each case enforceable in the United Kingdom or any other principles of law or equity established by the Courts;

"LD Notice" has the meaning given to such term in clause 16.9;

"Legislation" means any Act of Parliament or subordinate legislation within the meaning of section 21(1) of the Interpretation Act 1978, any exercise of the Royal Prerogative, and any enforceable community right within the meaning of section 2 of the European Communities Act 1972 in each case enforceable in the United Kingdom (and including any modification, amendment or re-enactment of such Legislation from time to time and any instruments, orders or regulations made pursuant thereto);

"LFEPA" means the London Fire and Emergency Planning Authority and any successor body;

"Line Replaceable Unit" or **"LRU"** means the line replaceable units defined in Section 34.1 of the Train Technical Specification;

"Listed Person" has the meaning given to such term in clause 47.1(b);

"Losses" means any claims, proceedings, losses, liabilities, suits, judgements, costs, expenses, Taxes, penalties or fines whether arising under statute, contract or at common law;

"Lost Train" has the meaning given to such term in clause 22.1;

"Mainline Test Track" means the section of the Network between the Depot and Beckton station on which the Manufacturer will conduct Mainline Test Track Testing, and access to which is to be provided by the Purchaser as further described in part 1 (Testing Requirements) of schedule 7 (Testing);

"Mainline Test Track Testing" means testing of the Trains on the Mainline Test Track, as more specifically described in paragraph 7 of part 1 (Testing Requirements): of schedule 7 (Testing);

"Maintenance Cost" has the meaning given to such term in clause 15.15(c);

"Maintenance Spares" means the pool of Spares and Consumables supplied or to be supplied by the Manufacturer for the Purchaser to carry out Routine Maintenance on the Trains and Equipment for the whole of the Train Warranty Period in accordance with the Train Maintenance Regime including, without limitation, as described in part A (Capital Spares) of schedule 8 (Spares and Special Tools) and **"Maintenance Spare"** shall mean any one of them;

"Major Component" means each of the items set out in column 1 of the table set out in clause 20.2;

"Mandatory Modification" means a Modification required by Applicable Laws and Standards;

"Manuals" means the documents set out in paragraphs 1 to 18 of schedule 28 (Technical Information) which fully describe how the Trains and Equipment function and how they should be operated, serviced, maintained, repaired and overhauled (including in the case of the Mock-Up and the Simulator, any relocation instructions and installation instructions) provided or to be provided by the Manufacturer pursuant to clause 6.5;

"Manufacturer Change" has the meaning given to such term in paragraph 1.1 of part C (Manufacturer Changes) of schedule 12 (Change Procedure);

"Manufacturer Change Notice" has the meaning given to such term in paragraph 1.1 of part C (Manufacturer Changes) of schedule 12 (Change Procedure);

"Manufacturer Compensation Proposal" has the meaning given to such term in paragraph 5.1(a) of part D (Compensation Changes) of schedule 12 (Change Procedure);

"Manufacturer Confidential Information" means the Confidential Information listed in schedule 18 (Manufacturer Confidential Information);

"Manufacturer Contract Manager" has the meaning given to such term in paragraph 1.3 of schedule 5 (Contract Management);

"Manufacturer Cost Proposal" has the meaning given to such term in paragraph 6.1 of part B (Purchaser Changes) of schedule 12 (Change Procedure);

"Manufacturer Depot Equipment" means the specialised maintenance equipment to be provided by the Manufacturer for installation at the Depot, as described in part B of schedule 9 (Maintenance Facilities);

"Manufacturer Depot Warranty Works" has the meaning given to such term in clause 7.11(c);

"Manufacturer Event of Default" means any of the events or circumstances listed in clause 31.1;

"Manufacturer Fault" means a Fault which is not a Purchaser Fault;

"Manufacturer Group" means the Manufacturer, the Service Provider, the Guarantor and any member of their/its Group from time to time;

"Manufacturer IPR" means the IPR, whether existing at the date of this Agreement or arising hereafter, that is owned by the Manufacturer or any of its Affiliates;

"Manufacturer Price" means the Total Contract Price less the Thales Initial Price;

"Manufacturer Serious Infringement" has the meaning given to such term in clause 34.4(b)(i);

"Manufacturer Termination Notice" has the meaning given to such term in clause 32.3;

"Manufacturer Train Proposal" means the Manufacturer's proposal in schedule 2 (Manufacturer Train Proposal), setting out how the Manufacturer proposes to achieve the requirements of the Train Technical Specification;

"Manufacturer's Premises" means the Manufacturer's premises at each of:

- (a) Jose Miguel Iturrioz, 26, 20200 Beasain, Spain; and
- (b) Avenida de Cataluña, 299, 50014 Zaragoza, Spain;

"Manufacturer's Records" has the meaning given to such term in clause 9.3(a)(i);

"Manufacturing Tooling" means:

- (a) jigs, fixtures and patterns required for forming and/or moulding parts or laminating elements, dies for hot and/or cold treated shape sections and tooling for pressed parts; and
- (b) all other tools and/or equipment used in the production and testing of the Trains and Equipment, including all related software, manuals and other related documentation;

"Maximum Liability" has the meaning given to such term in clause 38.5;

"Mayor" means the Mayor of London from time to time;

"MDBSAF" means the mean distance between Service Affecting Failures;

"MDBTSAF" means the mean distance between Test Service Affecting Failures;

"Milestone" means the completion of a specified activity or collection of activities or the occurrence of an event defined or identified as such in the relevant Schedule of Milestones;

"Milestone Payment" means the aggregate sums payable to the Manufacturer (which may be made up of multiple Currency Elements) in respect of each Milestone in accordance with schedule 10 (Milestones and Security);

"Milestone Payment Invoice" has the meaning given to such term in paragraph 5.1 of part B (Milestones) of schedule 10 (Milestones and Security);

"Minimum Fleet" means the first ■ Trains required under the Project Programme;

"Minimum Fleet Handback Date" has the meaning given to such term in clause 31.6(c);

"Minimum Fleet Handback Notice" has the meaning given to such term in clause 31.6;

"Mock-up" means the mock-up of a Train to be delivered by the Manufacturer in accordance with the Train Technical Requirements and the terms of this Agreement;

"Modification" means any change, modification or addition to any Train or item of Equipment;

"MSA Information" has the meaning given in clause 39.9(a);

"MSA Spares" means the Spares and the Option Spares;

"MTAP" has the meaning given in 4.2(a) of schedule 6 (Assurance);

"Network" means the Docklands Light Railway (including any extension, enhancement or modification on the date of its completion) of which the Purchaser is the owner;

"Network Testing" means Mainline Test Track Testing and Ghost Operations Testing;

"Notice of Milestone Achievement" has the meaning given to such term in paragraph 3.1 of part B (Milestones) of schedule 10 (Milestones and Security);

"Notice to Proceed" has the meaning given to such term in clause 4.1;

"Obsolescence" means the obsolescence of any Part, Spare, Consumable or Special Tool or item of Equipment whether this is due to technical, economic, availability, statutory or any other relevant matters;

"OEM" means the original equipment manufacturer;

"Office of Rail and Road" or "ORR" means the Office of Rail and Road from time to time established under the Railways and Transport Safety Act 2003 and includes any successor to all or any of its functions;

"Operationally Critical Matter" means any matter that may materially affect the Purchaser's or the Franchisee's ability to provide the DLR Train Services in accordance with the DLR Working Timetable;

"Option" means any of the options exercisable by the Purchaser contained in clause 6.6;

"Option 1 Contract Price Table" means the table as set out in appendix 4 (Option 1 Contract Price Table) to part B (Milestones) of schedule 10 (Milestones and Security);

"Option 1 Re-Profiled Milestone Payment" means the amounts specified with respect to each Milestone in column (3) of the Option 1 Re-Profiled Schedule of Milestones;

"Option 1 Re-Profiled Required APB Bond Amounts" means the amounts specified with respect to each Milestone in column (4) of the Option 1 Re-Profiled Schedule of Milestones;

"Option 1 Re-Profiled Schedule of Milestones" means the document as set out in appendix 3 (Option 1 Re-Profiled Schedule of Milestones) to part B (Milestones) of schedule 10 (Milestones and Security);

"Option 2 Contract Price Table" means the table as set out in appendix 6 (Option 2 Contract Price Table) to part B (Milestones) of schedule 10 (Milestones and Security);

"Option 2 Re-Profiled Milestone Payment" means the amounts specified with respect to each Milestone in column (3) of the Option 2 Re-Profiled Schedule of Milestones;

"Option 2 Re-Profiled Required APB Bond Amounts" means the amounts specified with respect to each Milestone in column (4) of the Option 2 Re-Profiled Schedule of Milestones;

"Option 2 Re-Profiled Schedule of Milestones" means the document as set out in appendix 5 (Option 2 Re-Profiled Schedule of Milestones) to part B (Milestones) of schedule 10 (Milestones and Security);

"Option Notice" means a notice on the terms set out in part A of schedule 21 (Pro Forma Certificates) issued by the Purchaser to the Manufacturer to procure Option Trains pursuant to clause 6.6(a);

"Option Price(s)" means the prices in respect of each Option as set out in part C (Options for supply of further Trains and Equipment) of schedule 10 (Milestones and Security);

"Option Spares" means supplementary Spares supplied or to be supplied by the Manufacturer pursuant to the exercise of an Option by the Purchaser in accordance with clauses 6.6(a) or 6.6(b);

"Option Spares/Special Tools Notice" means a notice on the terms set out in part A of schedule 21 (Pro Forma Certificates) issued by the Purchaser to the Manufacturer to procure Option Spares and/or Option Special Tools required pursuant to clause 6.6(b);

"Option Special Tools" means supplementary Special Tools supplied or to be supplied by the Manufacturer pursuant to the exercise of an Option by the Purchaser in accordance with clause 6.6(b);

"Option Train" means additional Trains supplied or to be supplied by the Manufacturer pursuant to the exercise of an Option by the Purchaser in accordance with clause 6.6(a);

"Option Train Change" means a Purchaser Change which requires Option Trains and/or Option Spares and/or Option Special Tools to be manufactured, tested, commissioned and delivered in accordance with the terms of this Agreement;

"Overhaul Interval" means, in respect of any ACS/Overhaul Component, each interval between planned overhauls as set out in the Train Maintenance Regime (including the Train Maintenance Plan), the first of which ends on the date which is the day before the day on which the first planned overhaul is due to be carried out in respect of an ACS/Overhaul Component as set out in the Train Maintenance Regime (including the Train Maintenance Plan);

"Owner" means the Purchaser or such other person nominated by the Purchaser in accordance with clauses 18.1 and 18.3 to take title to, have supplied to it, and own, any Purchased Items;

"Part" means any component (including Major Components and Recurrent Defect Extension Components), furnishing or equipment forming part of a Train or item of Equipment from time to time;

"Party" means each of:

- (a) the Purchaser; and
- (b) the Manufacturer,

and **"Parties"** shall be construed accordingly;

"Permitted Design Change" means any of the changes to the design of the Trains, Equipment or related equipment identified as **"Permitted Design Changes"** in appendix 1 (Permitted Design Changes) of schedule 6 (Assurance);

"Permitted Party" has the meaning given to such term in clause 45.3(a);

"Permitted Use" means the operation of the Trains on any part of the Network, and the operation of the Simulator, in each case in accordance with all Applicable Laws and Standards, Relevant Approvals and the Manuals, subject to any derogations granted by the Purchaser or the Franchisee, in each case acting as Infrastructure Manager for the relevant part of the Network;

"Persistent Breach" has the meaning given to such term in clause 31.3;

"Personal Data" means personal data as defined in the DP Legislation which is supplied to the Manufacturer by the Purchaser or obtained by the Manufacturer in the course of performing its obligations under this Agreement;

"Plan" means any of the plans described as such in this Agreement that are required to be produced by the Manufacturer in accordance with this Agreement;

"Planned FSA Services Commencement Date" means the date which is two (2) years following the date of Provisional Acceptance or Qualified Provisional Acceptance (whichever occurs first) of the last Train (excluding any Option Trains) on which it is planned that Services commence under the FSA;

"Portable Saloon Door Training Rig" means the portable saloon door training rig to be provided by the Manufacturer to the Purchaser, as described in section 33.3 of the Train Technical Specification;

"PPI" means the "MB56" figure published on a monthly basis by the Office of National Statistics;

"Preconditions" has the meaning given to such term in clause 15.10;

"Preconditions Retention" has the meaning given to such term in clause 15.11(a);

"Preconditions Timetable" has the meaning given to such term in clause 15.10;

"Pre-Provisional Acceptance" means, in relation to any Train, that the Train complies fully with the Pre-Provisional Acceptance Criteria as evidenced by and occurring upon the issue of a Pre-Provisional Acceptance Certificate for that Train, and **"Pre-Provisionally Accept"** and **"Pre-Provisionally Accepted"** shall be construed accordingly in each case;

"Pre-Provisional Acceptance Certificate" means a certificate in the form set out in part A of schedule 21 (Pro Forma Certificates), issued by the Purchaser in respect of a Train, as to compliance by such Train with the Pre-Provisional Acceptance Criteria;

"Pre-Provisional Acceptance Criteria" means, in respect of any Train, the criteria for issue of a Pre-Provisional Acceptance Certificate as set out in clause 15.2;

"Primary Assembly and Manufacture" means the assembly of each modular body shell, the installation of all Systems within each body shell, and the routine testing of all final assembled vehicles;

"Processing" has the meaning given in the DP Legislation; **"Process"**, **"Processed"** and **"Sub-Process"** shall be construed accordingly;

"Progressive Assurance" means the process by which the Manufacturer provides evidence on a progressive basis to the Purchaser throughout the Assurance Period to demonstrate to the Purchaser that the Manufacturer has understood the Train Technical Requirements and it is carrying out its obligations and delivering each Purchased Item in accordance with the Train Technical Specification, all Applicable Laws and Standards, Relevant Approvals, Good Industry Practice, safety and quality requirements and all other requirements of this Agreement;

"Prohibited Act" means:

- (a) offering, giving or agreeing to give any servant, agent, contractor or representative of a Public Sector Body any gift or consideration of any kind as an inducement or reward:
 - (i) for doing or not doing (or having done or not having done) any act in relation to the obtaining or performance of this Agreement or any other contract with a Public Sector Body; or
 - (ii) for showing or not showing favour or disfavour to any person in relation to this Agreement or any other contract with a Public Sector Body;
- (b) entering into this Agreement or any of the Project Documents or any contract with a Public Sector Body in connection with which commission has been paid or has been agreed to be paid by the Manufacturer or on its behalf, or to its knowledge, unless the terms and conditions of any such contract for the payment thereof have been disclosed in writing to the Purchaser;
- (c) committing any offence:
 - (i) under the Bribery Act 2010;
 - (ii) under law created in respect of fraudulent acts; or
 - (iii) at common law in respect of fraudulent acts in relation to this Agreement or any other contract with a Public Sector Body;
- (d) defrauding or attempting to defraud or conspiring to defraud a Public Sector Body; or
- (e) without prejudice to limbs (a) to (d) above, committing any of the offences set out in regulation 57(1) of the Public Contract Regulations 2015;

"Prohibited Act Notice" has the meaning given to such term in clause 35.2;

"Project" means the Works provided or to be provided under this Agreement and the provision of the Services by the Service Provider in accordance with the FSA;

"Project Documents" means:

- (a) this Agreement;
- (b) the FSA;

- (c) each of the Direct Agreements;
- (d) the Escrow Agreement;
- (e) any Guarantee;
- (f) any Advance Payment Bond; and
- (g) any Fleet Acceptance Bond;

"Project Execution Plan" has the meaning given to such term in paragraph 9 of schedule 5 (Contract Management);

"Project Office" has the meaning given to such term in clause 7.8(b);

"Project Programme" means the programme set out in part B of schedule 3 (Project Programme) as may be amended from time to time in accordance with this Agreement;

"Project Progress Report" has the meaning given to such term in paragraph 7.1 of schedule 5 (Contract Management);

"Project Review Meeting" has the meaning given to such term in paragraph 8.1 of schedule 5 (Contract Management);

"Provisional Acceptance" means, in relation to any Train, that the Train complies fully with the Provisional Acceptance Criteria as evidenced by and occurring upon the issue of a Provisional Acceptance Certificate for that Train, and Provisionally Accept and Provisionally Accepted shall be construed accordingly in each case;

"Provisional Acceptance Certificate" or "PAC" means a certificate in the form set out in part A of schedule 21 (Pro Forma Certificates), issued by the Purchaser in respect of a Train, certifying that such Train complies with the Provisional Acceptance Criteria;

"Provisional Acceptance Criteria" means, in respect of any Train, each of the criteria for issue of a Provisional Acceptance Certificate set out in clause 15.4;

"Public Sector Body" means all Ministers of the Crown, government departments, Crown agencies and authorities, local authorities or similar public sector bodies and any body corporate owned or controlled by any of them (including for the avoidance of doubt the Purchaser, TfL and the SoS);

"Purchased Item" means each Train and item of Equipment ordered from the Manufacturer in accordance with this Agreement;

"Purchaser Change" has the meaning given to such term in paragraph 1.1 of part B (Purchaser Changes) of schedule 12 (Change Procedure);

"Purchaser Change Notice" has the meaning given to such term in paragraph 1.2 of part B (Purchaser Changes) of schedule 12 (Change Procedure);

"Purchaser Contract Manager" has the meaning given to such term in paragraph 1.1 of schedule 5 (Contract Management);

"Purchaser Depot Works" means the Initial Purchaser Depot Works and the Final Purchaser Depot Works;

"Purchaser Event of Default" means any of the events or circumstances listed in clause 32.1;

"Purchaser Fault" means:

- (a) a Fault which results from the Franchisee or the Purchaser:
 - (i) operating the relevant Train or item of Equipment materially other than in accordance with the Permitted Use; or
 - (ii) maintaining the relevant Train or item of Equipment materially other than in accordance with the Manuals; or
- (b) a Fault which results from damage to a Train whilst that Train is in the Purchaser's or the Franchisee's (or any subcontractors of the Purchaser or the Franchisee other than the Manufacturer or Service Provider) care, custody or control;
- (c) a Fault which results from damage caused to a Train (as proved by the Manufacturer and demonstrated in written evidence from a reputable and independent third party with relevant experience) as a direct result of any Railway Infrastructure being in a condition which is worse than that to be expected of such Railway Infrastructure which is being maintained by a competent maintenance contractor having regard to:
 - (i) the standards applicable to such Railway Infrastructure (being DLR Standards); and
 - (ii) the condition of such Railway Infrastructure (to the extent that such Railway Infrastructure exists) at the date of this Agreement taking into account that the condition of certain parts of such Railway Infrastructure may not be compliant with DLR Standards or Railway Group Standards as the case may be; or
- (d) for the purposes of clause 20.2 only, a Fault which does not result from:
 - (i) the design of the Major Component in which the Fault has arisen;
 - (ii) the manufacturing of the Major Component in which the Fault has arisen; or
 - (iii) the Train Maintenance Regime or the Manuals failing to comply with the requirements of this Agreement or otherwise not being fit for purpose,

other than where the relevant Major Component is not Fault Free as a result of such Major Component failing to comply with limbs (b) or (c), or (insofar as it relates to limbs (b) and (c)) limb (e) of the definition of "Fault Free",

in each case, where such Fault is not caused by: (A) an act, omission, neglect or default of the Manufacturer, any other member of the Manufacturer's Group, any Subcontractor or the employees or suppliers of any of them; or (B) the Manufacturer's or Service Provider's performance, non-performance or purported performance of its obligations under this Agreement or the FSA;

"Purchaser Fault Spares" means the pool of Spares and Consumables supplied or to be supplied by the Manufacturer for the rectification of Purchaser Faults on the Trains and Equipment for the whole of the Train Warranty Period in accordance with the Train Maintenance Regime as described in part B (Warranty, Purchaser Fault and Maintenance Spares) of schedule 8 (Spares and Special Tools) and **"Purchaser Fault Spare"** shall mean any one of them;

"Purchaser Milestone Payment Certificate" has the meaning given to such term in paragraph 4.1(a) of part B (Milestones) of schedule 10 (Milestones and Security);

"Purchaser Serious Infringement" has the meaning given to such term in clause 34.4(b)(ii);

"Purchaser Statement" means a statement issued by the Purchaser to the Manufacturer in relation to the tender for Acceptance of a Train or an item of Equipment, setting out which of the relevant conditions and/or Acceptance Criteria (as applicable) have not been satisfied;

"Purchaser Termination Notice" has the meaning given to such term in clause 31.7;

"Qualified Provisional Acceptance" means the qualified provisional acceptance by the Purchaser of a Train which does not comply fully with the Provisional Acceptance Criteria, in accordance with clause 15.10, as evidenced by and occurring upon the issue of a Qualified Provisional Acceptance Certificate for that Train;

"Qualified Provisional Acceptance Certificate" or "QPAC" means a certificate in the form set out in part A of schedule 21 (Pro Forma Certificates) issued by the Purchaser in respect of a Train in accordance with clause 15.10;

"Qualifying Change in Law" means:

- (a) a Discriminatory Change in Law; and/or
- (b) a General Change in Law which requires the Manufacturer to incur Capital Expenditure in relation to the Trains and Equipment, on or after the Commencement Date in relation to the Base Order,

except, in each case, excluding any Foreseeable Changes in Law that comes into force substantially in the form envisaged as at the Commencement Date for the Base Order;

"Quality Management Plan" has the meaning given to such term in paragraph 9.1 of schedule 5 (Contract Management);

"Quality Standards" means those standards set out in clause 43.2(b)(i);

"RAIB" means the Railway Accident Investigation Branch;

"Railway Control System" or "RCS" has the meaning given to such term in the Train Technical Specification;

"Railway Group Standards" means:

- (a) technical standards with which railway assets, or equipment used on or as part of railway assets, must conform; and
- (b) operating procedures with which the operators of railway assets must comply,

in each case as issued and maintained by the Rail Safety and Standards Board and authorised pursuant to the document known as the Railway Group Standards Code;

"Railway Infrastructure" means the fixed assets used for the operation of a railway including its permanent way and plant used for signalling or exclusively for supplying electricity for operational purposes to the railway;

"Recipient" has the meaning given to such term in clause 38.4;

"Recognised Investment Exchange" has the meaning given to such term in section 285 of the Financial Services and Markets Act 2000;

"Recondition" means to carry out works to and/or repair a Spare or Part that is capable of being repaired so that, following such works and/or repair:

- (a) in the case of a planned overhaul of a Spare or Part in accordance with the Train Maintenance Regime, the condition of the reconditioned Spare or Part is no worse than the condition it was in when such Spare or Part was originally supplied by the Manufacturer; and
- (b) in any case that does not fall within paragraph (a) above, the level of wear and tear and functionality of the reconditioned Spare or Part is no worse than the level of wear and tear and functionality before the need for such reconditioning arose,

and **"Reconditioned"** and **"Reconditioning"** shall be construed accordingly;

"Rectification Plan" has the meaning given to such term in clause 31.7(b)(i);

"Recurrent Defect" means a Manufacturer Fault in any Train, Spare, Consumable, Special Tool, Simulator, Part or item of Equipment (including in all cases any Recurrent Defect Extension Component, but excluding in all cases the Thales Equipment) which either:

- (a) in any consecutive 12-month period occurs; or
- (b) the Purchaser reasonably believes will occur in any 12-month period,

in each case, in the greater of:

[REDACTED]
[REDACTED]

(ii) [REDACTED]
[REDACTED] or

(c) with respect to the Simulator:

- (i) in any consecutive 12-month period occurs [REDACTED]; or
- (ii) the Purchaser reasonably believes will occur [REDACTED] times in any 12-month period,

provided that with respect to Consumables, the reference to Manufacturer Fault in this definition shall not include any Fault arising as a result of fair wear and tear of such Consumable (taking into account usage);

"Recurrent Defect Period" means:

- (a) other than with respect to any Recurrent Defect occurring in any Recurrent Defect Extension Component, the period commencing on the date of Provisional Acceptance or Qualified Provisional Acceptance (whichever occurs first) of the first Train to be Accepted and expiring on the date which is ten (10) years after Provisional Acceptance or Qualified Provisional Acceptance (whichever occurs first) of the last Train in the Fleet to be Provisionally Accepted ordered by the Purchaser under this Agreement; and
- (b) with respect to any Recurrent Defect occurring in any Recurrent Defect Extension Component, the date falling the following number of years after the date of Acceptance or Qualified Provisional Acceptance (whichever occurs first) of the relevant Train on which that Recurrent Defect Extension Component is installed (or, if the Recurrent Defect Extension Component is provided and Accepted as an MSA

Spare, the date of Acceptance or the date of installation of the Recurrent Defect Extension Component on to a Train, if later):

- (i) [REDACTED];
- (ii) [REDACTED];
- (iii) [REDACTED];
- (iv) [REDACTED];
- (v) [REDACTED];
- (vi) [REDACTED];

"Recurrent Defect Extension Component" means each of the following Parts:

- (a) [REDACTED];
- (b) [REDACTED];
- (c) [REDACTED];
- (d) [REDACTED];
- (e) [REDACTED];
- (f) [REDACTED];

"Relevant Approvals" means all applicable consents, approvals, permissions, authorisations, acceptances, certifications, licences, exemptions, filings, permits, registrations, notarisations, declarations, letters of no objection and other matters required in each case from any Competent Authority, pursuant to any Applicable Laws and Standards in relation to any of the Manufacturer's obligations under this Agreement including (without limitation) under the Act and the ROGS;

"Relevant Date" has the meaning given to such term in clause 46.1(d);

"Relevant Event" means:

- (a) a Purchaser Change;
- (b) a Qualifying Change in Law;
- (c) a Compensation Event; or
- (d) any other matter as a result of which there may be adjustments to the Milestone Payments in accordance with this Agreement;

"Relevant Property" means the Network and any other property belonging to or occupied by any of the Indemnified Parties;

"Reliability and Maintainability Demonstration Testing" means the tests carried out in accordance with paragraph 5 of part 1 (Testing Requirements) of schedule 7 (Testing);

"Relief Event" means:

- (a) bursting or overflowing of water tanks, apparatus or pipes, ionising radiation (to the extent it does not constitute a Force Majeure Event);

(b) failure by any statutory undertaker, utility company, local authority or other like body to carry out works or provide services; and

(c) any blockade or embargo which does not constitute a Force Majeure Event,

unless any of the events listed in limbs (a) to (c) arises (directly or indirectly) as a result of any act, omission, breach, wilful default or wilful act of the Manufacturer, the Service Provider or any of its Subcontractors of any tier;

"Remedial Plan" has the meaning given to such term in clause 31.2(a)(iii);

"Replacement Strategy" has the meaning given to such term in clause 22.2(a);

"Replacement Works" has the meaning given to such term in clause 22.2(a);

"Request for Information" or **"RFI"** has the meaning given to such term in clause 7.6(b);

"Required APB Bond Amounts" means the amounts for which the Manufacturer is required to provide one or more Advance Payment Bonds from time to time in accordance with part A (Advance Payment Bond) of schedule 10 (Milestones and Security), being the Initial APB Bond Amounts at the Commencement Date, as increased and/or decreased thereafter in accordance with paragraphs 1.5 to 1.7 of part A of schedule 10;

"Required Insurances" has the meaning given to such term in paragraph 1.1 of part A of schedule 13 (Insurance);

"Retail Price Index" or **"RPI"** means the "all items" RPI figure including mortgage interest payments (RPI All items) published on a monthly basis by the Office for National Statistics;

"Retention Period" has the meaning given to such term in clause 9.3(a)(ii);

"Revocation" has the meaning given to such term in paragraph 2.1 of schedule 5 (Contract Management) and **"Revoked"** shall be construed accordingly;

"RIDDOR" means the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995;

"ROGS" means the Railways and Other Guided Transport Systems (Safety) Regulations 2006;

"Routine Maintenance" means any maintenance, repair, reconditioning or replacement of any Part which is required to be undertaken at intervals of less than or equal to three (3) years;

"RSMM" means the Purchaser's rolling stock maintenance model, contractualised at the date of this Agreement and contained on a USB flash drive initialled by the Parties as at the date of this Agreement;

"RSSB" means the Rail Safety and Standards Board Limited, a company incorporated in England and Wales with registered number 04655675, and any successor body;

"Rules" has the meaning given to such term in paragraph 17 of the form of the Advance Payment Bond;

"Safety Breach" means a breach of this Agreement caused by the gross incompetence, wilful default or reckless disregard to safety by the Manufacturer or any Subcontractor (or anyone employed or acting on behalf of the Manufacturer or any Subcontractor) which, in

each case, has materially affected (or which has the potential to materially affect) the safe provision of the Works and/or the Services and/or services provided pursuant to this Agreement, the safe operation of the Network and/or the safety of the Purchaser's customers, staff or any other person;

"Safety Breach Notice" has the meaning given to such term in clause 35.11(b);

"Safety Certificate" has the meaning given to such term in the ROGS;

"Safety Critical Matter" means a matter which may affect the safe provision of DLR Train Services or maintenance of any Trains or which is otherwise not in accordance with any safety case held by the Purchaser;

"Safety Management System" has the meaning given to such term in the ROGS;

"Safety Obligations" means all applicable obligations concerning health and safety arising under Applicable Laws and Standards (including any duty of care arising at common law, and any obligation arising under statute, statutory instrument or mandatory code of practice in Great Britain or other applicable jurisdiction);

"Schedule of Costs" means the schedule of costs included in appendix 1 (Schedule of Costs) to schedule 12 (Change Procedure);

"Schedule of Finishes" means the schedule of finishes for the Trains included in the Manufacturer Train Proposal;

"Schedule of Milestones" means the document as set out in appendix 1 (Schedule of Milestones) to part B (Milestones) of schedule 10 (Milestones and Security), as may be amended from time to time in accordance with this Agreement;

"Schedule of Payments" means the schedule of payments to be made by the Purchaser in respect of either:

- (a) a Change, such schedule of payments to be provided by the Manufacturer in accordance with paragraph 2.2(b) or 4.2(h) of part B (Purchaser Changes) of schedule 12 (Change Procedure) and containing the information specified in paragraph 7.1 of part B of schedule 12; or
- (b) a Compensation Event, such schedule of payments to be provided by the Manufacturer in accordance with paragraph 1.2(c) or 3.2(f) of part D (Compensation Changes) of schedule 12 (Change Procedure) and containing the information specified in paragraph 6.1 of part D of schedule 12;

"Schedule of Tests" means the schedule of tests, based on the form set out in part 3 (Schedule of Tests) of schedule 7 (Testing), which has been Approved pursuant to paragraph 1.3 of part 1 (Testing Requirements) of schedule 7, as may be updated and Approved from time to time pursuant to paragraph 1.8 of part 1 (Testing Requirements) of schedule 7;

"Scheduled Commencement Date" means 4 July 2019 or such other date as may be agreed between the Parties for scheduled commencement of this Agreement;

"Scheduled CP Satisfaction Date" means 15 October 2019 or such other date as may be agreed between the Parties for scheduled satisfaction of conditions precedent to this Agreement;

"Second ACS Date" means the date on which [REDACTED] of the Overhaul Interval for the relevant type of ACS/Overhaul Component has elapsed;

"Security Incident" means a breach of a system's security policy which can potentially affect its confidentiality, integrity or availability or the unauthorised access or attempted access to a system, including without limitation any malicious event that may lead to a significant disruption of business;

"Security Interest" means any mortgage, charge (whether fixed or floating), encumbrance, pledge, lien, trust arrangement or other third party right or interest (legal or equitable) over or in respect of the relevant asset, security or right;

"Senior Representative" has the meaning given to such term in paragraph 2.2 of schedule 19 (Dispute Resolution Procedure);

"Service Affecting Failure" means the occurrence of a Technical Failure in relation to a Train, which causes (in whole or in part):

- (a) a delay to that Train or any other train of [REDACTED] (provided that when that Train reaches the terminal station for that journey as set out in the DLR Working Timetable, the clock will be reset to zero);
- (b) premature withdrawal of that Train or any other train from passenger service; or
- (c) a delay to that Train or any other train entering passenger service, or causes that Train or any other train not to enter passenger service, from a depot or siding,

excluding any Technical Failure:

- (i) that has been predicted to the Purchaser's maintenance organisation, with reasonable supporting evidence and in sufficient detail to enable resolution of the Technical Failure, at least 24 hours prior to that Technical Failure causing the passenger service delay or withdrawal from passenger service; or
- (ii) where the remote reporting and diagnostic facilities provided by the Manufacturer gives sufficient information to a member of the Purchaser's or the Franchisee's operational staff, at a location remote from the Train, that enables that member of staff to perform remote mitigation actions which would prevent a Technical Failure from otherwise delaying the passenger service by 120 seconds or more;

"Service Provider" means the Manufacturer in its capacity as party to, and provider of the Services pursuant to, the Fleet Support Agreement;

"Services" means the services provided or to be provided under the Fleet Support Agreement;

"Simulator" means a simulator supplied or to be supplied under this Agreement which complies with all of the requirements of Section 33.2 of the Train Technical Specification, the Manufacturer Train Proposal and the requirements of clause 6.3;

"Simulator Acceptance Date" means, in relation to a Simulator, the intended date of issue of an Equipment Acceptance Certificate for such Simulator as set out in the Key Programme Dates;

"Simulator Locations" has the meaning given to such term in clause 6.3;

"Simulator Logbook" means a document supplied or to be supplied by the Manufacturer with, and relating to, the Simulator and which shall include the following:

- (a) build records including technical data such as reference sheets for build records, dimensional and setting checks and signed-off inspection and documentation;
- (b) equipment serialisation of part-numbered major components of the Simulator (including mechanical, pneumatic and electrical items and any other items agreed between the Parties) and configuration charts;
- (c) records of maintenance carried out by the Manufacturer prior to Approval;
- (d) the status of Modifications;
- (e) records of hardware and Software version numbers; and
- (f) status of fleet checks applicable to the Simulator,

and in the case of paragraphs (b) to (f) above, in a form which is suitable for import into the DLR Database;

"Software" means any computer program installed in or on any Train, Equipment, Technical Document or Source Code or in equipment to be used in conjunction with, or for the operation, testing, commissioning, maintenance, investigation, modification and/or refurbishment of, any Purchased Items or any FSA Purchased Items and any computer program required to access, install, build or compile or otherwise use any such computer program including the access to and editing of any online/web-based Technical Documents, Source Code or Special Tools, (but excluding in all cases the Thales Equipment);

"SoS" means the Secretary of State for Transport from time to time or any successor to what are the current transport functions of the Secretary of State for Transport;

"Source Code" means, with respect to any Software, the source code version of that Software, being all logic, logic diagrams, flow charts, orthographic representations, algorithms, routines, sub-routines, utilities, models, file structures, coding sheets, coding, source codes, listings, functional specifications and program specifications and all other materials and documents necessary to enable a reasonably skilled programmer to maintain, amend and enhance that Software without reference to any other person or document, and whether in eye-readable or machine-readable form;

"Spare" means any Part which forms or will form part of any Train or Equipment and/or which is held, or will be held, in stock for fitting to Trains or Equipment, including the Warranty Spares, the Purchaser Fault Spares and the Maintenance Spares for the Trains and Equipment (but excluding the Capital Spares), and **"Spare"** shall be construed accordingly;

"Special Tool" means those tools which are not readily available from generally available tool suppliers and include, but are not limited to, all of the items listed in part C (Special Tools) of schedule 8 (Spares and Special Tools) and **"Special Tool"** shall mean any one of them;

"Specially Designed IPR" means any IPR or Software specifically created by the Manufacturer (or by a Subcontractor or other third party on behalf of the Manufacturer) for the purposes of, or which arises from, a Joint Development, including:

- (a) any Manufacturer IPRs, Third Party IPRs or FSA IPRs that are embedded in or which are an integral part of such IPR or Software; and
- (b) any modifications or enhancements to Manufacturer IPR, Third Party IPR, FSA IPR or Software created specifically for the purposes of the Joint Development;

"Specified Standards" means, as the context may require, the standards listed in Section 35 of the Train Technical Specification;

"Stage" means each of the Assurance submission stages described in the TAP;

"Standards" means, as the context may require, all or any standards at any time or from time to time in force in the United Kingdom or the European Union and which are or may become applicable to this Agreement, any agreement or document referred to in this Agreement, any Purchased Item, the Training Services and/or the Manufacturer's obligations (including their performance) under this Agreement including, without prejudice to the generality of the foregoing, DLR Standards, British Standards, European Standards, International Standards and associated codes of practice, Railway Group Standards, the requirements of the ORR and ROGS;

"Storage Instructions" shall mean instructions for the storage of Parts as described in paragraph 9 of schedule 28;

"Subcontract" means any contract awarded by, or to be awarded by, the Manufacturer and any contract awarded by any person who is a party to a subcontract with the Manufacturer or awarded by any party to a subcontract with a Subcontractor, and so on, in relation to, or connected with, the carrying out of the obligations of the Manufacturer under this Agreement;

"Subcontractor" means any party to a Subcontract other than the Manufacturer and, for the avoidance of doubt, includes a Key Subcontractor;

"Substandard Condition" means, in respect of a Train, that:

- (a) a Pre-Provisional Acceptance Certificate has been issued for that Train; and
- (b) the condition or performance of the Train:
 - (i) falls below the minimum acceptable condition (as set out in the maintenance manual or the Minimum Acceptable Condition Standards set out in paragraph 14 of schedule 28 (Technical Information) of this Agreement);
 - (ii) falls below the minimum declared tolerance (as set out in the maintenance manual); or
 - (iii) is in an unsafe condition;

"Substantial Modification" has the meaning given to such term in clause 34.4(a);

"Suitable Lessor" means a person (other than a Competitor) that, in the Purchaser's reasonable opinion, has the capability to meet any payment obligations under this Agreement as may be transferred to it;

"Systems" means all of the systems of the Train, including each of the following:

- (a) [REDACTED];
- (b) [REDACTED];
- (c) [REDACTED];
- (d) [REDACTED];
- (e) [REDACTED];

- (f) [REDACTED];
- (g) [REDACTED];
- (h) [REDACTED];
- (i) [REDACTED];
- (j) [REDACTED];
- (k) [REDACTED];
- (l) [REDACTED];
- (m) [REDACTED];
- (n) [REDACTED];
- (o) [REDACTED];
- (p) [REDACTED];
- (q) [REDACTED];
- (r) [REDACTED];
- (s) [REDACTED]; and
- (t) [REDACTED];

"Taxes" means all present and future taxes, charges, imposts, duties or levies of any kind whatsoever, payable at the instance of or imposed by any Competent Authority, together with any penalties, additions, fines, surcharges or interest relating thereto and Tax and Taxation shall be construed accordingly;

"TCMS" means the Train Control and Management System, as further described in the Train Technical Specification;

"TECBAR" means the Technology and Construction Bar Association;

"Technical Advice" has the meaning given in paragraph 1.1 of part C of schedule 17 (Technical Services);

"Technical Advice Services" means the services to be performed by the Manufacturer as specified in part C of schedule 17 (Technical Services);

"Technical Assurance Plan" or **"TAP"** means the technical assurance plan included as appendix 6 to schedule 6 (Assurance);

"Technical Change Control Process" has the meaning given to such term in paragraph 11 of schedule 5 (Contract Management);

"Technical Documents" means all documents, drawings and data provided or to be provided by the Manufacturer to the Purchaser (in original or copy form (as applicable)) and updated pursuant to the terms of this Agreement and at each Assurance Stage, including but not limited to:

- (a) the Plans;

- (b) copies of all Relevant Approvals and notices from Competent Authorities and the Purchaser (including the supporting information) and national alerts for safety that affect the Trains, their operation or maintenance;
- (c) all documentation provided or to be provided pursuant to the Assurance Regime;
- (d) all design documentation in respect of the Works and Design Submissions, including documentation relating to:
 - (i) the Mock-up;
 - (ii) the Simulator;
 - (iii) the Schedule of Finishes;
 - (iv) any Permitted Design Changes; and
 - (v) configuration management;
- (e) all testing documentation relating to the Trains and Equipment, including:
 - (i) the Testing Strategy, the Schedule of Tests and the Testing Programme;
 - (ii) test specifications; and
 - (iii) test reports and results;
- (f) all documentation submitted pursuant to the Acceptance Criteria, including:
 - (i) authorisation from the ORR to place in service the Trains (and any other documentation required pursuant to ROGS);
 - (ii) the "as-built" design information in relation to the Trains (including calculations and modelling);
 - (iii) the Manuals;
 - (iv) the Train Maintenance Regime;
 - (v) the Training Materials;
 - (vi) the Spares inventory; and
 - (vii) the register of Parts;
- (g) all documents, appraisals and notices submitted pursuant to the Change Procedure including any Modifications or Mandatory Modifications and any other approvals and certificates in relation to any Modifications;
- (h) all reports, reviews, plans and strategies in relation to the performance and progress of the Project provided or to be provided pursuant to schedule 5 (Contract Management) including any reports, data and other relevant material in connection with the Technical Advice provided by the Manufacturer pursuant to part C of schedule 17 (Technical Services);
- (i) all documents listed in paragraph 18 of schedule 28 (Technical Information); and
- (j) all documents relating to Quality Standards;

"Technical Failure" means any loss of ability of a system, function, piece of equipment or Part to perform which impacts on the performance of the Train or Equipment, or which requires investigation, replacement or repair;

"Technical Library" means the online resource made available by the Manufacturer to the Purchaser containing all up to date versions of all of the Technical Documents and all other documents referred to in paragraph 1.8 of part B of schedule 17 (Technical Services);

"Technical Library Services" means the services to be performed by the Manufacturer as specified in part B of schedule 17 (Technical Services);

"Technical Principles Document" has the meaning given in paragraph 1.6 of schedule 28 (Technical Information);

"Termination Date" means the date upon which this Agreement is terminated in accordance with its terms;

"Test" means to prove correct operation by trial, and **"Testing"** shall be construed accordingly;

"Test Service Affecting Failure" means the occurrence of a Technical Failure in relation to a Train, which causes or would cause (in whole or in part):

- (a) without intervention or remedial action by the Manufacturer's staff, a delay of [REDACTED] or more to any Train;
- (b) premature withdrawal of any Train from testing; or
- (c) any Train not to be used for testing;

"Test Track Facilities" means the test facilities at [REDACTED] for testing the Trains and Systems and for systems integration testing away from the Network, which simulate both the conditions of the relevant parts of the Network and the operation of the DLR Working Timetable, access to which is to be procured by the Manufacturer as further described in schedule 7 (Testing);

"Testing Programme" means the Testing programme, based on the form set out in part 4 (Testing Programme) of schedule 7 (Testing), which has been Approved pursuant to paragraph 1.3 of part 1 (Testing Requirements) of schedule 7, as may be updated and Approved from time to time pursuant to paragraph 1.8 of part 1 (Testing Requirements) of schedule 7;

"Testing Requirements" means the requirements with regard to the testing of Trains set out in part 1 (Testing Requirements) of schedule 7 (Testing);

"Testing Strategy" means the Testing strategy, based on the form set out in part 2 (Testing Strategy) of schedule 7 (Testing), which has been Approved pursuant to paragraph 1.3 of part 1 (Testing Requirements) of schedule 7;

"TfL Corporate Environment Framework" means the TfL Corporate Environment Framework set out in appendix 7 to schedule 16 (Health, Safety and Environment) as updated from time to time;

"TfL Group" means Transport for London and any member of its Group;

"TfL Period" means each consecutive 28 day period, the first of which starts on 1 April in each year and, in respect of the first or last such period in any year, as may be varied by TfL;

"Thales" means Thales Canada Inc., c/o Thales Canada, Transportation Solutions, a company existing under the laws of Canada and having its principal place of business at 105 Moatfield Drive, Suite 100, Toronto, Ontario M3B 0A4, Canada;

"Thales Condition" has the meaning given to such term in clause 4.1(a);

"Thales Contract" means the subcontract to be entered into between the Manufacturer and Thales as soon as practicable after the date hereof for the supply of signalling and communications system hardware and related software and services;

"Thales Direct Agreement" means the signalling contractor direct agreement to be entered into between the Manufacturer, Thales and the Purchaser on or about the date hereof;

"Thales Equipment" means the equipment and software to be provided by Thales in accordance with the Thales Contract;

"Thales Initial Price" means [REDACTED];

"Thales IPR" means IPR, whether existing at the date of this Agreement or arising hereafter, that is owned by Thales or any of its Affiliates;

"Thales Updated Option Price" means the price per VOBC ordered pursuant to an Option Notice in Option Period 2 (in each case as such terms are defined in the Thales Contract), as applicable to a minimum order quantity of one VOBC, as set out in Annex 2A of the signed counterpart of the Thales Contract provided to the Manufacturer pursuant to clause 4.1(a);

"Thales Updated Price" means the total contract price, in Pounds Sterling and Canadian Dollars, as set out in the signed counterpart of the Thales Contract provided to the Manufacturer pursuant to clause 4.1(a);

"Third ACS Date" means the date on which [REDACTED] for the relevant type of ACS/Overhaul Component has elapsed;

"Third Party Escrow Material" has the meaning given to such term in clause 30.12(f);

"Third Party IPR" means IPR, whether existing at the date of this Agreement or arising hereafter, other than Corporate IPR, Thales IPR or the Manufacturer IPR;

"Total Contract Price" means the aggregate of the amounts in each Currency Element specified in the final row of the table set out in appendix 2 (Total Contract Price) to part B (Milestones) of schedule 10 (Milestones and Security) as the Total Contract Price of the Purchased Items comprising the Base Order and related provision of facilities and Test Track Facilities and ACS Services and related activities pursuant to this Agreement, as such amount is amended from time to time pursuant to clause 6.7 and as such amount may be adjusted in accordance with clause 20.9 and any Change Confirmation Notice or Claim Confirmation Notice;

"Train" means each complete train supplied or to be supplied under this Agreement for the Network which complies with the Train Technical Requirements and, except where expressly excluded, includes an Option Train;

"Train and Equipment Design" means the design of the Trains and Equipment from time to time in accordance with the requirements of this Agreement;

"Train Control and Management System" has the meaning given to such term in the Train Technical Specification;

"Train Data" means all data produced by the Trains or Equipment;

"Train Features" has the meaning given to such term in clause 30.5(a);

"Train Logbook" means a document supplied or to be supplied by the Manufacturer with, and relating to, each Train which shall be an accurate record of each Train and shall include the following:

- (a) build records including technical data such as reference sheets for build records, dimensional and setting checks and signed-off inspection and documentation for the following tests (in accordance with schedule 7 (Testing)):
 - (i) Type Tests;
 - (ii) Reliability and Maintainability Demonstration Testing;
 - (iii) Integration Testing;
 - (iv) Endurance Running;
 - (v) Depot/Train Integration Testing; and
 - (vi) Network Testing;
- (b) asset numbers for each Train, safety critical components, Major Components, Recurrent Defect Extension Components and Line Replaceable Units in accordance with the Train Technical Specification;
- (c) Final Test certificates and test result sheet;
- (d) radiographic/non-destructive testing (NDT) records;
- (e) equipment serialisation of serial-numbered Major Components, Recurrent Defect Extension Components and Parts (including mechanical, pneumatic and electrical items and any other items agreed between the Parties as requiring serialisation);
- (f) inspection sheets of Major Components and Recurrent Defect Extension Components as Approved by the Purchaser;
- (g) records of maintenance carried out by the Manufacturer prior to Acceptance;
- (h) the status of Modifications;
- (i) records of hardware and software version numbers and configuration levels;
- (j) pre and post-delivery commissioning test certificates;
- (k) reliability demonstration endurance testing result sheets;
- (l) copies of all relevant non-conformance reports and corrective action reports indicating how and when the relevant issues were resolved; and
- (m) other relevant information as required by the Purchaser,

and in the case of paragraphs (b) to (m) above, in a form which is suitable for import into the DLR Database;

"Train Longstop Date" means, in respect of any Train, the date [REDACTED] after the date set out for Provisional Acceptance of that Train in the relevant Key Programme Dates;

"Train Maintenance Cost" has the meaning given to such term in clause 15.15(a);

"Train Maintenance Plan" means the maintenance plan for the Trains and Equipment, as described in paragraph 3 of schedule 28 (Technical Information);

"Train Maintenance Regime" means the maintenance regime for the Trains and Equipment described in clause 13;

"Train Parameters" means the details of the Train set out in paragraphs 19.2(p) to 19.2(v), 19.3 and 19.4 of schedule 28 (Technical Information);

"Train Radio" means the train radio system described in Section 24 of the Train Technical Specification;

"Train Support Software" has the meaning given to such term in clause 30.10(c);

"Train Technical Requirements" means together the Train Technical Specification and the Manufacturer Train Proposal;

"Train Technical Specification" means the requirements for each Train and item of Equipment set out in schedule 1 (Train Technical Specification);

"Train Warranty Period" means:

- (a) with respect to the Base Order, the period commencing on the date of Provisional Acceptance or Qualified Provisional Acceptance (whichever occurs first) of the first Train in the Fleet and ending on the later to occur of:
 - (i) the date that is [REDACTED] after the date of Provisional Acceptance or Qualified Provisional Acceptance (whichever occurs first) of the last Train in the Fleet (excluding any Option Trains); and
 - (ii) the date set out in clause 7.15(g); and
- (b) with respect to each Option exercised by the Purchaser pursuant to clause 6.6(a), the period commencing on the date of Provisional Acceptance or Qualified Provisional Acceptance (whichever occurs first) of the first Train ordered pursuant to such Option, and ending on the later to occur of:
 - (i) the date that is [REDACTED] after the date of Provisional Acceptance or Qualified Provisional Acceptance (whichever occurs first) of the last Train ordered pursuant to such Option; and
 - (ii) the date set out in clause 7.15(g),

and in each case for the purposes of this Agreement any reference to the supply of Spares or Consumables during or for the whole of the Train Warranty Period shall be deemed to include the supply of Spares or Consumables lasting for the [REDACTED] following the end of the Train Warranty Period as described in clause 7.15(f);

"Training Course" means one training (or learning) module, or a series of training (or learning) modules that are sequential and thematically integrated within an area of subject matter;

"Training Materials" has the meaning given to such term in paragraph 7.1 of schedule 4 (Training);

"Training Module" means one or more training (or learning) units within a specific Training Course. The training (or learning) units shall normally comprise a number of training (or learning) outcomes that are combined thematically by means of their relationship with one another;

"Training Needs Analysis" means the formal identification, carried out pursuant to paragraph 4 of schedule 4 (Training), of the training needs of groups of the Purchaser's personnel based on the requirements for knowledge and skills relating to the Trains and Equipment and any other asset(s) and system(s) supplied or to be supplied, and the identification of any current or anticipated gaps in knowledge and skills of such personnel;

"Training Plan" means a document prepared or to be prepared by the Manufacturer detailing the training to be provided for a specific training course pursuant to schedule 4 (Training);

"Training Programme" has the meaning given to such term in paragraph 3.1 of schedule 4 (Training);

"Training Services" means those training services provided or to be provided by the Manufacturer pursuant to clause 12 (Training Services) as set out in the Training Programme;

"Transparency Commitment" means the Local Government Transparency Code issued by the Department for Communities and Local Government in May 2014 in accordance with which the Purchaser publishes its contracts, tender documents and data from invoices received, as the same may be amended from time to time;

"Transport for London" or **"TfL"** means the body established pursuant to section 154 of the Greater London Authority Act 1999 and any successor body;

"Undesirable Transferee" means:

- (a) any person who is Insolvent; or
- (b) any person:
 - (i) who has been convicted of a criminal offence or a series of offences, or is the subject of ongoing investigation, inquiry or regulatory or judicial proceedings (including in relation to any breach of health and safety laws) in the five (5) years preceding the date of the notice issued by the Manufacturer pursuant to clause 47.2(a);
 - (ii) whom it would be reasonable for a contracting authority to exclude from consideration on grounds of national security;
 - (iii) from a country which is, or who is otherwise, the subject of economic or security sanctions imposed by the United Kingdom (including sanctions which take the form of the prevention of the supply of goods or services to the country or restrictions on the freedom of movement of diplomats and/or consular personnel of that country) whether the sanctions are in full force or suspended; or
 - (iv) who has an Affiliate that falls within paragraphs (b)(i) to (iii) above;

"Uninsurable" has the meaning given to such term in paragraph 16.3 part A of schedule 13 (Insurance);

"Uninsured Loss" means that the relevant Losses are not recoverable under the Required Insurances to be taken out by the Manufacturer in accordance with schedule 13 (Insurance) (assuming that such Required Insurances have been taken out and maintained in force as required by schedule 13 and taking no account of any qualifications set out in the Insurance Differential Letter or any Losses which are not recoverable as a result of any excess or deductible under any such policy of insurance);

"Unrestricted Passenger Revenue Earning Service" means the operation without restriction of a Train on the relevant parts of the Network in connection with the carriage of passengers by railway;

"Utilities Contracts Regulations" means the Utilities Contracts Regulations 2016;

"VAT" means value added tax as provided for in the Value Added Tax Act 1994 and legislation supplemental thereto and any similar sales, consumption or turnover tax replacing or introduced in addition thereto;

"Voluntary Cancellation Notice" has the meaning given to such term in clause 4.2;

"Warranty Spares" means the pool of Spares and Consumables supplied or to be supplied by the Manufacturer for the carrying out of warranty work on the Trains and Equipment for the whole of the Train Warranty Period in accordance with the Train Maintenance Regime as described in part A (Capital Spares) of schedule 8 (Spares and Special Tools) and **"Warranty Spare"** shall mean any one of them;

"Working Day" means a weekday (other than a Saturday or Sunday) on which banks are open for domestic business in the City of London;

"Works" means the design, manufacture, testing, commissioning, integration and supply of the Trains and Equipment (and any temporary works undertaken by the Manufacturer or its Subcontractors at the Depot to facilitate Train and Equipment Acceptance as agreed with the Purchaser) carried out pursuant to the terms of this Agreement and in accordance with the Train Technical Requirements; and

"Yellow Book" means Engineering Safety Management (the Yellow Book): Fundamentals and Guidance, Issue 4.

1.2 Interpretation

In this Agreement, except where the context otherwise requires:

- (a) any reference to this Agreement includes the schedules, appendices and annexes to it, each of which forms part of this Agreement for all purposes;
- (b) a reference to an enactment or statutory provision shall, unless otherwise expressly specified in this Agreement, include:
 - (i) a reference to any subordinate legislation made under the relevant enactment or statutory provision whether before or after the date of this Agreement; and
 - (ii) be a reference to that enactment, statutory provision or subordinate legislation as from time to time amended, consolidated, modified, re-enacted or replaced, whether before or after the date of this Agreement;
- (c) words importing the singular only shall include the plural and vice versa;
- (d) references to one gender include other genders;

- (e) a reference to a person shall include a reference to a firm, a body corporate, an unincorporated association, a partnership, limited partnership, limited liability partnership or to that person's legal personal representatives, successors and permitted assignees;
- (f) a reference to a clause or schedule (other than to a schedule to a statutory provision), paragraph, part, appendix or annex shall be a reference to a clause, schedule, paragraph, part, appendix or annex (as the case may be) of or to this Agreement and a reference in a schedule to a part, paragraph, annex or appendix shall mean references to a part, paragraph, annex or appendix of that schedule;
- (g) if a period of time is specified as from or within a given day, or from or within the day of an act or event, it shall be calculated exclusive of that day;
- (h) references to any English legal term for any action, remedy, method of judicial proceeding, legal document, legal status, court, official or any legal concept or thing shall in respect of any jurisdiction other than England be deemed to include that which most nearly approximates the English legal term in that jurisdiction and references to any English statute or enactment shall be deemed to include any equivalent or analogous laws or rules in any other jurisdiction;
- (i) references to writing shall include any modes of reproducing words in any legible form and shall exclude email and any other form of electronic communication except where expressly stated otherwise;
- (j) a reference to includes or including is to be construed as includes without limitation or including without limitation;
- (k) the contents page and headings in this Agreement are for convenience only and shall not affect its interpretation;
- (l) references to this Agreement or any other agreement or document include permitted variations, amendments, replacements, novations or supplements to this Agreement or other agreement or document (as the case may be);
- (m) a reference to the Purchaser or the Manufacturer includes their respective (and any subsequent) successor(s) in title, and their respective permitted transferee(s) or assignee(s);
- (n) any obligation on any Party to do or not to do anything shall be deemed to include an obligation to procure or not to permit or suffer such things to be done by such Party's agents, servants, contractors and subcontractors of any tier and acts or omissions of either Party's agents, servants, contractors or subcontractors of any tier shall be deemed to be acts of such Party for the purposes of this Agreement;
- (o) references to costs, expenses and losses which are to be indemnified to, or recovered by, the person incurring the same shall be construed as references to an amount equal to the amount of such costs, expenses and losses together with any amount that represents VAT or other similar tax properly chargeable therein in any jurisdiction;
- (p) amounts stated or expressed in this Agreement to be "Indexed" shall be references to such amounts at Indexation Base Month prices multiplied by:




where:

- (i) [REDACTED]; and
- (ii) [REDACTED];

- (q) reference to a third party is a reference to any person who is not a Party;
- (r) a reference to any agreement or other document in the agreed form shall be deemed to be a reference to that agreement or document in the form which has been accepted by each of the Purchaser and the Manufacturer and initialled on behalf of each such Party for the purposes of identification;
- (s) references to otherwise and words following other shall not be limited by any foregoing words where a wider construction is possible; and
- (t) a reference to provisions of this Agreement expressed as being from one provision to another provision shall be construed as including both mentioned provisions.

1.3 **Thales Contract**

- (a) All references to "subcontract", "subcontractor", "Subcontract", "Subcontractor", "Key Subcontract", "Key Subcontractor" or their derivatives in the following clauses of this Agreement shall be deemed to exclude, for all purposes therein, Thales and the Thales Contract: clauses 1.2(n), 7.10, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7, 23.2, 23.3, 30.10(b), 39.14, 40.3, 42.4(d), 42.5, 43.2, 52.1 and paragraphs 2.2 and 7.1 of Part A of schedule 27.
- (b) The Purchaser acknowledges and agrees that, subject to the Manufacturer's compliance with clause 1.3(c)(ii), where the Manufacturer is obligated under this Agreement to manage the performance of Thales under the Thales Contract, the Manufacturer shall be entitled to claim relief from performance of its obligations under this Agreement in respect of Thales and the Thales Contract to the extent that the Manufacturer does not have the appropriate rights under the Thales Contract to fulfil such obligations (provided that the Purchaser shall have no liability to the Manufacturer pursuant to this clause 1.3(b) in respect of any costs suffered or incurred by the Manufacturer).
- (c) To the extent that the Manufacturer does not have the appropriate rights under the Thales Contract to fulfil its obligations under this Agreement in respect of Thales or the Thales Contract:
 - (i) the Purchaser acknowledges that it has a commercial relationship with Thales regarding matters not relating to the Project and, subject to the Manufacturer's compliance with its obligations in clauses 1.3(d) and 1.3(e) below, the Purchaser shall at its own cost and in a timely manner:
 - (A) discuss with Thales; and
 - (B) seek to escalate to an appropriate level of seniority within Thales, any performance issues relating to the Thales Contract; and
 - (ii) the Manufacturer shall use all reasonable endeavours to mitigate the impact and consequence of any such inability to fulfil such obligations under this Agreement.
- (d) For the purposes of clause 1.3(c)(ii) above, "all reasonable endeavours" means that the Manufacturer shall be required to liaise with Thales regularly and in a timely manner to determine a commercially viable solution that will enable the

Manufacturer to fulfil its obligations under this Agreement, provided that where the cost to the Manufacturer in identifying and implementing a solution is likely to be material, the Manufacturer shall give notice to the Purchaser to this effect, together with details of any proposed solution and demonstrate such material costs likely to be incurred by the Manufacturer (in each case, as is reasonably satisfactory to the Purchaser). Following receipt of such information by the Purchaser, the Manufacturer shall not be obliged to take such steps (to identify and implement the relevant solution) that will require it to incur such material cost unless and until the Purchaser and the Manufacturer agree otherwise (such agreement to include the allocation of such material costs between the Purchaser and the Manufacturer).

- (e) If, notwithstanding its use of all reasonable endeavours in accordance with clause 1.3(c)(ii) above, the Manufacturer reasonably considers that it is likely that the Manufacturer will not be able to fulfil any obligation under this Agreement in respect of Thales or the Thales Contract as a result of the Manufacturer not having the appropriate rights under the Thales Contract to fulfil such obligation, the Manufacturer shall notify the Purchaser as soon as reasonably practicable and provide the Purchaser with such information as the Purchaser may reasonably require in order to ascertain the nature and scope of any such inability to perform by the Manufacturer.
- (f) The Manufacturer shall:
 - (i) provide the Purchaser with reasonable notice of all contract management meetings between the Manufacturer and Thales, and permit the Purchaser to attend such meetings;
 - (ii) as soon as reasonably practicable provide the Purchaser with copies of all relevant notices, correspondence and documentation provided by Thales or the Manufacturer to each other pursuant to or in relation to the Thales Contract; and
 - (iii) provide any further information as the Purchaser may reasonably require in relation to Thales and/or the Thales Contract, as soon as reasonably practicable following the Manufacturer receiving notice from the Purchaser to such effect.

2. COMMENCEMENT AND CONDITIONS PRECEDENT

2.1 Immediately Effective Clauses

The rights and obligations of the Parties arising under the Immediately Effective Clauses shall be of immediate effect upon execution by the last Party to execute this Agreement.

2.2 Conditions Precedent to CP Satisfaction and Commencement

- (a) The rights and obligations of the Parties under this Agreement arising under the First Payment Provisions shall be conditional upon satisfaction or waiver of the conditions set out in clauses 2.3 and 2.4, and shall come into effect upon the CP Satisfaction Date as specified in the relevant Certificate of CP Satisfaction.
- (b) The rights and obligations of the Parties under this Agreement (other than the rights and obligations arising under the Immediately Effective Clauses and the First Payment Provisions) shall be conditional upon satisfaction of the Thales Condition, and shall come into effect upon the Commencement Date as specified in the relevant Notice to Proceed.

2.3 Manufacturer Conditions Precedent

The Manufacturer shall provide to the Purchaser:

- (a) one or more Advance Payment Bonds for the Initial APB Bond Amounts, which are duly executed by the relevant Advance Payment Bond Provider(s) and which comply with the provisions of paragraphs 1.1 and 1.2 of part A (Advance Payment Bond) of schedule 10 (Milestones and Security);
- (b) the Fleet Support Agreement duly executed by the Service Provider and such document having become unconditional in all respects (save for any condition relating to this Agreement coming into full force and effect);
- (c) a certified copy of:
 - (i) a resolution of the board of directors of the Manufacturer passed at a duly convened and held meeting or, where the Manufacturer is not incorporated in England and Wales, an equivalent statement of authority constituted by a power of attorney or otherwise (in either case in a form and substance satisfactory to the Purchaser):
 - (A) approving the terms of, and the transactions contemplated by, this Agreement and all the other related documents to which it is a party; and
 - (B) authorising a specified person to approve amendments to, and execute, this Agreement and all the other related documents to which it is a party; and
 - (ii) the most recent:
 - (A) statutory audited accounts; and
 - (B) articles of association,(or the equivalent documentation in Spain) in respect of the Manufacturer;
- (d) a legal opinion (in a form and substance satisfactory to the Purchaser) that the Manufacturer has the requisite power and authority to execute the Project Documents to which it is party and that, following such execution, the terms of such Project Documents will be binding on and enforceable against the Manufacturer; and
- (e) a letter from the Manufacturer's insurance broker and the Manufacturer (in form and substance acceptable to the Purchaser) confirming that, subject only to certain qualifications as specified in such letter, the Required Insurances required under part A and part B of schedule 13 (Insurance) are in full force and effect (the **"Insurance Differential Letter"**) together with certificates of insurance evidencing the same.

The Manufacturer shall use its reasonable endeavours to procure that the conditions referred to in this clause 2.3 are satisfied on or before the Scheduled CP Satisfaction Date.

2.4 **Purchaser Condition Precedent**

The Purchaser shall provide to the Manufacturer a certified copy of the board papers of the Purchaser:

- (a) approving the terms of, and the transactions contemplated by, this Agreement and all the other related documents to which it is a party; and

- (b) authorising a specified person or persons to approve amendments to, and execute, this Agreement and all the other related documents to which it is a party.

The Purchaser shall use its reasonable endeavours to procure that the condition referred to in this clause 2.4 is satisfied on or before the Scheduled CP Satisfaction Date.

2.5 Waiver

- (a) The Purchaser may, by written notice to the Manufacturer, waive any condition precedent specified in clause 2.3 in whole or in part.
- (b) The Manufacturer may, by written notice to the Purchaser, waive the condition precedent specified in clause 2.4 in whole or in part.

2.6 Certificate of CP Satisfaction

Once the Purchaser is satisfied that each of the conditions precedent set out in clauses 2.3 and 2.4 have been satisfied (except to the extent waived or deferred by the Purchaser) then the Purchaser shall issue to the Manufacturer a Certificate of CP Satisfaction, which shall specify the CP Satisfaction Date, the issuance of which must not be unreasonably withheld or delayed by the Purchaser once all conditions precedent have been satisfied by the Manufacturer.

2.7 [Not used.]

2.8 Information

If at any time the Manufacturer becomes aware of any matter that might prevent or delay a condition precedent in clause 2.3 from being satisfied, it shall inform the Purchaser as soon as is reasonably practicable. If at any time the Purchaser becomes aware of any matter that might prevent or delay the condition precedent set out in clause 2.4 from being satisfied it shall inform the Manufacturer as soon as is reasonably practicable.

2.9 Effect of non-satisfaction of conditions precedent

Unless all of the conditions precedent in clauses 2.3 and 2.4 are satisfied or, in the case of the conditions set out in clause 2.3 waived in writing by the Purchaser, and, in the case of the condition set out in clause 2.4 waived in writing by the Manufacturer, in each case, on or before the Scheduled CP Satisfaction Date (or such later date as the Parties may agree), this Agreement (other than the Immediately Effective Clauses) shall have no force or effect and:

- (a) the Manufacturer shall bear the costs incurred by the Purchaser and the Manufacturer in connection with the negotiation of this Agreement, where this Agreement does not have force or effect as a result of any one or more of the conditions precedent in clause 2.3 not being satisfied or waived in accordance with this clause 2.9;
- (b) each Party shall bear their own costs in connection with the negotiation of this Agreement, where this Agreement does not have force or effect as a result of the condition precedent in clause 2.4 not being satisfied or waived in accordance with this clause 2.9; and
- (c) other than as referred to in clause 2.9(a), neither Party shall have any obligation to the other under this Agreement save for any antecedent breach or under clause 39 (Confidentiality) which shall remain in full force and effect notwithstanding the non-satisfaction of the conditions precedent hereto.

3. REPRESENTATIONS AND WARRANTIES

3.1 The Manufacturer represents and warrants to the Purchaser as at the date of this Agreement (unless otherwise expressly stated) that:

- (a) it is a corporation, duly incorporated and validly existing under the laws of Spain and that it has the power to own its assets and carry on its business as it is being conducted;
- (b) the execution by it of this Agreement does not contravene any provision of:
 - (i) any existing law, treaty or regulation in force and binding on the Manufacturer;
 - (ii) the memorandum of association or articles of association of the Manufacturer (or their equivalent in Spain);
 - (iii) any order or decree of any Court or arbitrator existing as at the date of this Agreement and binding on the Manufacturer; or
 - (iv) any obligation which is binding upon the Manufacturer or upon any of its assets or revenues;
- (c) it has the requisite power and authority to enter into, perform and deliver, and has taken all necessary action to authorise its entry into, performance and delivery of this Agreement and the transactions contemplated by this Agreement;
- (d) it has obtained all necessary shareholder and board approvals in respect of the execution of this Agreement and the performance of its obligations under it;
- (e) its obligations under this Agreement are valid, binding and enforceable at law and in equity in accordance with its terms;
- (f) no litigation, arbitration or administrative proceeding is current, pending or threatened to restrain the entry into, exercise of any of its rights under and/or performance or enforcement of or compliance with any of its obligations under this Agreement;
- (g) no meeting has been convened or is intended to be convened and/or so far as it is aware, no petition, application or the like is outstanding with a view to its winding-up;
- (h) the certified copies of the most recent statutory audited accounts and articles of association (or the equivalent documentation in Spain) of the Manufacturer delivered to the Purchaser under clause 2.3(c)(ii) are true and accurate and that no proposals are outstanding to amend those documents;
- (i) the Manufacturer (and/or the relevant Subcontractors) is/are the absolute and unencumbered proprietor of all Intellectual Property Rights necessary for the Manufacturer to carry out the Works and all other obligations under the Project Documents (other than the Corporate IPRs) described in clause 30 (Intellectual Property Rights) or, where such Intellectual Property Rights are licensed, has/have the right to exercise those Intellectual Property Rights and grant the relevant licences of those Intellectual Property Rights to the Purchaser as contemplated by this Agreement;
- (j) the entering into or performance of its obligations or exercising of its rights under this Agreement, the Project Documents or any related document will not be in breach of, or cause to be breached, any restriction (whether arising in contract or

otherwise) binding on the Manufacturer or any Subcontractor or any of their respective assets or undertakings; and

- (k) in entering into this Agreement none of it, any other member of the Manufacturer Group nor, to the best of its knowledge and belief having made due enquiry, any Subcontractor of the Manufacturer has committed any Prohibited Act.

3.2 Repetition of Warranties

The Parties agree that the representations and warranties set out in clause 3.1 shall be deemed to be repeated by the Manufacturer on the Commencement Date and on each date the Manufacturer receives an Option Notice in accordance with this Agreement. The Manufacturer understands and acknowledges that the Purchaser is relying on these representations and warranties and is entering into this Agreement on the basis of them.

4. NOTICE TO PROCEED AND VOLUNTARY CANCELLATION

4.1 Notice to Proceed

- (a) The Manufacturer and the Purchaser shall each use all reasonable endeavours to procure that Thales provides to the Manufacturer a signed counterpart of the Thales Contract in a form acceptable to the Purchaser as soon as reasonably practicable following execution of this Agreement (the provision of such signed counterpart of the Thales Contract to the Manufacturer being the **"Thales Condition"**).
- (b) Once the Purchaser is satisfied that the Thales Condition has been satisfied then the Purchaser shall issue to the Manufacturer a notice to proceed (a **"Notice to Proceed"**), which shall specify the Commencement Date, the issuance of which must not be unreasonably withheld or delayed by the Purchaser once the Thales Condition has been satisfied.

4.2 Cancellation of Order

The Purchaser shall have the right, at any time after the issue of a Certificate of CP Satisfaction and before it has issued a Notice to Proceed, to terminate this Agreement by giving written notice to the Manufacturer stating that the Purchaser is terminating this Agreement under this clause 4.2 and the date when such termination shall become effective (a **"Voluntary Cancellation Notice"**).

4.3 Effect of Delay to Commencement Date

- (a) If the Commencement Date falls after the Scheduled Commencement Date, then:
 - (i) each date in the Key Programme Dates shall be deferred by the number of days between the Scheduled Commencement Date and the Commencement Date;
 - (ii) the Manufacturer shall submit an updated Project Programme for agreement by the Purchaser (acting reasonably), including the updated Key Programme Dates pursuant to clause 4.3(a)(i); and
 - (iii) the Manufacturer shall submit details of deferrals of any other dates specified in this Agreement (other than the Key Programme Dates and the Project Programme) which are necessary solely as a result of, and corresponding to, the deferral of the Key Programme Dates pursuant to clause 4.3(a)(i), for agreement by the Purchaser (acting reasonably).

(b) As soon as reasonably practicable following the Commencement Date, the Manufacturer shall submit, for agreement by the Purchaser (acting reasonably), updated versions of the:

- (i) Schedule of Milestones;
- (ii) Option 1 Re-Profiled Schedule of Milestones; and
- (iii) Option 2 Re-Profiled Schedule of Milestones,

which shall, subject to clause 4.3(d), only be updated from the respective versions included in this Agreement on the CP Satisfaction Date to:

- (A) deduct from each of the aggregate of the Milestone Payments, the aggregate of the Option 1 Re-Profiled Milestone Payments and the aggregate of the Option 2 Re-Profiled Milestone Payments (as applicable) an amount equal to [REDACTED] (the "**Thales Price Deducted Amount**"); and
- (B) add to each of the aggregate of the Milestone Payments, the aggregate of the Option 1 Re-Profiled Milestone Payments and the aggregate of the Option 2 Re-Profiled Milestone Payments (as applicable) amounts equal to:

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

(together, the "**Thales Price Added Amount**"),

and the Manufacturer shall act reasonably in allocating the Thales Price Deducted Amount and each Currency Element of the Thales Price Added Amount between the Milestone Payments in such updated Schedule of Milestones, Option 1 Re-Profiled Schedule of Milestones and Option 2 Re-Profiled Schedule of Milestones, having regard to the scheduled dates for payments by the Manufacturer to Thales in accordance with the Thales Contract.

(c) As soon as reasonably practicable following the Commencement Date, 'Table 1' in part C (Options for supply of further Trains and Equipment) of schedule 10 (Milestones and Security) shall be updated by replacing the figure [REDACTED]

[REDACTED] where there has been no break in production and where there has been a break in production, respectively), in each case with an amount equal to [REDACTED].

(d) Subject to clause 4.4, if the Purchaser issues a Notice to Proceed after the Scheduled Commencement Date, the Manufacturer Price shall, with effect from the issuance of the Notice to Proceed, be [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

(e) As soon as practicable following the Commencement Date, the Purchaser and the Manufacturer shall (each at their own cost) take such actions as may be necessary in order to effect amendments to the:

- (i) Key Programme Dates;
- (ii) Project Programme;
- (iii) other specified dates pursuant to clause 4.3(a)(iii);
- (iv) Schedule of Milestones;
- (v) Contract Price table set out in appendix 2 (Total Contract Price) to part B (Milestones) of schedule 10 (Milestones and Security);
- (vi) Option 1 Contract Price Table;
- (vii) Option 1 Re-Profiled Schedule of Milestones;
- (viii) Option 2 Contract Price Table; and
- (ix) Option 2 Re-Profiled Schedule of Milestones,
- (x) LD Cap Amount as calculated in accordance with clause 16.3(b) of this Agreement; and
- (xi) updated Maximum Liability as calculated in accordance with clause 38.5 of this Agreement,

to reflect any updates required pursuant to clauses 4.3(a) to 4.3(d).

4.4 **Longstop Date**

If the Purchaser has not issued a Notice to Proceed within three (3) months after the CP Satisfaction Date then, without prejudice to clause 4.2, the Manufacturer shall be entitled, by way of written notice to the Purchaser, to require the Purchaser to issue a Voluntary Cancellation Notice, in which case the Purchaser shall promptly issue such a notice.

4.5 **Effect of Voluntary Cancellation**

- (a) If the Purchaser issues a Voluntary Cancellation Notice:
 - (i) this Agreement shall terminate on the date stated in the Voluntary Cancellation Notice;
 - (ii) the Purchaser shall pay to the Manufacturer:
 - (A) to the extent not already reimbursed, the Bid Costs; and
 - (B) to the extent not already reimbursed through the first Milestone Payment, the costs, expenses and other liabilities reasonably and properly incurred by the Manufacturer other than those costs that are properly regarded by the Purchaser as forming part of the Bid Costs (the "**Cancellation Costs**"), provided that the Purchaser shall only be required to make such payment upon receipt from the Manufacturer of evidence in accordance with the principles set out in schedule 15 (Open Book Accounting) reasonably satisfactory to the Purchaser of such costs, expenses and other liabilities actually incurred; and
 - (iii) the Manufacturer shall, to the extent that the evidence provided pursuant to clause 4.5(a)(ii) demonstrates that the sum of the Bid Costs and the Cancellation Costs is less than the Milestone Payment that has been paid by

the Purchaser, repay to the Purchaser on demand the difference between such amounts.

- (b) The Purchaser's liability under clause 4.5(a)(ii) shall be limited [REDACTED].
- (c) For the avoidance of doubt, other than as expressly specified in this clause 4.5, no amount on account of Bid Costs will be payable after the first Milestone set out in the Schedule of Milestones.

5. **RELATIONSHIP WITH THE FRANCHISEE AND REPRESENTATIVES**

5.1 **Acknowledgement of the Franchisee**

- (a) The Manufacturer acknowledges that the Purchaser has contracted and may in the future contract with the Franchisee to undertake the operation of the DLR Train Services, or may undertake the operation of the DLR Train Services itself or by TfL or an Affiliate of TfL, and that the Purchaser and the Franchisee are the Infrastructure Managers of the relevant parts of the Network.
- (b) The Manufacturer acknowledges that the Purchaser is entitled, by notice in writing to the Manufacturer, to:
 - (i) subcontract all or any of its obligations and functions under this Agreement to the Franchisee and/or TfL and/or any of its Affiliates; and/or
 - (ii) appoint the Franchisee and/or TfL and/or any Affiliate of the Purchaser to exercise all or any of the Purchaser's rights, powers and entitlements under the Project Documents as agent for or nominee of the Purchaser,

in each case the "**Approved Party**", provided always that the Purchaser shall retain full responsibility (under, and subject to the terms and conditions (including limitations) of, this Agreement) for the acts and omissions of the Approved Party when carrying out any of the Purchaser's rights, powers and entitlements under the Project Documents as if such acts and omissions were those of the Purchaser itself.

- (c) The Purchaser shall not be entitled to appoint the Franchisee to undertake on the Purchaser's behalf:
 - (i) the Purchaser's payment obligations under the Project Documents;
 - (ii) the Purchaser's rights and obligations in relation to Changes under the Project Documents; and
 - (iii) the Purchaser's rights to terminate the Project Documents.

5.2 **Notification**

- (a) Without prejudice to clause 5.1(b), the Purchaser shall be entitled to notify the Manufacturer from time to time of any specific functions which the Approved Party will be carrying out on behalf of the Purchaser and, following any such notification, the Manufacturer shall co-operate with the Approved Party in the performance of such functions as if they were being carried out by the Purchaser.
- (b) The Manufacturer may rely on the authority granted under a notice served pursuant to clause 5.2(a) and such authority shall only lapse in accordance with the terms of the notice or where otherwise notified by the Purchaser.

5.3 **Co-operation**

- (a) The Manufacturer shall co-operate in all respects with the Approved Party as if it were the Purchaser and at the request of the Purchaser shall provide to the Approved Party any assistance reasonably required by the Approved Party to undertake any functions.
- (b) The Parties acknowledge that the Purchaser may provide any information or documents it receives in respect of or relating to this Agreement from the Manufacturer or from any third party in relation to or on behalf of the Manufacturer to the Approved Party to enable it to undertake its functions.
- (c) The Manufacturer shall co-operate in all respects with the Franchisee and the Concessionaire and shall provide any assistance reasonably required by the Franchisee and the Concessionaire in connection with the performance of their obligations under the Franchise Agreement and Concession Agreement respectively.

5.4 **Representatives**

In carrying out or exercising any rights, duties and obligations under this Agreement or the other Project Documents, the Purchaser shall always be entitled to consult the Approved Party and shall be entitled to bring a representative of the Approved Party to any meeting or discussion on any matter relating to this Agreement and to disclose any information and/or documents relating to the subject matter of the Project Documents to such Approved Party.

5.5 **Subsequent franchisees**

If the Purchaser appoints any subsequent or additional Franchisee or Franchisees, the terms of this clause 5 shall apply in relation to such subsequent or additional Franchisee or Franchisees.

5.6 **Definition of the Franchisee**

References in this clause 5 to "**Franchisee**" or "**Franchisees**" or "**TfL**" shall be deemed to include any agents, subcontractors of any tier, officers and employees of such Franchisee or Franchisees or TfL from time to time.

6. **BASE ORDER AND OPTIONS**

6.1 **Base Order**

The Manufacturer shall supply each item of the Base Order to the Purchaser on the relevant Contractual Acceptance Date for that item in consideration for the Purchaser paying or procuring payment to the Manufacturer of the relevant Milestone Payment of the Contract Price in respect of each item of the Base Order, in each case in accordance with the terms of this Agreement. The "**Base Order**" shall comprise:

- (a) 43 Trains;
- (b) the Equipment; and
- (c) the Technical Documents.

6.2 **Spares**

- (a) The Manufacturer shall ensure that each Spare supplied:
 - (i) is a brand new part manufactured from materials of sound and satisfactory quality and is Fault Free;

- (ii) has a part number which is clearly identifiable in accordance with Good Industry Practice and conforms to the part number set out in the Bill of Materials; and
- (iii) is clearly labelled in accordance with the labelling format to be provided by the Purchaser to the Manufacturer, or otherwise identifiable as being the property of the Purchaser.

6.3 **Simulator**

- (a) The Manufacturer shall deliver the Simulator (including a Simulator Logbook) to the Purchaser for Acceptance at such location as the Purchaser may specify on reasonable notice (the "**Simulator Location**"), and in accordance with clause 8.3(e).
- (b) The Manufacturer shall:
 - (i) until the end of the Train Warranty Period, ensure that the Simulator is always available for use at all times by the Purchaser or the Purchaser's nominee, up to date and continually represents the configuration status of the Trains in the Fleet; and
 - (ii) to the extent that the Manufacturer carries out Modifications after the end of the Train Warranty Period, update the Simulator to ensure it continually represents the configuration status of the Trains in the Fleet (such updates shall not be at the Manufacturer's cost unless: (i) otherwise agreed in accordance with the terms of schedule 12 (Change Procedure); or (ii) such updates are required as a result of the performance of the Manufacturer's obligations pursuant to clause 20).
- (c) The Simulator forming part of the Base Order pursuant to clause 6.1, shall be equipped for training with respect to operation on the Network.
- (d) In relation to the Simulator, in advance of the:
 - (i) introduction of the first Train into passenger service;
 - (ii) introduction of any configuration changes affecting the operation of the Trains; and
 - (iii) introduction of configuration changes affecting the signalling system in relation to automatic train operation,

the Manufacturer shall, following such introduction or conversion, ensure that the Simulator has been updated to accurately reflect the systems, equipment, functionality and visual attributes of the Network.
- (e) The Manufacturer shall maintain the Simulator in accordance with Good Industry Practice and all Applicable Laws and Standards for the duration of the Train Warranty Period. In relation to the rectification of any operational performance issue on the Simulator, including Faults, the Manufacturer shall:
 - (i) provide support via remote means within one hour of a notification by the Purchaser to the Manufacturer; and
 - (ii) where such issue cannot be resolved by clause 6.3(e)(i) above, the Manufacturer shall provide on-site support and rectify the issue concerned within 20 hours of initial notification by the Purchaser to the Manufacturer.

6.4 **Special Tools**

The Manufacturer shall ensure that:

- (a) each of the Special Tools supplied is a brand new part manufactured from materials of sound and satisfactory quality and is Fault Free;
- (b) each Special Tool has a part number which is clearly identifiable in accordance with Good Industry Practice and conforms to the part number set out in the Bill of Materials; and
- (c) each Special Tool is clearly labelled in accordance with the labelling format to be provided by the Purchaser to the Manufacturer.

6.5 **Manuals**

- (a) In accordance with schedule 10 (Milestones and Security), the Manufacturer shall supply the first draft version of the Manuals to the Purchaser for Approval 18 months prior to the Contractual Provisional Acceptance Date of the first Train and the revised version of the Manuals to the Purchaser in sufficient time for them to have received Approval no later than 6 months before Provisional Acceptance of the first Train to be Accepted, in accordance with schedule 28 (Technical Information).
- (b) The Manufacturer shall comply with the provisions set out in schedule 28 (Technical Information).

6.6 **Options**

- (a) The Manufacturer grants to the Purchaser the option to order, and if it exercises such option the Manufacturer shall supply to the Purchaser, by one or more Option Notices up to a maximum of [REDACTED]:
 - (i) supplying a sufficient quantity of associated Option Spares to comply with the Manufacturer's obligations in clause 7.15; and
 - (ii) on the terms of this Agreement (including part E (Option Train Changes) of schedule 12 (Change Procedure) and the Option Prices set out in part C (Options for supply of further Trains and Equipment) of schedule 10 (Milestones and Security)),and the Parties shall implement each such Option as an Option Train Change in accordance with the Change Procedure.
- (b) In addition to the option in clause 6.6(a) above, the Manufacturer grants to the Purchaser the option to order, and if it exercises such option the Manufacturer shall supply to the Purchaser, additional Option Spares, and/or Option Special Tools, by one or more Option Spares/Special Tools Notices, at the price per Option Spare and/or Option Special Tool, and on the terms, set out in the Bill of Materials and otherwise on the terms of this Agreement, provided that the option granted to the Purchaser pursuant to this clause 6.6(b) shall lapse at the end of the Train Warranty Period.

6.7 The Total Contract Price shall:

- (a) increase on and from the relevant effective date of an Option Train Change, by the addition of the Option Price;

- (b) be adjusted in accordance with any Change Confirmation Notice or Claim Confirmation Notice; and
- (c) be adjusted in accordance with any payments made by the Purchaser pursuant to clause 20.9.

7. **MANUFACTURER'S GENERAL OBLIGATIONS**

7.1 **General Undertaking and Warranties**

The Manufacturer undertakes and warrants to the Purchaser on the Commencement Date, for the benefit of the Purchaser and the Owner (where it is not the Purchaser), that it shall design, manufacture, supply, test, commission, and deliver each Purchased Item, the Training Services and any other item, goods or services supplied or to be supplied pursuant to this Agreement:

- (a) so that it is Fault Free;
- (b) so that, in relation to the Trains, each Train satisfies the Pre-Provisional Acceptance Criteria, the Provisional Acceptance Criteria and the Final Acceptance Criteria;
- (c) so that, in relation to the Purchased Items other than the Trains, each item satisfies the relevant Equipment Acceptance Criteria;
- (d) so that in relation to the Trains, each Train is designed and manufactured in accordance with the design agreed in accordance with this Agreement to achieve a design life of at least [REDACTED];
- (e) so that, in relation to the Simulator, it is manufactured in accordance with the design agreed pursuant to this Agreement to achieve a design life of at least [REDACTED];
- (f) in accordance with, and so that the Trains and Equipment are in accordance with, sound modern design and engineering principles and practices in the rail industry;
- (g) in accordance with the Train Technical Requirements and the Key Programme Dates so as to achieve Acceptance of each Purchased Item on the Contractual Acceptance Date for that item;
- (h) in compliance with all Applicable Laws and Standards and Relevant Approvals;
- (i) in accordance with Good Industry Practice and with all due skill, care, diligence, prudence and foresight to be expected of appropriately qualified and experienced professional designers and engineers with experience in carrying out work of a similar scope, type, nature and complexity to that required under this Agreement;
- (j) in a safe manner and free from any material risk to the health and wellbeing of persons (including passengers) using, operating, maintaining, or involved in the management of the Trains or the other Purchased Items, and free so far as is reasonably practicable (taking into account the Manufacturer's obligations under this Agreement) from any risk of Environmental Damage;
- (k) using materials and goods which comply with the Train Technical Requirements and Applicable Laws and Standards, and which are of satisfactory quality such that the Trains and the Equipment will be of new manufacture and, with respect to compliance with the Train Technical Requirements, will be of satisfactory quality (provided that the Manufacturer shall be entitled to use materials and goods which are new but have been manufactured from recycled materials);

- (l) in accordance with the requirements of any Change Confirmation Notice and in all other respects in accordance with this Agreement;
- (m) in respect of the MSA Spares, so that those MSA Spares are sufficient and adequate to comply with the Manufacturer's obligations set out in clauses 7.15(a) and 7.15(b);
- (n) in respect of the Special Tools, so that those Special Tools are sufficient and adequate to enable the Purchaser to maintain the Trains in accordance with the Train Maintenance Regime so as to achieve the reliability requirements of the Train Technical Requirements, including the relevant outputs of MDBSAF set out in clause 15; and
- (o) in accordance with each of the Plans,

provided always that the Manufacturer and the Purchaser acknowledge that certain Parts will require repair and/or replacement as a result of wear and tear during the [REDACTED] design life of the Trains in accordance with the Train Maintenance Regime.

7.2 **Compliance with laws**

In performing its obligations under this Agreement, the Manufacturer shall and shall procure that its Subcontractors shall (where relevant):

- (a) comply with all Applicable Laws and Standards;
- (b) comply with their respective Safety Obligations, including all relevant requirements of the HSWA, the ROGS, the Transport and Works Act 1992 and/or any Safety Management System applicable to the testing of the Trains;
- (c) comply with all directions of the ORR, the Purchaser, LFEPA, HMRI and any other Competent Authority (in each case acting properly and lawfully in its role as Competent Authority), provided that the Manufacturer acknowledges and agrees that compliance with the same shall not relieve the Manufacturer from compliance with any of its obligations under this Agreement nor entitle it to any compensation or relief; and
- (d) perform their respective obligations in a manner which would be adopted by a reasonably diligent contractor acting in accordance with Good Industry Practice.

7.3 **General Assistance**

The Manufacturer shall, at its own cost:

- (a) provide in a timely manner all reasonable assistance and/or information reasonably requested from time to time by the Purchaser or its nominee in relation to any Purchased Items;
- (b) co-operate fully with any reasonable request made by the Purchaser, its nominee or any Infrastructure Manager in connection with the design, construction, testing and commissioning of upgrades to the Network or any part thereof;
- (c) without prejudice to clause 9 (Manufacturing Facilities and Rights of Audit), on request in writing from the Purchaser, make available to the Purchaser (without charge) all documents and data of any nature acquired or brought into existence in any manner whatsoever by or on behalf of the Manufacturer and which might reasonably be required by the Purchaser for the purposes of carrying out its duties and obligations under this Agreement and any other functions, duties or responsibilities or obligations of the Purchaser or the Franchisee in relation to the

operation of the Trains and integration of the Trains with other systems in place or to be implemented on or in connection with the Network (and the provisions of schedule 15 (Open Book Accounting) shall apply; and

- (d) during the period from the Commencement Date until the end of the Train Warranty Period, provide to the Purchaser all information relating to failures, Faults, poor performance and corrective actions relevant to the Trains, Major Components, Recurrent Defect Extension Components and Parts as soon as reasonably practicable after such failures, Faults, poor performance or corrective actions have occurred.

7.4 Manufacturer as independent contractor

In entering into and performing its obligations under this Agreement, the Manufacturer shall be an independent provider and is not and shall not hold itself out as, and shall ensure that none of its employees or any Subcontractor, their subcontractors of any tier or any employee of any of them holds themselves out as, an agent of the Purchaser or the Franchisee unless this Agreement expressly states that any such person is to act as an agent of the Purchaser or the Franchisee.

7.5 Manufacturer costs of performance of obligations

Save as otherwise provided in this Agreement, the Manufacturer shall, in undertaking and in carrying out its obligations under this Agreement, give all notices, pay all fees, expenses, compensation, liabilities, damages and other outgoings and do all other acts or things which are or may be required to be given, paid or done whether under Applicable Laws and Standards or otherwise.

7.6 Manufacturer to inform itself fully

- (a) The Manufacturer shall be deemed prior to entering into this Agreement to have inspected and examined all documents and specifications and terms, and all established Applicable Laws and Standards, associated specifications and material requirements and to have obtained for itself all necessary information as to risks, contingencies and all other circumstances which may influence or affect the amounts payable to and by the Manufacturer and the performance of the obligations of the Manufacturer under this Agreement. The Manufacturer shall be responsible for the interpretation of all such information for the purposes of this Agreement.
- (b) The Manufacturer may at any time submit a reasonable request to the Purchaser for information which is not reasonably available to the Manufacturer other than from the Purchaser (a **"Request for Information"** or **"RFI"**) and, if the Purchaser is reasonably able to provide such information, the Parties shall agree a timescale for the provision of such information. For the avoidance of doubt, the Purchaser shall provide any information which it is able to procure on an unwarranted basis, unless it is information which:
 - (i) forms part of or is referenced to in the Train Technical Specification (on which the Manufacturer is entitled to rely as part of the Train Technical Specification, in carrying out its obligations to design and manufacture the Trains); or
 - (ii) the Purchaser has (in its absolute discretion) decided to provide on the basis that the Manufacturer is entitled to rely on it and is provided explicitly (and in writing) on that basis (but without prejudice to clause 8.5(b)),

and under no circumstances shall a failure by the Purchaser to provide information to the Manufacturer in response to an RFI give rise to a claim by the Manufacturer for relief or compensation under this Agreement.

- (c) Save as expressly provided herein, the Manufacturer shall not be entitled to make any claim against the Purchaser or to seek any relief or remedy of any nature nor shall the Manufacturer be relieved from any risks or obligations imposed on or undertaken by it under this Agreement on the grounds:
 - (i) of any misunderstanding or misapprehension in respect of any of the matters referred to in clauses 7.6(a) or 7.6(b); or
 - (ii) that incorrect or insufficient information (including the information made available to the Manufacturer at any stage) was given to it by any person whether or not in the employ of the Purchaser, other than in the case of incorrect information provided to the Manufacturer pursuant to clauses 7.6(b)(i) or 7.6(b)(ii) above; or
 - (iii) that, at the date hereof, it did not or could not foresee any matter which may affect or have affected the ability of the Manufacturer to comply with its obligations under this Agreement.

7.7 **Assurance**

The Manufacturer shall provide Progressive Assurance to the Purchaser in accordance with the requirements of schedule 6 (Assurance).

7.8 **Contract Management**

- (a) The Manufacturer shall comply with the provisions of schedule 5 (Contract Management).
- (b) The Manufacturer shall establish and maintain an office in London (the "**Project Office**") at a location to be agreed with the Purchaser for the purposes of administering its activities under this Agreement and liaising with the Purchaser's contractors.
- (c) The Manufacturer shall provide the Purchaser with 5 desks in the Project Office for use by employees or representatives of the Purchaser, and such employees or representatives of the Purchaser shall be granted unrestricted access to the Project Office by the Manufacturer.
- (d) The Manufacturer may change the location of the Project Office with the prior approval of the Purchaser and shall move the location of the Project Office if reasonably required by the Purchaser at different stages of the Works.
- (e) The Manufacturer represents and warrants to the Purchaser that the Project Programme complies with the requirements described in paragraph 5 (Communications and Document Control) of schedule 5 (Contract Management) and the Key Programme Dates.

7.9 **Assistance of the Purchaser**

- (a) Wherever, pursuant to any Applicable Laws and Standards or otherwise, the service of notices or documents is required by the Purchaser or its nominee (including the service of notices in respect of functions or obligations retained by the Purchaser or its nominee), and such notices or documents cannot be provided directly by the Manufacturer, the Purchaser or its nominee shall serve all such notices or

documents as the Manufacturer may reasonably require to enable the Manufacturer to perform its duties and obligations under this Agreement.

- (b) Where clause 7.9(a) applies, the Manufacturer shall:
 - (i) provide the Purchaser with the requisite information in a timely manner;
 - (ii) permit the Purchaser to review the relevant information; and
 - (iii) take account of any reasonable comments of the Purchaser.
- (c) Neither the Purchaser nor its nominee shall assume any responsibility for the effect or result of an application or notice which it submits to a Competent Authority or other third party on the part of the Manufacturer pursuant to this Agreement and the Manufacturer agrees that it shall retain full responsibility.

7.10 **Verification**

- (a) Without prejudice to clause 9 (Manufacturing Facilities and Rights of Audit), in order to verify the Manufacturer's performance of, and compliance with, this Agreement, the Purchaser (and/or its nominees) shall be entitled to inspect or witness any aspect of the design, manufacture, supply, testing, commissioning and delivery of the Trains and the Equipment, their components or allied services, and to inspect the Technical Documents and to audit the management systems of the Manufacturer and those of any Subcontractor. The Purchaser (and/or any nominees) shall be entitled to enter on to the premises of the Manufacturer and any Subcontractor for this purpose, provided that no such inspection or audit shall unreasonably disrupt the commercial and industrial operation of the Manufacturer or any Subcontractor. Clause 9.8 shall apply in respect of any action found to be required as a consequence of such inspection or audit.
- (b) The Parties shall bear their own inspection and witnessing costs pursuant to this clause 7.10.

7.11 **Depot**

- (a) The Purchaser shall procure the completion of the Purchaser Depot Works at the Depot by the relevant dates set out in the Key Programme Dates.
- (b) Subject to clause 7.11(a), the Manufacturer warrants, and warrants that it has carried out sufficient depot modelling to demonstrate that, following completion of the Purchaser Depot Works, the Depot will be adequate and sufficient to enable the Purchaser or its nominee to maintain the Trains in the Fleet at the Depot in accordance with the Train Maintenance Regime.
- (c) If the Manufacturer is in breach of the warranties in clause 7.11(b) or 7.11(j), then (without prejudice to the Purchaser's rights and remedies in respect of such breach) any further works (the "**Manufacturer Depot Warranty Works**") required to remedy such breach and to ensure that the warranties in clause 7.11(b) and 7.11(j) are satisfied shall be undertaken by the Purchaser or (at the Purchaser's discretion) by a third party, in either case at the cost and risk of the Manufacturer.
- (d) The Manufacturer shall not be entitled to make any claim against the Purchaser in respect of, nor be relieved from any obligations as a result of, any further Manufacturer Depot Warranty Works carried out or to be carried out pursuant to clause 7.11(c).
- (e) If the Purchaser has not procured the completion of the Purchaser Depot Works by the dates set out in the relevant Key Programme Dates, the Purchaser shall not be

obliged to Accept any Trains pursuant to clause 15.5 in its absolute discretion, without prejudice to the application of Compensation Event (f).

- (f) The Purchaser shall not be obliged to Accept any Trains pursuant to clause 15.6 until all Manufacturer Depot Warranty Works required to be carried out pursuant to clause 7.11(c) have been completed to the Purchaser's reasonable satisfaction.
- (g) The Manufacturer shall not carry out, or procure the carrying out of, any depot works at the Depot, except with the prior written consent of the Purchaser to be given in the Purchaser's absolute discretion, and which consent will not be given until the Purchaser is satisfied with all aspects of the depot works (including the insurance arrangements).
- (h) The Manufacturer shall deliver or procure delivery of the Manufacturer Depot Equipment to the Depot Contractor at the Depot (or such other location in the United Kingdom as may be notified by the Purchaser to the Manufacturer from time to time) and obtain Equipment Acceptance of the Manufacturer Depot Equipment in accordance with the Key Programme Dates.
- (i) Following Equipment Acceptance of the Manufacturer Depot Equipment:
 - (i) the Purchaser shall install, or procure the installation of, the Manufacturer Depot Equipment at the Depot in accordance with any reasonable installation instructions provided by the Manufacturer to the Purchaser; and
 - (ii) the Manufacturer shall witness the installation of the Manufacturer Depot Equipment at the Depot and shall verify to the Purchaser that the Manufacturer Depot Equipment has been installed in accordance with clause 7.11(i)(i) above.
- (j) The Manufacturer warrants that the installed Manufacturer Depot Equipment will be adequate and sufficient to enable the Purchaser or its nominee to maintain the Trains at the Depot in accordance with the Train Maintenance Regime.
- (k) From Pre-Provisional Acceptance of the first Train in the Fleet until the end of the Train Warranty Period, the Manufacturer shall ensure that at all times (24 hours per day, seven (7) days per week) a sufficient number of its suitably qualified employees or representatives, or employees or representatives of a Subcontractor, are located at the Depot including for the purposes of:
 - (i) carrying out:
 - (A) the rectification of any Fault (where such rectification is required by this Agreement to be carried out by the Manufacturer);
 - (B) the Manufacturer's other warranty obligations under clause 20;
 - (ii) advising and assisting the Purchaser in relation to maintenance activities as set out in the Train Maintenance Regime and Fault rectification, in each case as to be carried out by the Purchaser or as may be requested from time to time by the Purchaser;
 - (iii) in addition to clauses 7.11(k)(i) and 7.11(k)(ii) above, analysing any Fault in a Train, Part or item of Equipment as required by clause 20;
 - (iv) carrying out the Manufacturer's performance monitoring and spares management obligations as set out in paragraphs 13 and 14 of schedule 5 (Contract Management); and

- (v) monitoring the consumption and stocks of Spares and Consumables during the Train Warranty Period,

in accordance with all plans, strategies and other submissions of the Manufacturer which have been Approved by the Purchaser through the Assurance process.

- (l) The Manufacturer undertakes that while any of its employees or representatives are located at the Depot, any other of the Purchaser's premises or on the Network, such employees or representatives shall:

- (i) comply with (A) any Depot rules and/or policies in existence from time to time; and (B) the Purchaser's health and safety rules and documentation including, but not limited to, the documents listed in schedule 16 (Health, Safety and Environment) and any specific Depot health and safety rules and/or policies in existence from time to time; and
- (ii) not disrupt the commercial and industrial operation of the Purchaser or its subcontractors,

and the Manufacturer shall procure that any employees or representatives of any Subcontractors comply with the same.

- (m) The Manufacturer shall cooperate in all respects with the Depot Contractor, the Purchaser and the Franchisee, and shall provide any assistance reasonably required by the Depot Contractor, the Purchaser or the Franchisee in connection with the Purchaser Depot Works, including but not limited to attending such meetings with the Depot Contractor, the Purchaser and/or the Franchisee as the Depot Contractor, Purchaser or Franchisee may require from time to time.
- (n) The Manufacturer shall maintain the Manufacturer Depot Equipment in accordance with Good Industry Practice and all Applicable Laws and Standards for the duration of the Train Warranty Period. In relation to the rectification of any operational performance issue in relation to the Manufacturer Depot Equipment, including Faults, the Manufacturer shall:
 - (i) provide support via remote means within one hour of a notification by the Purchaser to the Manufacturer; and
 - (ii) where such issue cannot be resolved by clause 7.11(n)(i) above, the Manufacturer shall provide on-site support and rectify the issue concerned within 20 hours of initial notification by the Purchaser to the Manufacturer.

7.12 **Enhanced Capital Allowances**

- (a) To enable the Purchaser to support TfL's claim to Her Majesty's Revenue & Customs ("**HMRC**") in relation to Enhanced Capital Allowances, the Manufacturer shall have any eligible components listed in the Energy Technology List or the Water Technology List and shall provide the following information to the Purchaser as necessary:
 - (i) details of eligible components, including:
 - (A) the number of components;
 - (B) unique model reference numbers; and
 - (C) manufacturer details and evidence of conformance with minimum performance;

- (ii) the cost per each eligible component;
- (iii) any applicable professional fees directly associated with the provision of each eligible component;
- (iv) the installation and delivery cost of each eligible component and associated preliminaries directly associated with the provision of each eligible component; and
- (v) details of the Train that each eligible component purchased will be installed on,

and, for the purposes of this clause 7.12, "**eligible components**" shall mean any of those components listed, or capable of being listed, in the Energy Technology List or the Water Technology List.

- (b) For each cost incurred in relation to clauses 7.12(a)(ii) to (iv), an invoice or payment certificate shall be provided with supporting evidence that confirms the cost incurred at clauses 7.12(a)(ii) to (iv) has sufficient nexus to each eligible component (where applicable). In addition, the delivery date for each eligible component at clauses 7.12(a)(ii) to (iv) shall be provided.
- (c) The Manufacturer agrees to co-operate with the Purchaser and TfL and its professional advisers in relation to the submission and agreement of such claim to HMRC.

7.13 Compliance with Applicable Standards

- (a) If there is an inconsistency between a standard referred to in paragraph (b) of the definition of Applicable Standards and any other aspect/requirement/remainder of the Train Technical Specification, the terms of the Train Technical Specification shall take priority.
- (b) If there is an inconsistency between any two (2) or more Applicable Standards, the following order of priority shall apply such that the Manufacturer should not have to comply with any element of a lower ranking Applicable Standard if and to the extent that a higher ranking Applicable Standard conflicts with it:
 - (i) first: Specified Standards;
 - (ii) second: British Standards;
 - (iii) third: European Standards; and
 - (iv) fourth: International Standards and associated codes of practice.

7.14 Obtaining Parts from third party suppliers

Without prejudice to the Manufacturer's other obligations under this Agreement and the Project Documents, the Manufacturer undertakes to ensure that the Train and Equipment Design maximises the ability of the Purchaser to source spares, consumables and parts for the Trains from third party suppliers following the end of the Train Warranty Period and undertakes to provide the Purchaser with all relevant documentation to enable the Purchaser to do this.

7.15 Provision and replenishment of Spares during the Train Warranty Period

- (a) Without prejudice to clause 7.15(f), for the duration of the Train Warranty Period, the Manufacturer shall be responsible for supplying at the Depot, or any other location in the United Kingdom notified by the Purchaser, sufficient:
 - (i) Warranty Spares to enable the Manufacturer (without prejudice to the Purchaser's right in clause 20.3(b) to rectify or procure the rectification of a Manufacturer Fault and require the Manufacturer to indemnify the Purchaser) to:
 - (A) rectify all Manufacturer Faults on the Fleet and Equipment; and
 - (B) carry out all other warranty work required by this Agreement on the Fleet and Equipment; and
 - (ii) Maintenance Spares to enable the Purchaser or its nominee to carry out all Routine Maintenance on the Fleet and Equipment,

and, for the avoidance of doubt, the Total Contract Price shall not be amended and no further payment shall be made to the Manufacturer if the quantity of Warranty Spares and/or Maintenance Spares required pursuant to this clause 7.15(a) differs from any prediction made by the Manufacturer or anything set out in part B of schedule 8 (Spares and Special Tools), in accordance with the Manufacturer's replenishment obligations in clause 7.15(c) below.

- (b) Subject to clause 7.15(d)(ii), for the duration of the Train Warranty Period, the Manufacturer shall be responsible for supplying at the Depot, or any other location in the United Kingdom notified by the Purchaser, the number of Purchaser Fault Spares set out in the column titled 'Base' in table 1.2 (Purchaser Fault Spares) of part B of schedule 8 (Spares and Special Tools) to enable the Purchaser, or (where applicable) the Manufacturer, to rectify Purchaser Faults on the Trains and Equipment.
- (c) Where a Spare has been used during the Train Warranty Period to carry out any of the activities described in clause 7.15(a) or 7.15(b) above, the Manufacturer shall ensure that:
 - (i) where a Warranty Spare or Maintenance Spare has been used, such Warranty Spare or Maintenance Spare is replenished or, where appropriate, Reconditioned as soon as reasonably practicable after it has been used and in any case to ensure compliance with clause 7.15(e); and
 - (ii) subject to clause 7.15(d) below, where a Purchaser Fault Spare has been used, such Purchaser Fault Spare is replenished or, where appropriate, Reconditioned as soon as reasonably practicable after it has been used.
- (d) Where a Purchaser Fault Spare has been used to rectify a Purchaser Fault pursuant to clause 7.15(b), the Purchaser shall, at its absolute discretion, either:
 - (i) reimburse the Manufacturer for the cost of replenishing or, where appropriate, Reconditioning the Purchaser Fault Spare pursuant to clause 7.15(c)(ii) at the price set out in the Bill of Materials; or
 - (ii) direct the Manufacturer not to replenish or Recondition that Purchaser Fault Spare, in which case clause 7.15(c)(ii) shall not apply.
- (e) Without prejudice to clauses 7.15(f) and (g), for the duration of the Train Warranty Period, the Manufacturer shall, on a monthly basis, ensure that the Warranty Spares and Maintenance Spares are replenished or, where appropriate, Reconditioned at a sufficient rate and in sufficient quantities to enable the Parties

to carry out all of the activities described in clause 7.15(a) for the next three (3) month period (provided that, without prejudice to clauses 7.15(f) and (g), the Manufacturer shall not deliver to the Purchaser any Warranty Spare or Maintenance Spare if it is not due to be used for such activities within that next three (3) month period) pursuant to the requirements of Train Maintenance Regime and on the basis set out in the Bill of Materials.

- (f) In accordance with clause 7.15(e), on or before the date which is six (6) months prior to the Planned FSA Services Commencement Date, the Manufacturer shall supply or have supplied to the Purchaser a sufficient quantity of Warranty Spares and Maintenance Spares to enable the Purchaser to carry out all of the activities described in clause 7.15(a) for the 12 month period following the end of the Train Warranty Period pursuant to the requirements of the Train Maintenance Regime and as set out in the Bill of Materials.
- (g) Unless the Manufacturer has already satisfied the obligations in clauses 7.15(g)(i) and 7.15(g)(ii) below, the Train Warranty Period shall be extended until the later of the date on which:
 - (i) the Manufacturer has procured that the Service Provider has put in place the FSA Insurances pursuant to clause 2.9 of the FSA; and
 - (ii) the number of Spares required by the Train Maintenance Regime and set out in the Bill of Materials have been provided by the Manufacturer pursuant to clause 7.15(f) and are in the Purchaser's possession to enable the Purchaser to carry out all relevant activities for the 12 month period immediately following the end of the Train Warranty Period.
- (h) Without prejudice to clause 7.15(g), if the Manufacturer is in breach of any of the obligations in this clause 7.15, the Purchaser shall be entitled to serve a non-compliance notice on the Manufacturer, and the Manufacturer shall be required to provide adequate Spares to fulfil the requirements of this clause 7.15 in accordance with what is set out in the non-compliance notice.
- (i) Where the Purchaser orders Option Trains pursuant to clause 6.6, the Manufacturer's obligation to provide all Warranty Spares and Maintenance Spares until the end of the Train Warranty Period pursuant to clause 7.15(a), and the Manufacturer's obligation to provide all Purchaser Fault Spares in accordance with clause 7.15(b), shall apply to those Option Trains as if they were included in the Base Order.
- (j) Amounts payable by the Purchaser under clause 7.15(d) shall be invoiced by the Manufacturer on the last Working Day of each TfL Period and paid by the Purchaser at the end of the TfL Period following the TfL Period in which the invoice is received, and the Total Contract Price shall increase by the actual amount paid in each case.

7.16 DLR Operating Conditions

- (a) Throughout the life of this Agreement, the Manufacturer shall use all reasonable endeavours to make itself aware of the DLR Operating Conditions.
- (b) On and from Acceptance of the first Train to be Accepted, the Manufacturer shall give notice to the Purchaser as soon as reasonably practicable of any DLR Operating Conditions where such DLR Operating Conditions are materially different from those set out in this Agreement (including the Train Technical Specification) and/or the Train Maintenance Regime. Any such notification shall be deemed to be a notification for the purposes of this clause 7.16 and clause 5.13 of the FSA.
- (c) Where:

- (i) the Manufacturer informs the Purchaser of a DLR Operating Condition pursuant to clause 7.16(b) above; and/or
- (ii) the Purchaser informs the Manufacturer of a DLR Operating Condition which the Manufacturer should have been aware of as a prudent manufacturer or maintainer of rolling stock,

the Manufacturer shall co-operate with the Purchaser to mitigate the impact of any such DLR Operating Condition on the Project, any Train, item of Equipment, Major Component or Recurrent Defect Extension Component, and on the Purchaser.

7.17 ACS/Overhaul Services

- (a) Where any ACS Date falls before the expiry of the Train Warranty Period, the Manufacturer shall perform the relevant ACS Services in respect of the relevant type of ACS/Overhaul Component in accordance with the provisions set out in paragraph 8 of part B of schedule 1 (The Services) of the FSA (as if the Manufacturer were the Service Provider, and the Purchaser were acting in its capacity as Customer, and making any further necessary changes).
- (b) The Purchaser may, at any time prior to the end of the Train Warranty Period, exercise any Component Overhaul Option in accordance with the provisions set out in paragraph 9 of part B of schedule 1 (The Services) of the FSA (as if the Purchaser were acting in its capacity as Customer, and as if the Manufacturer were the Service Provider, and making any further necessary changes).
- (c) Where the Purchaser exercises any Component Overhaul Option as referred to in clause 7.17(b) above, the Purchaser shall pay to the Manufacturer an amount equal to the amount that the Customer would have paid to the Service Provider under the FSA, in accordance with paragraph 5 and appendix 7 of schedule 11 (Payment Mechanism) of the FSA, on exercise of the Component Overhaul Option under the FSA.
- (d) Where the Manufacturer demonstrates that the costs of performing a Component Overhaul (as defined in the FSA) are in excess of the amount payable by the Purchaser pursuant to clause 7.17(c) above as a direct result of any Purchaser Fault, any such additional costs shall be met by the Purchaser.
- (e) Any work or overhauls carried out pursuant to this clause 7.17 shall be without prejudice to any warranty work required to be carried out by the Manufacturer under this Agreement, with the effect that any work that should have been paid for by the Purchaser under the provisions relating to warranty work will not be paid for under the provisions in this clause 7.17.

7.18 Disposal

The Manufacturer shall carry out all of its obligations with respect to the disposal of existing rolling stock as set out in schedule 29 (Disposal).

7.19 Mitigation of losses

Each of the Manufacturer and the Purchaser undertake to at all times take all reasonable steps to minimise and mitigate any loss for which they are entitled to claim from the other Party pursuant to this Agreement.

8. DOCUMENTATION

8.1 Priority of contract documents

- (a) Unless expressly stated otherwise (including as stated in clause 8.1(b)), where there is a conflict or other discrepancy between the Train Technical Specification and the Manufacturer Train Proposal, the Train Technical Specification shall prevail.
- (b) Where such a conflict or discrepancy exists and the Manufacturer Train Proposal offers a more beneficial position to the Purchaser than that set out in the Train Technical Specification, unless the Purchaser in its absolute discretion decides otherwise, the Manufacturer shall, in such a respect only, comply with the Manufacturer Train Proposal.

8.2 **Priority of provisions in this Agreement**

Unless expressly stated otherwise, where there is a conflict or other discrepancy between a clause of this Agreement and the provisions of a schedule, the provisions of the clause of this Agreement shall prevail.

8.3 **Key Programme Dates**

- (a) The Manufacturer undertakes to carry out the design, manufacture, testing, validation, systems integration and supply of the Trains and the other Purchased Items in accordance with the Key Programme Dates.
- (b) Unless expressly stated otherwise, the Key Programme Dates shall not be amended in any manner or form without the Purchaser or its nominee granting Approval to such amendment. Any changes to the Key Programme Dates that are requested by the Manufacturer or, following Approval by the Purchaser, made by the Manufacturer, must comply with paragraph 6 of schedule 5 (Contract Management).
- (c) The matters set out in the Key Programme Dates shall be wholly without prejudice to the Manufacturer's obligation to achieve Acceptance for each Train and each other Purchased Item on the Contractual Acceptance Date for that Train or Purchased Item.
- (d) The Manufacturer undertakes that it will deliver all relevant contract documents in accordance with the dates set out in the Key Programme Dates.
- (e) Without prejudice to any Manufacturer obligations to provide documents relating to the Simulator that are required to be delivered earlier, the Manufacturer undertakes that the Simulator will achieve Equipment Acceptance and be installed and fully functioning at the Simulator Location in accordance with the relevant Key Programme Dates which shall be four (4) months prior to delivery of the first two (2) Trains for Network Testing as set out in the relevant Key Programme Dates.

8.4 **Manufacturer's acknowledgements regarding discrepancies and errors**

- (a) The Manufacturer confirms to the Purchaser that, as at the Commencement Date, it has reviewed and considered in detail this Agreement and has satisfied itself:
 - (i) that no discrepancies or errors exist within this Agreement;
 - (ii) as to the feasibility of the Train Technical Specification with respect to the design, manufacture, testing, commissioning and supply of the Trains;
 - (iii) without prejudice to clause 7.6(b), that it has all relevant information with regard to the Network to enable the Manufacturer to carry out the Works and to achieve Acceptance of each Train and that, to the extent that any additional infrastructure parameter information ("**Additional Infrastructure Information**") is required, the Manufacturer shall request this from the Purchaser and shall not be entitled to make any claim against

the Purchaser or seek any relief or remedy or to be relieved from its obligations on the grounds of the obtaining by the Manufacturer of such Additional Infrastructure Information;

- (iv) that the Manufacturer Train Proposal conforms with and will implement in every respect the Train Technical Specification; and
 - (v) that the Manufacturer will be able to implement the Train Technical Requirements within the timescales set out in the Key Programme Dates.
- (b) The Manufacturer acknowledges that it accepts all risks arising from any discrepancies or errors that may be subsequently discovered within this Agreement or between any provisions and/or schedules of this Agreement and that, subject as aforesaid, it shall not be entitled to make any claim against the Purchaser for extension of time, payment or otherwise in respect of any such discrepancies or errors.

8.5 Infrastructure

- (a) The Manufacturer confirms that it has verified that as at the date of this Agreement all information in its possession (or in the possession of any member of the Manufacturer Group) relating to the Network is consistent with the Train Technical Specification and that no discrepancies exist between the two.
- (b) On and from the Commencement Date the Manufacturer shall verify that all information and data relating to the Network (or part thereof) that it receives from or on behalf of the Purchaser or the relevant Infrastructure Manager (or otherwise) is consistent with the Train Technical Specification and with all Applicable Laws and Standards and shall inform the Purchaser of any discrepancies as soon as reasonably practicable after receipt of such Network related information and (without prejudice to the fact that all such information is obtained at the Manufacturer's risk) shall co-operate with the Purchaser to mitigate the impact of any such discrepancies on this Project.
- (c) If the Manufacturer requests Additional Infrastructure Information, the Purchaser shall endeavour to provide such Additional Infrastructure Information to the Manufacturer, or shall endeavour to procure such Additional Infrastructure Information from the Franchisee, as the case may be, and clause 8.4(a)(iii) shall apply.

8.6 Notification and resolution of any discrepancies

- (a) The Manufacturer shall notify the Purchaser forthwith in accordance with clause 8.6(b) upon becoming aware of a discrepancy within this Agreement that cannot be resolved in accordance with clauses 8.1 and 8.2.
- (b) Where clause 8.6(a) applies, the Manufacturer shall provide the Purchaser, together with the notice of such discrepancy, an explanation of how the discrepancy can be so resolved. Within 15 Working Days of the Manufacturer's notice, the Purchaser shall consult with the Manufacturer to resolve the discrepancy and may notify the Manufacturer to resolve the discrepancy in a different manner, without prejudice to the fact that such resolution will not entitle the Manufacturer to make any claim against the Purchaser for extension of time, payment or otherwise. Unless the Purchaser notifies the Manufacturer to resolve the discrepancy in a different manner, the Manufacturer shall resolve the discrepancy in the manner proposed by it (subject always to that means of resolving the discrepancy being in compliance with Applicable Laws and Standards), at the Manufacturer's own cost.

8.7 **Plans**

- (a) The Manufacturer shall comply with each of the Plans as may be amended from time to time in accordance with clause 8.7(b).
- (b) Unless expressly stated otherwise the Manufacturer shall not be entitled to amend any Plan in any manner or form without obtaining the prior Approval of the Purchaser or its nominee to such amendments.

8.8 **No Extension of Time**

The Manufacturer acknowledges and agrees that compliance with its obligations in the Assurance Regime shall not entitle it to:

- (a) any extension of time to the Contractual Acceptance Date in respect of any Purchased Item or otherwise entitle the Manufacturer to any adjustment to the Key Programme Dates or the Project Programme;
- (b) any adjustment to:
 - (i) the Contract Price for any Purchased Item;
 - (ii) the Option Price for any Option;
 - (iii) the Total Contract Price and/or the Schedule of Milestones; or
- (c) be reimbursed for any costs and expenses incurred or otherwise be compensated in any form or manner.

8.9 **Technical Library**

The Manufacturer shall establish the Technical Library in electronic format from the Commencement Date and shall perform the Technical Library Services as specified in part B of schedule 17 (Technical Services) for the period from the Commencement Date until the FSA Services Commencement Date.

8.10 **Technical Advice**

The Manufacturer shall perform the Technical Advice Services as specified in part C of schedule 17 (Technical Services) for the period from the Commencement Date until the FSA Services Commencement Date.

9. **MANUFACTURING FACILITIES AND RIGHTS OF AUDIT**

9.1 **Manufacturing Facilities**

The Manufacturer shall ensure that the Primary Assembly and Manufacture of the Trains shall be carried out by the Manufacturer at the Manufacturer's Premises and the Manufacturer shall not use any other manufacturing facility for the Primary Assembly and Manufacture of the Trains without the prior agreement of the Purchaser.

9.2 **Access to Facilities**

The Manufacturer shall without further charge grant access to the Purchaser during normal business hours and on reasonable prior notice, to any premises used by the Manufacturer or any of its Subcontractors in performing its obligations pursuant to this Agreement for the purposes of audit, verification, inspection and integration, to the extent necessary to allow the Purchaser to exercise any of its rights granted under this Agreement.

9.3 Right of Audit

- (a) The Manufacturer shall, and shall procure that its Subcontractors shall:
 - (i) maintain a complete and correct set of records pertaining to all activities relating to the performance of the Manufacturer's obligations under this Agreement and all transactions and Subcontracts entered into by the Manufacturer for the purposes of performing its obligations under this Agreement (in respect of the Manufacturer) and the performance by the Key Subcontractor of its obligations under its Key Subcontract (in respect of the Key Subcontractor) (the "**Manufacturer's Records**"); and
 - (ii) to the extent not handed over to the Purchaser on termination or expiry of this Agreement, retain all the Manufacturer's Records during the life of this Agreement and for a period of not less than 12 years (or such longer period as may be required by law) following termination or expiry of this Agreement (the "**Retention Period**").
- (b) Notwithstanding any other right of audit to which the Purchaser is entitled under this Agreement or under any Applicable Laws and Standards, in order to verify the Manufacturer's performance of and compliance with this Agreement the Purchaser (and/or its nominees) shall be entitled on reasonable written notice, to:
 - (i) audit, inspect or witness any aspects of the design, manufacturing, testing or commissioning of the Trains or any other Purchased Items or any of their Parts and to audit the design and certification thereof including being present at, taking photographs, making audio or visual recordings of, and participating in, amongst other things:
 - (A) any inspection and conformance control of Systems supplied by Key Subcontractors;
 - (B) any inspection and conformance control of a Train construction at stages to be agreed between the Purchaser and the Manufacturer;
 - (C) any system tests (at stages to be agreed) during construction;
 - (D) any dynamic run testing of completed Trains;
 - (E) any systems integration testing; and
 - (F) any inspection and certification of each Train's compliance with the Train Technical Requirements, Assurance Regime and Manufacturer Train Proposal after completion of assembly and dynamic testing;
 - (ii) inspect the sub assembly of each Train;
 - (iii) inspect and be provided with copies (electronic and hard copy) without further charge to the extent necessary to verify the Manufacturer's compliance with this Agreement any and all of the Manufacturer's Records during the Retention Period (excluding any commercially confidential information to which the Purchaser is not otherwise entitled pursuant to this Agreement);
 - (iv) audit the management systems of the Manufacturer and those of any Subcontractor; and
 - (v) inspect and/or audit compliance by the Manufacturer and its Key Subcontractors with the Manufacturer's obligations under this Agreement,

provided that each of the audits and inspections described in clauses 9.3(b)(i) to 9.3(b)(v) shall not unreasonably disrupt the commercial and industrial operation of the Manufacturer or its Subcontractors.

9.4 **Co-operation with Audit Procedure**

To the extent necessary for the purpose of exercising any of the rights granted under clause 9.3, the Manufacturer shall provide, and shall procure that its Subcontractors shall provide, all reasonable co-operation to the Purchaser and/or its nominee including:

- (a) ensuring that appropriate safety and security systems are in place to prevent unauthorised access, extraction of and/or alteration to any of the Manufacturer's Records;
- (b) subject to clause 9.3(b)(iii), making all of the Manufacturer's Records available for inspection and within a reasonable time (or within such reasonable time specified by the Purchaser if such a time is specified) if requested; and
- (c) making the Manufacturer's employees and/or any Subcontractor's employees available for discussion with the Purchaser or its nominee.

9.5 **Purchaser's Resident Representatives**

The Manufacturer shall:

- (a) procure that the Purchaser shall be entitled to locate ten suitably qualified Purchaser representatives (the "**Purchaser's Resident Representatives**") at the Manufacturer's Premises and at any Subcontractor's works at any time from the Commencement Date until Final Acceptance of the last Train; and
- (b) be responsible for providing the Purchaser's Resident Representatives with:
 - (i) suitable comfortable office accommodation and meeting room facilities for ten (10) people at the Manufacturer's Premises and ten (10) people at the Test Track Facilities consisting of:
 - (A) desks;
 - (B) chairs;
 - (C) pedestal drawers;
 - (D) photocopiers;
 - (E) document scanners;
 - (F) high-speed secure Wi-Fi access; and
 - (G) telephone handsets with power sockets and two (2) phone lines (each with broadband capability);
 - (ii) facilities as are reasonably required by the Purchaser to be located at any Subcontractor's works; and
 - (iii) any necessary or desirable training required by the Purchaser's Resident Representatives in order to access or assist in the access to the Manufacturer's or any Subcontractor works or facilities.

9.6 The Manufacturer acknowledges and agrees that the Purchaser's Resident Representatives situated at the Manufacturer's Premises, Test Track Facilities and/or Subcontractor's works may exercise any of the rights of audit granted to the Purchaser under this clause 9 and the Manufacturer shall provide the Purchaser's Resident Representatives with unrestricted access to any documentation and records relating to the performance of the Works.

9.7 **No Claim for Relief**

No audit, inspection and/or testing by the Purchaser, the Purchaser's nominee, a Purchaser's Resident Representative pursuant to this clause 9 shall relieve the Manufacturer (nor any of its Subcontractors) from any of its obligations under this Agreement or prejudice any right, power and/or remedy of the Purchaser against the Manufacturer.

9.8 **Corrective Actions Arising**

- (a) If and to the extent that the Purchaser, the Purchaser's nominee or a Purchaser Contract Manager, when exercising their respective rights under this clause 9, clause 7.10 or otherwise, discovers any potential or actual breach or non-compliance with the Manufacturer's obligations under this Agreement then the Manufacturer shall carry out any actions found to be reasonably necessary to remedy such potential or actual breach or non-compliance (each, a "**Corrective Action**") as soon as reasonably practicable in accordance with the following provisions of this clause 9.8.
- (b) The Manufacturer shall acknowledge formally within two (2) Working Days receipt of any request for a Corrective Action raised by the Purchaser, its nominee or a Purchaser Contract Manager, together with the Manufacturer's confirmation of the timescale allocated by the Purchaser, its nominee or a Purchaser Contract Manager for the Manufacturer to close out the Corrective Action. The Manufacturer shall advise the Purchaser and/or its nominee upon its close-out of the Corrective Action, together with details of the Corrective Action applied. The Purchaser shall be entitled to undertake a further audit of any Corrective Actions on the same basis as set out in clauses 9.2 to 9.6.
- (c) If the Manufacturer (acting reasonably) disputes any Corrective Action it shall notify the Purchaser whereupon the Manufacturer and the Purchaser shall consult with each other and seek to resolve such dispute and in default of such resolution either the Purchaser or the Manufacturer may refer the dispute for determination in accordance with clause 41 (Dispute Resolution).

10. **DESIGN AND MOCK-UP**

10.1 **Design Specification and Assurance Regime**

The Manufacturer shall:

- (a) undertake the design of the Trains and Equipment in accordance with the requirements of this Agreement including the Train Technical Specification, schedule 6 (Assurance) and the Project Programme; and
- (b) provide to the Purchaser throughout the Assurance Period, Progressive Assurance in accordance with the Assurance Regime that the Train Technical Requirements have been understood by the Manufacturer and that the Manufacturer's design proposals for the Trains and Equipment satisfy the Train Technical Specification and will be at all times capable of meeting the Manufacturer's obligations under this Agreement.

10.2 Design Authority

- (a) The Manufacturer shall perform the Design Authority Services as specified in part A of schedule 17 (Technical Services) for the period from the Commencement Date until the FSA Services Commencement Date.
- (b) In each 12 month period, if (and to the extent that) the performance by the Manufacturer of its obligations with respect to:
 - (i) clause 10.2(a) and schedule 17 (Technical Services); and
 - (ii) paragraph 3 of schedule 1 (The Services) of the FSA,reasonably requires, [REDACTED] of work by the relevant suitably qualified employees of the Manufacturer (as demonstrated by the Manufacturer to the reasonable satisfaction of the Purchaser), the Purchaser shall pay to the Manufacturer or the Service Provider within 20 Working Days following the end of the relevant 12 month period an amount equal to [REDACTED]
[REDACTED]

10.3 Liability for Performance / no design risk back to Purchaser

- (a) Notwithstanding any other provision of this Agreement, no examination or lack of examination and/or Approval given by the Purchaser or its nominee of any document submitted by the Manufacturer in accordance with the requirements of the Assurance Regime or this Agreement shall in any respect relieve or absolve the Manufacturer from any obligation or liability under or in connection with this Agreement whether in relation to accuracy, safety, suitability, adequacy, performance, time or otherwise.
- (b) No involvement of the Purchaser or any Purchaser nominee in the Assurance Regime shall pass any design risk in respect of the Trains and the Equipment to the Purchaser. Design risk in respect of the Trains and the Equipment remains with the Manufacturer. All design risk in relation to a Train and/or any item of Equipment shall be borne by the Manufacturer regardless of any Approval given.

10.4 Schedule of Finishes

- (a) The Manufacturer shall consult with the Purchaser on the Schedule of Finishes included in the Manufacturer Train Proposal for the interior and exterior of the Trains and shall provide to the Purchaser, in hard copy and electronic copy form, an updated Schedule of Finishes for the interior and exterior of the Trains within six (6) months of the Commencement Date.
- (b) The Purchaser, acting reasonably, shall notify the Manufacturer of any amendments required to the draft Schedule of Finishes relating to each of the interior and exterior of the Trains, no later than the date falling 20 Working Days after receiving the relevant draft from the Manufacturer.
- (c) The Parties agree to discuss such amendments in good faith and the Manufacturer shall, in accordance with such discussion, incorporate the amendments required by Purchaser and provide the Purchaser with the final version of the Schedule of Finishes (in hard copy and electronic copy form and without any amendments which the Purchaser has not reviewed) within 20 Working Days after the Purchaser has notified the Manufacturer of any amendments to the Schedule of Finishes under this clause 10.4. The Manufacturer may only exclude amendments proposed by the Purchaser from the final version of the Schedule of Finishes if the Manufacturer has satisfied the Purchaser as to the reason for such exclusion.

10.5 **Mock-up**

- (a) The Manufacturer shall build the Mock-up which complies with the requirements set out in the Train Technical Specification and achieve Equipment Acceptance of the Mock-up by no later than the dates set out in the Key Programme Dates.
- (b) The Manufacturer shall update the Mock-up when necessary to reflect changes made as part of the Train and Equipment Design process.
- (c) In any case, the Manufacturer shall ensure that reasonable access is provided to the Purchaser for the purposes of assessing the Mock-up.
- (d) The Manufacturer shall deliver and transfer to the Purchaser title to the Mock-up free and clear of all Security Interest with full title guarantee in accordance with the relevant Key Programme Dates.
- (e) The Manufacturer shall make the Mock-up available to the Purchaser and the Franchisee at a location specified by the Purchaser (which may include the Manufacturer's Premises or other such suitable facilities) as instructed by the Purchaser.
- (f) The Manufacturer shall maintain a detailed log and photographic record (each of which shall be available to the Purchaser and the Franchisee at all times) of all updates which are made to the Mock-up.

10.6 **Permitted Design Change**

- (a) The Purchaser shall be entitled to make a Permitted Design Change at any time prior to the Design Freeze Date applicable to that Permitted Design Change by serving written notice on the Manufacturer.
- (b) A notice served by the Purchaser pursuant to clause 10.6(a) shall:
 - (i) identify the Permitted Design Change the Purchaser requires the Manufacturer to implement; and
 - (ii) describe, in reasonable detail, the scope and nature of the change required by the Purchaser.
- (c) Where the Purchaser serves written notice on the Manufacturer pursuant to clause 10.6(a) the Manufacturer shall notify the Purchaser in writing within ten (10) Working Days of receipt of such notice whether it considers that the Permitted Design Change required by the Purchaser (as described pursuant to clause 10.6(b)(ii)) is within the scope of and consistent with the Train Technical Requirements.
- (d) If the Manufacturer does not respond to the Purchaser within the period of time specified in clause 10.6(c), the Parties:
 - (i) shall be deemed to have agreed that the Permitted Design Change (as described pursuant to clause 10.6(b)(ii)) is within the scope of and consistent with the Train Technical Requirements; and
 - (ii) shall act in accordance with clause 10.6(f).
- (e) If the Manufacturer considers that the Permitted Design Change required by the Purchaser is outside the scope of and/or inconsistent with the Train Technical Requirements:

- (i) the Manufacturer shall describe, in the notice given pursuant to clause 10.6(c), in reasonable detail those elements of the Permitted Design Change which are outside the scope of and/or inconsistent with the Train Technical Requirements; and
 - (ii) the Parties shall meet within three (3) Working Days of receipt by the Purchaser of the notice given by the Manufacturer pursuant to clause 10.6(c) and seek to agree whether the Permitted Design Change is within the scope of and consistent with the Train Technical Requirements. If the Parties are unable to reach agreement within ten (10) Working Days of first meeting then either Party may refer the matter as an Expert Dispute for resolution pursuant to schedule 19 (Dispute Resolution Procedure).
- (f) If the Parties agree or it is otherwise determined that the Permitted Design Change is within the scope of and consistent with the Train Technical Requirements or if the implementation of any Permitted Design Change pursuant to this clause 10.6(f) is otherwise required under this clause 10.6:
 - (i) the Manufacturer shall:
 - (A) comply with and implement the Permitted Design Change in the design, manufacture, supply, testing and commissioning of the Trains; and
 - (B) revise the Manufacturer Train Proposal to take into account the Permitted Design Change and submit the revised Manufacturer Train Proposal to the Purchaser for Approval no later than ten (10) Working Days following such agreement or determination (as necessary); and
 - (ii) the Purchaser shall revise the Train Technical Specification to include the Permitted Design Change (as necessary).
- (g) If the Purchaser and the Manufacturer agree or it is otherwise determined that a Permitted Design Change is outside the scope of and/or inconsistent with:
 - (i) the Train Technical Specification, the Purchaser shall be entitled to:
 - (A) revise the form and scope of the Permitted Design Change and resubmit the revised Permitted Design Change to the Manufacturer in accordance with clause 10.6(a), provided that the Design Freeze Date for the Permitted Design Change has not occurred; or
 - (B) issue a Purchaser Change Notice to modify the Train Technical Specification to the extent necessary for it to be consistent with the Permitted Design Change and the terms of clause 28 (Change Procedure) shall apply;
 - (ii) the Manufacturer Train Proposal (but not the Train Technical Specification), the Purchaser shall be entitled to:
 - (A) revise the form and scope of the Permitted Design Change and resubmit the revised Permitted Design Change to the Manufacturer in accordance with clause 10.6(a), provided that the Design Freeze Date for the Permitted Design Change has not occurred; or
 - (B) instruct the Manufacturer to implement the Permitted Design Change in accordance with clause 10.6(f).

- (h) The Parties acknowledge and agree that any amendment to the Train Technical Requirements by reason of the implementation of a Permitted Design Change and/or the serving of a notice by the Purchaser pursuant to clause 10.6(a) shall not:
 - (i) except to the extent expressly provided for in clause 10.6(g)(i), constitute a Purchaser Change under the Change Procedure;
 - (ii) constitute a Compensation Event or entitle the Manufacturer to an extension of time to the Contractual Acceptance Date for any Train or Equipment or otherwise entitle the Manufacturer to any adjustment to the Project Programme or to any relief or compensation pursuant to this Agreement; or
 - (iii) in any way affect the Contract Price for any Train or Equipment, the Total Contract Price, the Option Price for any Option, the Schedule of Milestones, or otherwise entitle the Manufacturer to be reimbursed for any costs and expenses incurred or otherwise compensated in any form or manner.
- (i) Any change to this Agreement other than a Permitted Design Change, including without limitation any change to the Train Technical Specification and the Manufacturer Train Proposal, shall be made in accordance with the Change Procedure, save for any such changes made pursuant to the provisions of schedule 6 (Assurance).

10.7 **Bill of Materials**

The Manufacturer shall:

- (a) keep the Bill of Materials updated to reflect any Changes made in accordance with the Change Procedure; and
- (b) provide to the Purchaser a final version of the Bill of Materials for Approval at the end of the Detailed Design Phase.

11. **APPROVALS AND INFRASTRUCTURE**

11.1 **Licences and Consents**

In carrying out its obligations under this Agreement, the Manufacturer shall:

- (a) obtain and maintain at all times any Relevant Approvals which the Manufacturer shall be required to hold under any Applicable Laws and Standards or which are otherwise required for the Manufacturer to perform the Works and carry out its other obligations under this Agreement;
- (b) be responsible for and bear the cost of preparing all materials necessary for each application for obtaining any such Relevant Approvals;
- (c) be responsible for obtaining an independent safety assessment of all safety submissions to Competent Authorities;
- (d) be responsible for liaising with all relevant parties in obtaining all Relevant Approvals including Competent Authorities; and
- (e) renew and/or update and/or obtain new Relevant Approvals where:
 - (i) either of the Parties wishes to change, in accordance with this Agreement or the FSA, any aspect of the design, manufacture, construction, maintenance or use of the Trains in a way which would invalidate an existing Relevant

Approval or the Purchaser's or the Franchisee's Safety Certificate or Certificate of Technical Conformance; or

- (ii) any Relevant Approval needs to be renewed; and/or
- (iii) any Relevant Approval needs to be updated for any other reason in accordance with all Applicable Laws and Standards,

subject, in the case of clause 11.1(e)(i) only, to the Change Procedure.

11.2 Manufacturer Assistance for Franchisee Relevant Approvals

- (a) Without prejudice to the Manufacturer's obligations in clause 11.4, the Manufacturer shall provide to the Purchaser as soon as reasonably practicable any information relating to the Trains and/or the Purchased Items and/or their maintenance required in relation to any preparation/modification of the Purchaser's or the Franchisee's Safety Certificate and Certificate of Technical Conformance to accommodate operation of the Trains and/or Purchased Items.
- (b) Where a Relevant Approval may only be granted to an operator of rolling stock, the Purchaser shall (or shall procure that the Franchisee shall) make the formal presentation of the submissions for such Relevant Approval provided that the Manufacturer has supplied the required materials in accordance with this clause 11.
- (c) All documentation which the Manufacturer provides under this clause 11 shall be in a format so as to be suitable for submission to the applicable Competent Authority by the Purchaser (or the Franchisee) without re-drafting.
- (d) The Purchaser shall prepare (or procure the preparation of) all documentation forming part of submissions to Competent Authorities for the Relevant Approvals which only the Purchaser or the Franchisee, in their capacity as operator/future operator of the Trains, can prepare and which are therefore not within the Manufacturer's control provided that the Manufacturer has supplied the required materials in accordance with this clause 11.

11.3 Tax Allowances

The Manufacturer undertakes and confirms to the Purchaser that neither it nor any other person which is a member of the Manufacturer Group, a Subcontractor, a supplier or a provider of finance to the Manufacturer or any of those persons has claimed and that it will not claim and shall procure that no such other person shall claim any capital allowances or analogous Tax allowances in respect of any Train or any other Purchased Items.

11.4 Acceptance onto the Network

- (a) The Manufacturer acknowledges and agrees that it will at its risk and cost do all things necessary to assist the Purchaser in obtaining Acceptance of Asset of the Trains onto the DLR Network. Additionally, the Manufacturer shall, where requested to do so by the Purchaser, obtain and provide or procure the provision to the Purchaser of all documents and information relating to the Trains required to be provided by the relevant Infrastructure Manager in accordance with Applicable Laws and Standards.
- (b) The Purchaser shall carry out (or procure that the Franchisee carries out) those things which only the Franchisee, in its capacity as an operator of passenger-carrying rolling stock, it is able to undertake, including the preparation and approval of the Franchisee's Safety Certificate and Certificate of Technical Conformance in relation to the testing and passenger service of the Trains,

provided that, without prejudice to clause 11.4(a), the Manufacturer promptly provides the Purchaser with all necessary documentation and information regarding the Trains that are reasonably necessary for the Franchisee to prepare its Safety Certificate and Certificate of Technical Conformance.

11.5 ROGS

Without limiting the Manufacturer's general obligations in this Agreement to comply with Applicable Laws and Standards and Relevant Approvals, the Manufacturer shall comply with all obligations under the ROGS which relate to its obligations and activities under this Agreement including the obligation in regulation 22 of the ROGS to co-operate with transport operators.

11.6 Imports

(a) Without prejudice to the generality of clause 7.2 and subject to clause 11.6(b), the Manufacturer shall ensure that, to the extent applicable, all Purchased Items shall be imported in accordance with all Applicable Laws and Standards and the Manufacturer shall obtain all required approvals, licences and permits and pay or procure the payment of all taxes, import or export duties and tariffs relating to and/or incurred in connection with and/or arising out of the performance of the Works. The Manufacturer shall indemnify and keep indemnified the Indemnified Parties against all costs, damages and losses that any such person may suffer or that may arise as a result of and/or in connection with the importation of such Purchased Items into the United Kingdom. The Manufacturer, or any relevant Subcontractor(s) shall be the importer of record in respect of any of the Purchased Items which are subject to any Applicable Laws and Standards relating to the importation of goods into the United Kingdom.

(b) The parties agree that if:

- (i) there is a Change in Law (in the United Kingdom or in the European Union) due to the UK Government's decision to invoke article 50 of the Lisbon Treaty to leave the European Union; and
- (ii) such Change in Law increases or imposes any taxes (including corporation taxes), import or export duties or tariffs relating to and/or incurred in connection with and/or arising out of the performance of the Works (including as a result of the Manufacturer, or any relevant Subcontractor(s) being the importer of record),

then such a Change in Law shall be implemented as a Purchaser Change, notwithstanding that such a Change in Law may not otherwise be a Qualifying Change in Law.

12. TRAINING SERVICES

The Manufacturer shall provide, or procure the provision of, the training requirements set out in schedule 4 (Training) and in accordance with the Training Programme and the Key Programme Dates.

13. TRAIN MAINTENANCE REGIME

The Manufacturer shall provide to the Purchaser for Approval, not less than six (6) months before the intended date for Pre-Provisional Acceptance of the first Train as set out in the Key Programme Dates, a rolling stock train maintenance regime (including the Train Maintenance Plan) which shall demonstrate how the Purchaser or its nominee shall maintain the Trains and Equipment in the Depot (or, where an item of Equipment is located elsewhere, maintained in that location) in order to achieve the required levels of

performance throughout the life of the Trains and Equipment as set out in the Train Technical Specification (based on the version of the Train and Equipment Design which has been Approved). Once such Train Maintenance Regime has been Approved, it shall, for the purposes of this Agreement, be the **"Train Maintenance Regime"**. The Manufacturer shall provide the maintenance documentation referred to in paragraph 18.2 of schedule 28 (Technical Information) in order to support the Train Maintenance Regime.

14. **TESTING AND CERTIFICATION**

14.1 **Compliance with Testing Requirements**

The Manufacturer shall:

- (a) carry out testing on the Trains and Equipment in accordance with the Testing Requirements, the Testing Strategy, the Schedule of Tests, the Testing Programme, the Key Programme Dates, all Applicable Laws and Standards, all Relevant Approvals and all safety, quality and environmental requirements;
- (b) provide the results of the tests to the Purchaser on the dates specified in the Testing Requirements and to meet the requirements for Acceptance in clause 15; and
- (c) ensure that the Testing Programme shall incorporate all testing required to demonstrate compliance with the requirements of clause 14.1(a) and the Assurance Regime.

14.2 **Testing equipment and paths**

- (a) For the testing of each Train and each item of Equipment:
 - (i) the Manufacturer shall secure access for carrying out testing at the Test Track Facilities;
 - (ii) the Purchaser shall make the Depot Testing Facilities available to the Manufacturer for the delivery, re-assembly, static and dynamic testing of the Trains in accordance with paragraph 6 of part 1 (Testing Requirements) of schedule 7 (Testing);
 - (iii) the Purchaser shall secure access for carrying out the Network Testing in accordance with paragraph 7 of part 1 (Testing Requirements) of schedule 7 (Testing), and shall provide such access to the Manufacturer at the Purchaser's cost; and
 - (iv) other than as set out in paragraph 7.6(b) of part 1 (Testing Requirements) of schedule 7 (Testing), the Manufacturer shall provide, procure or otherwise make available at its own cost all testing equipment, personnel, documentation and facilities (including the Test Track Facilities) in order to comply with its obligations under this Agreement (including for any repeat testing that may be required as a result of a Train or an item of Equipment not passing any tests or otherwise as required to obtain any Relevant Approvals or as required by Applicable Laws and Standards).
- (b) The Purchaser shall:
 - (i) subject to clauses 14.2(b)(ii) and 14.2(d) below, not be required to provide operators to the Manufacturer for the purpose of carrying out any tests under schedule 7 (Testing), but at the request of the Purchaser the Manufacturer shall provide access for the Purchaser's operators at the Test Track Facilities to observe and/or participate in testing;

- (ii) provide operators for Network Testing in accordance with paragraph 7.6(b)(ii) of part 1 (Testing Requirements) of schedule 7 (Testing) at its own cost; and
 - (iii) assist the Manufacturer in obtaining any necessary approval for carrying out testing in the Depot and on the Network.
- (c) The Purchaser shall not be obliged to provide access to the Network for testing except as set out in schedule 7 (Testing).
- (d) Without prejudice to clauses 14.2(b) and 14.2(c), the Purchaser shall use reasonable endeavours to assist in providing additional access to the Network and/or additional operators, in each case as the Manufacturer may reasonably request, for Network Testing, including without limitation in order to carry out any re-tests, additional tests, or any delayed or extended tests, provided that the provision of any such additional access or additional operators shall be at the Manufacturer's cost.

14.3 Verification of Testing

- (a) No involvement by the Purchaser or the Franchisee or any nominees either in the Assurance Regime or testing carried out pursuant to, or otherwise relating to the subject matter of, this Agreement (including in respect of the Trains and the Equipment) will result in any diminution of the responsibilities or obligations of the Manufacturer under this Agreement or any change in the allocation of risks and responsibilities set out in this Agreement. In particular the attendance at or otherwise the witnessing of any tests by the Purchaser and/or the nominees of either will not affect the obligations of the Manufacturer to comply with its obligations under this Agreement.
- (b) Each time there is a significant event (including any of the events listed in clause 9.3(b)(i)) in the production of the Trains or the Equipment, a design review, any testing or any other significant event, the Manufacturer shall provide the Purchaser with reasonable notice (having regard to the nature and location of the test) of the date upon which such event, review or testing is due to take place and the Purchaser and/or its nominee shall be entitled to attend, and the provisions of clause 7.10 shall apply.

14.4 No extension of time or adjustment

The Manufacturer acknowledges and agrees that compliance with its assurance obligations and the application of and implications of the Approval Process set out in Appendix 2 (Approval Process) to schedule 5 (Contract Management) shall not entitle it to:

- (a) any extension of time to any Contractual Acceptance Date in respect of any Train or item of Equipment or otherwise entitle the Manufacturer to any adjustment to the Key Programme Dates, the Project Programme or the Contract Price for any Purchased Item, the Total Contract Price, the Option Price for any Option, the Schedule of Milestones, or to any other relief or compensation in accordance with this Agreement; or
- (b) be reimbursed for any costs and expenses incurred or otherwise be compensated in any form or manner.

15. ACCEPTANCE OF TRAINS AND EQUIPMENT

15.1 General Acceptance requirements

The Manufacturer shall ensure that:

- (a) the Trains and Equipment are delivered to the Depot by road, tested and made ready for Provisional Acceptance or Equipment Acceptance (as applicable), and the Trains are delivered to the Depot by road, tested and made ready for Final Acceptance and Fleet Acceptance in accordance with the Train Technical Requirements, the Key Programme Dates, the Testing Programme and the procedures set out in the Assurance Regime;
- (b) no Train or Equipment is delivered to the Purchaser for Provisional Acceptance or Equipment Acceptance (as applicable) prior to the relevant Contractual Acceptance Date (unless otherwise agreed by the Purchaser in its absolute discretion); and
- (c) the rate of delivery for Pre-Provisional Acceptance and for Provisional Acceptance of the Trains does not exceed one Train per week (unless otherwise agreed by the Purchaser in its absolute discretion).

15.2 **Pre-Provisional Acceptance Criteria**

Pre-Provisional Acceptance of any Train will only occur and the Purchaser shall only issue a Pre-Provisional Acceptance Certificate when the requirements set out in each of clauses 15.2(a) to 15.2(n) in respect of the Train presented for Pre-Provisional Acceptance have been satisfied:

- (a) the Manufacturer has delivered to the Purchaser all relevant contract documents (including all Technical Documents) due to have been delivered by the date of tender of the Train for Pre-Provisional Acceptance, evidence of successful completion of all testing due to have been carried out by that date, the Manuals, the Train Maintenance Regime, and evidence that all actions that are due to have been completed by that date pursuant to the Key Programme Dates have been completed and evidence that the Manufacturer has complied with all of its obligations under this Agreement which have fallen due by the date of such tender of the Train for Pre-Provisional Acceptance;
- (b) all testing has been carried out and all tests (on Trains and Equipment) have been passed in accordance with the Schedule of Tests pursuant to schedule 7 (Testing);
- (c) all training that the Manufacturer is required to have carried out by the date of tender of the Train for Pre-Provisional Acceptance has been carried out in accordance with schedule 4 (Training);
- (d) all Relevant Approvals have been obtained and the Train is in the requisite condition such that safe and meaningful Network Testing can be carried out in accordance with all Relevant Approvals and Applicable Laws and Standards;
- (e) the Simulator has been Accepted and is installed, fully functioning, and accurately reflects the systems, equipment, functionality and visual attributes of the Network in accordance with the requirements of clause 6.3(d) at the relevant time for Pre-Provisional Acceptance, at the Simulator Location in accordance with the Key Programme Dates;
- (f) the Manufacturer has fully reimbursed the Purchaser for any Manufacturer Depot Warranty Works that the Purchaser or a third party has undertaken or are to undertake pursuant to clause 7.11(c);
- (g) a valid Certificate of Technical Conformance has been granted;
- (h) a safe delivery method statement has been Approved;
- (i) the Manufacturer has delivered to the Purchaser a Train Logbook in respect of the relevant Train;

- (j) in relation to:
 - (i) the first and second Trains presented for Pre-Provisional Acceptance, the reliability of each Train presented is at least [REDACTED] MDBTSAF (without the intervention of on-board technical support of the Manufacturer) before the Manufacturer tenders any Train for Provisional Acceptance;
 - (ii) the third to fifth Trains presented for Pre-Provisional Acceptance, each Train has achieved at least [REDACTED] without a Technical Failure occurring; and
 - (iii) all other Trains presented for Pre-Provisional Acceptance, each Train has achieved at least [REDACTED] without a Technical Failure occurring;
- (k) the Manufacturer has obtained Approval for AoD;
- (l) the Train has either met the Energy Consumption Test, or the Purchaser has elected to receive and has received payment of all applicable liquidated damages pursuant to clause 16.8;
- (m) evidence that the Required Insurances required under part C of schedule 13 (Insurance) are in full force and effect and the Purchaser has received a letter in of undertaking in the form set out in part D (Broker's Letter of Undertaking) to schedule 13 (Insurance) in relation to those Required Insurances; and
- (n) the Manufacturer has delivered the Manufacturer Depot Equipment to the Depot Contractor.

15.3 Where the conditions in clause 15.2 have been satisfied in respect of a Train then the Purchaser will:

- (a) issue a Pre-Provisional Acceptance Certificate in respect of that Train; and
- (b) make the Depot available for use by the Manufacturer (such access being limited to (i) any scheduled tests that the Manufacturer is required to carry out in accordance with schedule 7 (Testing); and (ii) any maintenance that the Manufacturer is required to carry out in order to satisfy its obligations in clause 15.5(k)),

and the Train may be made available for Network Testing provided that it is in an As New Condition.

15.4 **Provisional Acceptance Criteria**

The Provisional Acceptance Criteria for each Train are the following:

- (a) the Pre-Provisional Acceptance Certificate has been issued;
- (b) all Relevant Approvals to operate in Unrestricted Passenger Revenue Earning Service on the Network have been obtained;
- (c) all testing has been carried out and all tests have been passed in accordance with the Schedule of Tests and the Testing Programme pursuant to schedule 7 (Testing);
- (d) those items of Equipment which according to the Key Programme Dates are due to have been Accepted on or before the date on which the Train is to be presented for Provisional Acceptance have been Accepted;
- (e) with respect to:

- (i) the third to tenth Trains presented for Provisional Acceptance, each Train that has previously received a PAC or QPAC prior to the date that the Manufacturer is tendering a Train for Provisional Acceptance has achieved at least [REDACTED] without a Technical Failure occurring; and
- (ii) all other Trains presented for Provisional Acceptance, the performance and reliability of all the Trains that have previously received a PAC or QPAC prior to the date that the Manufacturer is tendering a Train for Provisional Acceptance, is at [REDACTED] MDBSAF (without the intervention of on-board technical support from the Manufacturer) in the 28-day period ending on the day before the Manufacturer tenders a Train for Provisional Acceptance (taking the total number of kilometres run by all of the Trains that have previously received a PAC or QPAC and dividing this by the number of Service Affecting Failures that have occurred); and
- (f) no Corrective Actions in relation to the Train remain outstanding;
- (g) the Simulator is fully functioning, continues to comply with the relevant requirements in the Train Technical Specification, and is fully up to date to accurately reflect the systems, equipment, functionality and visual attributes of the Network, in accordance with the requirements of clause 6.3(d), and is Fault Free;
- (h) the Train is presented in an As New Condition;
- (i) the Manufacturer has obtained Approval for AoA and AftO; and
- (j) the Manufacturer has delivered to the Purchaser an updated version of the Train Logbook provided at Pre-Provisional Acceptance in respect of the relevant Train.

15.5 **Provisional Acceptance**

The Manufacturer shall tender each Train for Provisional Acceptance at the Depot by 12 noon on the Contractual Provisional Acceptance Date. The Purchaser shall not be obliged to accept a Train for Provisional Acceptance unless:

- (a) the Provisional Acceptance Criteria for the Train being presented for Provisional Acceptance have been satisfied;
- (b) the Manufacturer is otherwise in compliance with its obligations under schedule 4 (Training) to provide the training required under and in accordance with the Training Programme as at the relevant date;
- (c) such Train is Fault Free and there are no Recurrent Defects affecting the Trains across the Fleet;
- (d) the Manufacturer has updated the DLR Database to reflect the updated position in respect of the relevant Train and has complied with all of its obligations which have fallen due at the date of such tender for Provisional Acceptance under this Agreement in respect of the Technical Documents;
- (e) the Manufacturer has established the Technical Library, and the Manufacturer has updated the Technical Library such that it is up-to-date in accordance with clause 8.9;
- (f) for the first Train tendered for Provisional Acceptance, the Manufacturer has updated the Bill of Materials to reflect any amendments made in accordance with the Change Procedure, and for each subsequent Train tendered for Provisional

Acceptance, the Manufacturer has further updated the Bill of Materials to reflect any amendments made in accordance with the Change Procedure;

- (g) for the first Train tendered for Provisional Acceptance, the Manufacturer has provided to the Purchaser the Escrow Agreement duly executed by the Manufacturer and the Escrow Agent and such document having become unconditional in all respects (or, in the event that such document has not been executed by the Purchaser, such document would otherwise become unconditional in all respects upon execution by the Purchaser);
- (h) sufficient Spares have been delivered to the Purchaser at the Depot (and have achieved Equipment Acceptance) to enable all of the activities set out in clause 7.15 to be carried out for:
 - (i) all of the Trains and Equipment that have been Accepted prior to that time; and
 - (ii) the specific Train and/or item of Equipment being tendered for Provisional Acceptance,

in each case for a period of three (3) months following the relevant Contractual Acceptance Date, reflecting the Spares requirements for the Trains and Equipment for the forthcoming three (3) month period set out in clauses 7.15(a) and 7.15(b);

- (i) a valid up to date Certificate of Technical Conformance has been issued by the Purchaser (updated from that achieved at Pre-Provisional Acceptance, as appropriate);
- (j) all Taxes due from the Manufacturer in respect of the Train relating to the period prior to Provisional Acceptance and all import duties in respect of the Train have been paid by the Manufacturer; and
- (k) such Train has been maintained by the Manufacturer in accordance with the Train Maintenance Regime.

- 15.6 Subject to clauses 7.11(f) and 15.1(c), where the conditions specified in clause 15.5 have been fulfilled with respect to a Train, the Purchaser shall issue a PAC with respect to such Train.
- 15.7 If the conditions specified in clause 15.5 have not been satisfied, the Purchaser shall issue to the Manufacturer, on the day of the relevant Train being tendered for Provisional Acceptance by the Manufacturer, either (i) a Purchaser Statement setting out which of the conditions specified in clause 15.5 have not been satisfied; or (ii) a QPAC in accordance with clause 15.10.
- 15.8 If the Manufacturer, acting reasonably, disputes any of the reasons set out in a Purchaser Statement, it shall notify the Purchaser of this in writing within five (5) Working Days after receipt of the Purchaser Statement and either Party may refer the matter as an Expert Dispute pursuant to schedule 19 (Dispute Resolution Procedure).
- 15.9 Following Provisional Acceptance or Qualified Provisional Acceptance of a Train, the Purchaser may commence operation of such Train in Unrestricted Passenger Revenue Earning Service and the Manufacturer shall at all times comply with the reasonable instructions of the Purchaser for the purposes of monitoring compliance with the conditions for Final Acceptance specified in clause 15.13.

15.10 **Qualified Provisional Acceptance**

If one or more of the conditions for Provisional Acceptance set out in clause 15.5 has not been satisfied in respect of a Train when the Train is tendered for Provisional Acceptance by the Manufacturer, and provided that the Train can nevertheless be operated safely and in accordance with all Applicable Laws and Standards and the terms of all Relevant Approvals, the Purchaser shall be entitled in its absolute discretion (and shall not be obliged) to issue a QPAC in respect of that Train. The QPAC shall list in detail the outstanding conditions to be satisfied and tasks to be performed by the Manufacturer in order for full Provisional Acceptance of the Train to occur (the "**Preconditions**") and require the Manufacturer to satisfy the Preconditions in accordance with a timetable set out in the relevant QPAC, which timetable shall state that all Preconditions must in any event be completed before the date on which Final Acceptance of the Train is scheduled to occur pursuant to the Key Programme Dates ("**Preconditions Timetable**").

15.11 **Precondition Retention**

- (a) In respect of each Train which has achieved a QPAC but not a PAC, the Purchaser shall be entitled to retain [REDACTED] from the Milestone Payment payable on QPAC or PAC until all of the Preconditions have been met (the "**Preconditions Retention**").
- (b) When all of the Preconditions in a QPAC have been satisfied in respect of a Train, the Purchaser shall issue a PAC to the Manufacturer with respect to such Train, release the Preconditions Retention and pay such Preconditions Retention to the Manufacturer within 30 days of satisfaction of all such Preconditions for that Train.

15.12 **Final Acceptance**

The Manufacturer shall achieve Final Acceptance of each Train on the relevant Contractual Final Acceptance Date for that Train.

15.13 Final Acceptance of a Train shall occur when:

- (a) such Train has met all of the requirements for Provisional Acceptance and all of the Provisional Acceptance Criteria have been met in full;
- (b) such Train has achieved [REDACTED] MDBSAF on the Network in Unrestricted Passenger Revenue Earning Service (and without the intervention of on-board technical support by the Manufacturer), excluding any kilometres run for the purposes of the MDBTSAF calculation and test under clause 15.4;
- (c) the Preconditions set out in any QPAC under clause 15.10 have been satisfied to the satisfaction of the Purchaser in respect of such Train;
- (d) such Train is Fault Free and there are no Recurrent Defects affecting the Trains;
- (e) any Changes, Mandatory Modifications and Fault rectification due for completion prior to Final Acceptance of the relevant Train have been completed;
- (f) the Manufacturer has updated the Technical Library such that it is up-to-date in accordance with clause 8.9 including to reflect any Modifications, Mandatory Modifications and Changes made to date to the Trains and Equipment such that the Technical Library is up to date;
- (g) the Manufacturer has obtained Approval for AfO; and
- (h) the Manufacturer has provided a Fleet Acceptance Bond for the Fleet Acceptance Bond Required Amount with respect to the Final Acceptance of the relevant Train.

15.14 Where the conditions specified in clause 15.13 have been satisfied with respect to a Train, the Purchaser shall issue a Final Acceptance Certificate to the Manufacturer with respect to such Train.

15.15 Maintenance Cost

- (a) The Purchaser shall measure (or shall procure that the Franchisee measures) the cost of maintenance for each Accepted Train (excluding: (i) the cost of planned overhauls as set out in the Train Maintenance Regime (including the Train Maintenance Plan); and (ii) the cost of maintenance of the Thales Equipment) from the date of Acceptance of the Train until the Contractual Fleet Acceptance Date (each a **"Train Maintenance Cost"**). Before carrying out such measurements, the Purchaser shall consult with the Manufacturer to determine the process that the Purchaser or Franchisee will undertake when performing such measurements and shall (i) give due consideration to any comments of the Manufacturer; and (ii) act reasonably, in determining such process. The Manufacturer agrees to co-operate with the Purchaser and the Franchisee in relation to the monitoring of such Train Maintenance Cost.
- (b) On or after the occurrence of the Contractual Fleet Acceptance Date, the Purchaser will aggregate all Train Maintenance Costs for each TfL Period from issue of the first PAC or QPAC, if earlier, up to and including the Contractual Fleet Acceptance Date (**"Fleet Maintenance Cost"**).
- (c) The Manufacturer shall use the Train Maintenance Cost and Fleet Maintenance Cost data collected pursuant to clauses 15.15(a) and 15.15(b) above to re-populate a copy of the RSMM in accordance with the instructions provided to the Manufacturer by the Purchaser and using the Bid Maintenance Cost adjusted for the actual distance travelled by the Fleet so that the Maintenance Cost and the Bid Maintenance Cost are populated on a comparable basis and the Purchaser shall derive from the RSMM a net present value figure for maintaining the Fleet, such figure being the **"Maintenance Cost"**. When re-populating the RSMM, the Manufacturer shall use the actual mileage of the Fleet to date in place of the mileage contained in the "Kms" worksheet in the version of the RSMM as initialled on the date of this Agreement to enable a direct comparison of the Bid Maintenance Cost and the Maintenance Cost and clause 16.8(b) shall apply.

15.16 Fleet Acceptance

The Manufacturer shall achieve Fleet Acceptance by the Contractual Fleet Acceptance Date.

15.17 The Manufacturer shall make a submission for Fleet Acceptance to the Purchaser once the following Fleet Acceptance Criteria have been satisfied:

- (a) the ability of the Purchaser to run all the Trains with unconditional approval to operate from the relevant Competent Authority or such successor certificate which allows Unrestricted Passenger Revenue Earning Service over all of the Network;
- (b) receipt by the Purchaser of all relevant up to date documentation (including the Manufacturer having kept the DLR Database up to date) in accordance with clause 15.5(d) and the Technical Library is fully updated and up-to-date in accordance with clause 8.9;
- (c) the Manufacturer has kept the Simulator updated and it fully reflects the systems, equipment, functionality and visual attributes of the Network in accordance with the requirements of clause 6.3(d);
- (d) all Trains have achieved Final Acceptance; and

- (e) the performance and reliability of the Fleet (taken as a whole, but excluding any Option Trains) has reached a level of at least [REDACTED] MDBSAF, during the period of the six (6) TfL Periods immediately preceding the date of Fleet Acceptance (taking the total number of kilometres run by all of the Trains in the Fleet and dividing this by the number of Service Affecting Failures that have occurred).
- 15.18 Upon Fleet Acceptance being obtained in accordance with clause 15.17, the Purchaser shall issue a Fleet Acceptance Certificate to the Manufacturer.
- 15.19 **Equipment Acceptance**
- The Manufacturer shall deliver the Equipment and tender it for Equipment Acceptance in accordance with the Key Programme Dates (and, in the case of Spares, on the basis set out in clause 7.15) at the Depot or such other location in the United Kingdom as may be notified by the Purchaser to the Manufacturer.
- 15.20 The Purchaser shall not be obliged to accept the tender of any Equipment for Equipment Acceptance or issue an Equipment Acceptance Certificate unless:
- (a) in the case of the Special Tools, the number and specification of the relevant Special Tools corresponds with that required (in schedule 8 (Spares and Special Tools)) to be Accepted on the relevant date pursuant to the Key Programme Dates and terms of this Agreement;
 - (b) in the case of the Spares, such Spares have been supplied in accordance with clause 7.15;
 - (c) the particular item of Equipment conforms with the appropriate part of the Train Technical Requirements;
 - (d) the particular item of Equipment complies with all Applicable Laws and Standards, has all Relevant Approvals and is Fault Free;
 - (e) the Equipment Acceptance Tests for the relevant item of Equipment have been successfully completed to the Purchaser's satisfaction;
 - (f) all training in relation to that item of Equipment that the Manufacturer is required to have carried out by that date has been carried out in accordance with schedule 4 (Training);
 - (g) the Manufacturer has, up to the date of Equipment Acceptance, maintained that item of Equipment in accordance with the instructions for that Equipment;
 - (h) the Manufacturer has fully reimbursed the Purchaser for any Manufacturer Depot Warranty Works that the Purchaser or a third party have undertaken, pursuant to clause 7.11(c);
 - (i) in the case of the Simulator:
 - (i) the Simulator has been properly installed at the Simulator Location and all installation tests have been successfully completed to the satisfaction of the Purchaser; and
 - (ii) the Manufacturer has kept the Simulator updated to accurately reflect the systems, equipment, functionality and visual attributes of the Network in accordance with the requirements of clause 6.3(d);

- (iii) adequate Spares have been delivered to the Purchaser at the Depot to enable the carrying out of all of the activities set out in clause 7.15 for the Simulator during the period of three (3) months following the relevant Contractual Acceptance Date and reflecting the Spares requirements for the Simulator for the forthcoming three (3) month period set out in the Train Maintenance Regime;
 - (j) the Manufacturer has updated the Technical Library and the DLR Database such that it is up-to-date, and has confirmed that the Technical Library is up to date, both in accordance with clause 8.9, including to reflect any Modifications, Mandatory Modifications and Changes made to date to the Equipment;
 - (k) adequate Spares have been delivered to the Purchaser at the Depot, or such other location in the United Kingdom as may be notified by the Purchaser to the Manufacturer, to enable the carrying out of all of the activities set out in clause 7.15 for:
 - (i) all of the Equipment (except for the Simulator) that has been Accepted prior to that time; and
 - (ii) the specific item of Equipment (except for the Simulator) being tendered for Equipment Acceptance,

during the period of three (3) months following the relevant Key Programme Date reflecting the Spare requirements for the Equipment for the forthcoming three (3) month period set out in clauses 7.15(a) and 7.15(b);
 - (l) the Manufacturer has provided to the Purchaser a Simulator Logbook in respect of the Simulator; and
 - (m) in the case of the Manufacturer Depot Equipment, the Manufacturer has delivered the Manufacturer Depot Equipment to the Depot Contractor.
- 15.21 Where the conditions specified in clause 15.20 have been fulfilled, Equipment Acceptance of the relevant item of Equipment shall occur and the Purchaser shall issue to the Manufacturer an Equipment Acceptance Certificate in respect of that item of Equipment.
- 15.22 If the conditions specified in clause 15.20 have not been satisfied, the Purchaser shall issue to the Manufacturer, on the Working Day after the relevant item of Equipment is tendered for Acceptance by the Manufacturer, a Purchaser Statement setting out which of the conditions specified in clause 15.20 have not been satisfied.
- 15.23 If the Manufacturer, acting reasonably, disputes any of the reasons set out in the Purchaser Statement, it shall notify the Purchaser of this in writing within five (5) Working Days of receipt of the Purchaser Statement and either Party may refer the matter as an Expert Dispute for resolution pursuant to schedule 19 (Dispute Resolution Procedure).

15.24 Certificates

The Parties agree that the issue of any certificate, document or notice under clause 14 (Testing and Certification), this clause 15 (Acceptance of Trains and Equipment) and/or schedule 7 (Testing) shall not release, diminish or in any other way affect the obligations of the Manufacturer under this Agreement nor shall it result in the Purchaser assuming any responsibility for the adequacy, completeness, condition and performance of the Trains and/or any Equipment. In particular, and without prejudice to the generality of the foregoing, the issue by the Purchaser of a QPAC for a particular Train shall not imply that a QPAC will be issued by the Purchaser for any other Train (and clause 15.10 shall apply).

16. **ACCEPTANCE LIQUIDATED DAMAGES**

16.1 **Liquidated Damages for Delay to Trains**

Subject to clause 16.3, if the Manufacturer does not obtain a PAC or a QPAC in respect of any Train on or prior to the Contractual Provisional Acceptance Date for that Train, the Manufacturer shall pay liquidated damages to the Purchaser in [REDACTED] after the relevant Contractual Provisional Acceptance Date for that Train until the actual date upon which a PAC or QPAC is issued in relation to that Train by the Purchaser and such liquidated damages shall (without prejudice to clause 31 (Manufacturer Default)) be the sole and exclusive remedy of the Purchaser in respect of such late delivery.

16.2 **Liquidated Damages for Delay to Simulator**

Subject to clause 16.3, if the Manufacturer does not obtain Equipment Acceptance in respect of the Simulator on or prior to the Simulator Acceptance Date for the Simulator in accordance with the Key Programme Dates, the Manufacturer shall pay liquidated damages to the Purchaser in [REDACTED] after the Simulator Acceptance Date until Acceptance of the Simulator has occurred and such liquidated damages shall (without prejudice to clause 31 (Manufacturer Default)) be the sole and exclusive remedy of the Purchaser in respect of such late delivery.

16.3 **Late Acceptance Liquidated Damages Cap**

- (a) Subject to clauses 16.3(b), 16.4 and 17.9, the maximum liability of the Manufacturer to make payment of liquidated damages incurred pursuant to clauses 16.1 and 16.2 shall not exceed [REDACTED] (the "**LD Cap Amount**"), exclusive of VAT.
- (b) Upon any change to the Total Contract Price resulting from a Change Confirmation Notice, Claim Confirmation Notice or Option Train Change pursuant to clauses 6.7(a) or 6.7(b):
 - (i) if the Total Contract Price increases, the LD Cap Amount [REDACTED] of the relevant increase in the Total Contract Price; or
 - (ii) if the Total Contract Price decreases, the LD Cap Amount [REDACTED] of the relevant decrease in the Total Contract Price,

and any such increase or decrease in the LD Cap Amount shall be expressed as an amount in Pounds Sterling by converting the Euro and Canadian Dollar Currency Elements of such increase or decrease in the Total Contract Price to Pounds Sterling using the relevant spot exchange rates as shown in the Bank of England's 'Daily spot exchange rates against Sterling' with respect to the effective date of the relevant increase or decrease resulting from any such Change Confirmation Notice, Claim Confirmation Notice or Option Train Change.

16.4 **Application of Late Acceptance Liquidated Damages to Options**

Where the Purchaser has served an Option Notice:

- (a) the Purchaser shall promptly revise the relevant Key Programme Dates to take into account each of the Contractual Acceptance Dates for the Option Trains supplied or to be supplied by the Manufacturer and notify the Manufacturer of the same; and
- (b) upon receipt by the Manufacturer of a notice given pursuant to clause 16.4(a), the revised Key Programme Dates attached to the notice shall supersede and replace

the existing Key Programme Dates and shall be incorporated in and form part of this Agreement.

16.5 Liquidated Damages for Excess Mass

- (a) Where it is agreed or determined in accordance with this Agreement that the Actual Mass of any Train to be Accepted by the Purchaser under this Agreement (including any Option Train) exceeds the Contracted Design Mass, then the Purchaser may in its absolute discretion elect:
 - (i) to require the Manufacturer to pay to the Purchaser liquidated damages calculated in accordance with clause 16.6; or
 - (ii) to refuse to issue a QPAC or a PAC for that Train.
- (b) Where the Purchaser elects to require the Manufacturer to pay liquidated damages in respect of a Train pursuant to clause 16.5(a)(i), such liquidated damages shall be the sole and exclusive remedy of the Purchaser in respect of that Train's non compliance with the Contracted Design Mass, and any Train in respect of which such liquidated damages have been paid shall be treated, for the purposes of whether such Train is Fault Free, as complying with the weight requirements set out in the Train Technical Specification, but without prejudice to the Purchaser's right to refuse to issue a PAC if the relevant Train does not comply with the Train Technical Specification or is otherwise not Fault Free for any other reason.
- (c) The exercise by the Purchaser of its rights under this clause 16.5 in any particular manner in respect of any Train(s) shall not prevent, restrict or otherwise prejudice the right of the Purchaser to exercise its rights under this clause 16.5 in respect of any other Trains.
- (d) Where it is agreed or determined in accordance with this Agreement that the Actual Mass of any Train to be Accepted by the Purchaser under this Agreement (including any Option Train) exceeds the Contracted Design Mass, the Manufacturer may submit to the Purchaser for its agreement a remedial plan by which it proposes to reduce the Actual Mass of such Train (which remedial plan may propose that the payment of liquidated damages by the Manufacturer to the Purchaser pursuant to clause 16.5(a)(i) shall be waived, reduced or deferred subject to the Manufacturer's compliance with such remedial plan). This clause 16.5(d) shall be without prejudice to clause 16.5(a), save that where the Purchaser has (in its absolute discretion) provided its agreement in writing to such remedial plan, the Manufacturer shall only be obliged to pay liquidated damages to the Purchaser pursuant to clause 16.5(a)(i) in accordance with the terms of any such agreed remedial plan, notwithstanding the issue of a QPAC for the relevant Train.

16.6 Calculation of Excess Mass Liquidated Damages

- (a) If the Purchaser Accepts a Train notwithstanding that its Actual Mass is greater than its Contracted Design Mass, the Manufacturer shall be liable for liquidated damages determined by the formula:

■■■■■

where:

EMA means the amount of liquidated damages for which the Manufacturer shall be liable and if a negative number shall be deemed to be zero;

A means the amount of ■■■■■;

- B means the Actual Mass in tonnes of the Train to be Accepted by the Purchaser; and
- C means the Contracted Design Mass in tonnes of the relevant Train.

16.7 **[Not used.]**

16.8 **Whole Life Cost Warranty**

- (a) If a Train has not met the Energy Consumption Test, such that the ECT WLC for such Train is higher than the ECT Bid, the Purchaser will give notice to the Manufacturer indicating the amount the Manufacturer is required to pay in liquidated damages, and the Purchaser shall be entitled, in its absolute discretion, to:

- (i) require the Manufacturer to pay liquidated damages to the Purchaser in respect of such Train in the amount of:

$$(\text{ECT WLC} - \text{ECT Bid}) \times \text{[REDACTED]} \text{ per KWh/Train/km}$$

within [REDACTED] of the notification given above, and on receipt by the Purchaser of payment of the full amount, the relevant criterion for Pre-Provisional Acceptance shall have been met; or

- (ii) elect not to receive liquidated damages pursuant to this clause 16.8, in which case the relevant criterion for Pre-Provisional Acceptance shall not be met.
- (b) If, following the carrying out of the calculations in clause 15.15, the Maintenance Cost is higher than the Bid Maintenance Cost, the Purchaser will give notice to the Manufacturer indicating the amount the Manufacturer is required to pay in liquidated damages, and the Manufacturer shall be required to pay liquidated damages to the Purchaser in the amount of the difference between:

- (i) the Bid Maintenance Cost; and
 - (ii) the Maintenance Cost,

within [REDACTED] of the notification given above.

- (c) If a Train has not met the Energy Consumption Test, such that the ECT WLC for such Train is higher than the ECT Bid, the Manufacturer may submit to the Purchaser for its agreement a remedial plan by which it proposes to reduce the ECT WLC of such Train (which remedial plan may propose that the payment of liquidated damages by the Manufacturer to the Purchaser pursuant to clause 16.8(a)(i) shall be waived, reduced or deferred subject to the Manufacturer's compliance with such remedial plan). This clause 16.8(c) shall be without prejudice to clause 16.8(a), save that where the Purchaser has (in its absolute discretion) provided its agreement in writing to such remedial plan, the Manufacturer shall only be obliged to pay liquidated damages to the Purchaser pursuant to clause 16.8(a)(i) in accordance with the terms of any such agreed remedial plan, notwithstanding the deemed satisfaction of the relevant Pre-Provisional Acceptance criterion for the relevant Train.

16.9 **Determination and Payment of Liquidated Damages**

- (a) At any time after the last Working Day of a TfL Period in which liquidated damages have accrued under clauses 16.1 to 16.8, the Purchaser shall be entitled to determine in accordance with this clause 16 the amount of liquidated damages (if

any) that the Manufacturer has incurred and shall notify the Manufacturer in writing of such amount of liquidated damages together with sufficient information to enable the Manufacturer, acting reasonably, to understand how such amount was determined (an "**LD Notice**").

- (b) The Purchaser shall be entitled, at its absolute discretion, to:
 - (i) deduct the amount of liquidated damages determined under clause 16.9(a) above from any subsequent Milestone Payments or any other payments due to the Manufacturer; or
 - (ii) require the Manufacturer to pay such liquidated damages to the Purchaser with [REDACTED] of its receipt of such LD Notice.

16.10 No relief for Disputes

The Manufacturer shall not be relieved of its obligation to pay liquidated damages under this clause 16 by reason of the existence of any Dispute, unless and until the relevant Dispute is finally determined otherwise.

16.11 Genuine pre-estimate of loss

- (a) The Manufacturer acknowledges and agrees that the liquidated damages specified in clauses 16.1 to 16.8 and 20.5 in each case represent a genuine pre-estimate of the Purchaser's Losses arising from the failure to provide a Train on the relevant Contractual Acceptance Date, the Simulator on the Simulator Acceptance Date, a failure to meet the Energy Consumption Test or the Contracted Design Mass or the Maintenance Cost being higher than the Bid Maintenance Cost and the taking out of revenue earning service of a Train referred to in clause 20.5 (as applicable).
- (b) The Parties expressly undertake and agree that neither Party will:
 - (i) raise any claim of objection or defence challenging the validity of, or otherwise questioning the reasonableness of, the liquidated damages specified in clauses 16.1 to 16.8 or 20.5; or
 - (ii) bring any proceedings (including injunctive proceedings) challenging the Purchaser's rights to deduct amounts or the Manufacturer's obligation to pay amounts under clauses 16.1 to 16.8 or 20.5.
- (c) If the provisions for liquidated damages are held to be unenforceable as a result of a claim, objection, defence, dispute or proceedings raised or brought by the Manufacturer, the Manufacturer expressly agrees to pay to the Purchaser all Losses whatsoever (including loss of profit, loss of use and loss of production) incurred, suffered or payable by the Purchaser arising from or in consequence of the failure to provide a Train on the relevant Contractual Acceptance Date, the Simulator on the Simulator Acceptance Date or the taking out of revenue earning service of a Train referred to in clause 20.5 (as applicable).

17. RELIEF EVENTS AND COMPENSATION EVENTS

17.1 Occurrence of a Relief Event

If and to the extent that a Relief Event:

- (a) is a direct cause of a delay in achieving a Contractual Acceptance Date for a Train or any other Purchased Item; and/or

- (b) adversely affects the ability of the Manufacturer to perform any of its obligations under this Agreement,

then (subject to clause 7.6(c)), the Manufacturer is entitled to apply for relief from any right of the Purchaser to terminate under clause 31 (Manufacturer Default):

- (i) including relief from termination as a result of breaching the relevant Train Longstop Date, but irrespective of such relief the Manufacturer shall remain responsible for the payment of liquidated damages pursuant to clauses 16.1 to 16.8 and/or 20.5; and
- (ii) excluding the right to terminate pursuant to clause 31.1(i).

17.2 Obtaining relief from a Relief Event

- (a) To obtain relief the Manufacturer shall:
 - (i) as soon as practicable, and in any event within 20 Working Days after it becomes aware that the Relief Event has caused or is likely to cause delay and/or adversely affect the ability of the Manufacturer to perform its other obligations, give to the Purchaser a notice of its claim for relief from its obligations under this Agreement including full details of the nature of the Relief Event, the date of its occurrence and its likely duration;
 - (ii) within five (5) Working Days of receipt by the Purchaser of the notice referred to in clause 17.2(a)(i) above, give full details of the relief claimed; and
 - (iii) demonstrate to the reasonable satisfaction of the Purchaser that:
 - (A) the Manufacturer could not reasonably have foreseen the occurrence or consequence of the relevant Relief Event and could not have avoided such occurrence or consequences by steps which it might reasonably be expected to have taken, without incurring material expenditure;
 - (B) the Relief Event directly caused the need for relief;
 - (C) the relief from the obligations under this Agreement claimed could not reasonably be expected to be mitigated or recovered by the Manufacturer acting in accordance with Good Industry Practice, without incurring material expenditure; and
 - (D) the Manufacturer is using reasonable endeavours to perform its obligations under this Agreement.
- (b) If the Manufacturer has complied with its obligations in clause 17.2(a) above, then the Purchaser shall not be entitled to exercise its right to terminate this Agreement under clause 31 (Manufacturer Default) (other than in relation to clause 31.1(i)) as a result of and to the extent of any failure by or default of the Manufacturer arising from such Relief Event.
- (c) Nothing in this clause 17.2 shall affect any entitlement of the Purchaser to levy, and any obligation of the Manufacturer to pay, liquidated damages in accordance with clauses 16.1 to 16.8 and/or 20.5 during the period in which the Relief Event is subsisting.

17.3 Obligation to mitigate the consequence of any Relief Event

The Manufacturer shall use all reasonable endeavours to mitigate the impact and consequence of any Relief Event and the Manufacturer shall not be entitled to any relief under this clause if and to the extent that the consequences of the Relief Event have arisen as a result of a failure by the Manufacturer to mitigate such consequences.

17.4 Delay in notification of a Relief Event

If the information required under clause 17.2 is provided after the specified dates then the Manufacturer shall not be entitled to any relief to the extent that the requirement for relief is increased as a result of the delay in providing such information.

17.5 Additional information in relation to a Relief Event

The Manufacturer shall notify the Purchaser as soon as reasonably practicable and in any event within 15 Working Days if at any time it receives or becomes aware of any further information relating to the Relief Event, giving details of that information to the extent that such information is new or renders information previously submitted materially inaccurate or misleading.

17.6 Disputes relating to Relief Events

If the Parties cannot agree the extent of the relief required or the Purchaser disagrees that a Relief Event has occurred the Parties shall resolve the matter in accordance with the Dispute Resolution Procedure.

17.7 Occurrence of a Compensation Event

Subject to clause 7.6(c), if the occurrence of a Compensation Event:

- (a) is a direct cause of a delay in achieving a Contractual Acceptance Date for a Train or any other Purchased Item; and/or
- (b) prevents the Manufacturer from complying with, or has an adverse effect on the ability of the Manufacturer to perform any of its obligations under, this Agreement; and/or
- (c) results in the Manufacturer incurring any additional costs,

then the Manufacturer is entitled to apply for relief from its obligations and to claim Direct Losses under this Agreement and in doing so shall comply with the provisions of part D (Compensation Changes) of schedule 12 (Change Procedure).

17.8 Sole remedy for Compensation Events

Any compensation or relief agreed or determined under this clause 17 or part D (Compensation Changes) of schedule 12 (Change Procedure) shall be the Manufacturer's sole remedy in respect of the relevant Compensation Event.

17.9 Extension of limitations of liability

Where the Manufacturer has obtained relief in accordance with clause 17.2 in relation to any given Relief Event, the maximum liability cap identified in clauses 16.3 and 38.5 shall be extended by the aggregate amount of any liquidated damages levied by the Purchaser in accordance with clauses 16.1 to 16.8 and/or 20.5 during the period in which such Relief Event is subsisting.

18. TRANSFER OF TITLE AND RISK

18.1 Title in Trains and Equipment

Title and risk in the Trains and Equipment shall pass to the Purchaser or, at the Purchaser's discretion, the Purchaser's nominee (the "**Owner**"), from the date of the (a) issue of a QPAC or PAC (whichever is earlier); or (b) issue of an Equipment Acceptance Certificate, and in each case the Manufacturer warrants that such title shall be with full title guarantee and free and clear of all Security Interests.

18.2 Prohibition on Creating Security

(a) The Manufacturer undertakes that it shall not, at any time:

- (i) create; or
- (ii) purport to create; or
- (iii) permit to subsist,

any Security Interest over (A) any Train; and/or (B) any other Purchased Item (including any Manual or other documentation) or part thereof; and/or (C) any of the Works or any plant, materials and equipment used therein, and delivered in accordance with this Agreement and which has been, or is to be, supplied to the Purchaser under and in accordance with the terms of this Agreement.

18.3 Ownership of Purchased Items

Without prejudice to clause 45.1, any reference in this Agreement to Purchased Items or other assets being supplied to, delivered to and/or owned by the Purchaser shall, in the event that another person has become the Owner, be construed as a reference to Purchased Items or other assets being supplied to, delivered to or owned by such person.

18.4 Title in Train Data

Title in the Train Data shall pass to the Purchaser or, at the Purchaser's discretion, the Owner, from the date of creation of such Train Data, and the Manufacturer warrants that such title shall be with full title guarantee and free and clear of all Security Interests with the Purchaser having the right to use the Train Data for any reason whatsoever.

19. INSURANCE

19.1 Save as provided in clause 19.2, the Manufacturer and the Purchaser shall comply with the requirements of the insurance regime set out in schedule 13 (Insurance).

19.2 In the period from the Commencement Date until the date falling six (6) months after the date of signature of this Agreement, the Manufacturer shall comply with the requirements of the insurance regime set out in schedule 13 (Insurance) subject to the qualifications set out in the Insurance Differential Letter.

19.3 On or prior to the date falling six (6) months after the date of this Agreement, the Manufacturer shall provide to the Purchaser:

- (a) evidence that the Required Insurances required under part A and part B of schedule 13 (Insurance) are in full force and effect; and
- (b) a letter of undertaking in the form set out in part D (Broker's Letter of Undertaking) to schedule 13 (Insurance).

20. WARRANTIES

20.1 Design Life Warranty

The Manufacturer warrants to the Purchaser in respect of each Train that, on the date of Provisional Acceptance or Qualified Provisional Acceptance of a Train (whichever occurs first), such Train is designed for a [REDACTED] subject to operation and maintenance of such Train in accordance with the Permitted Use, the Train Maintenance Regime and the Manuals (and clause 20.5 shall apply).

20.2 Major Component Warranty

- (a) The Component Life Warranty of each Major Component shall commence on the date of Provisional Acceptance or Qualified Provisional Acceptance (whichever occurs first) of the relevant Train on which that Major Component is installed (or, if the Major Component is provided and Accepted as an MSA Spare, the date of Acceptance or the date of installation of the Major Component on to a Train, if later).
- (b) If a Fault arises on any Major Component during the Component Life Warranty of such Major Component, the Manufacturer shall:
 - (i) in the case of any Fault which the Parties have not agreed is a Purchaser Fault, remedy the Fault as soon as possible (and in any case within such reasonable period as is notified to the Manufacturer by the Purchaser) and undertake necessary rectification (whether by Reconditioning or replacement) to such Train or Major Component and execute such rectification work (whether by Reconditioning or replacement) as may be required by the Purchaser either:
 - (A) at the Depot; or
 - (B) at the Manufacturer's Premises, other Manufacturer site or any third party site in which case the Manufacturer shall arrange for the movement or transport of the relevant Train or Major Component to and from such site to undertake such Reconditioning or replacement; and
 - (ii) where the Manufacturer fails to remedy such Fault within the reasonable period as is notified to the Manufacturer by the Purchaser (other than where clause 20.2(d) or (e) (below) applies), at the request of the Purchaser, indemnify the Purchaser in respect of the full cost (including the cost of removal and transport of the Major Component) incurred by the Purchaser in rectifying, or procuring the rectification of, the Fault.
- (c) Within 20 Working Days of the date on which the affected Major Component was removed by the Purchaser or its nominee and made available for collection or rectification at the Depot by the Manufacturer, the Manufacturer shall:
 - (i) analyse such Major Component and provide a report or notification to the Purchaser, confirming details of the Fault that has occurred;
 - (ii) submit to the Purchaser its assessment of what further work is required for rectification of such Fault; and
 - (iii) submit to the Purchaser a determination of whether the Fault is a Manufacturer Fault or a Purchaser Fault, providing all supporting evidence as may be required by the Purchaser.
- (d) Where the Manufacturer demonstrates that the Fault was a Purchaser Fault, and the Purchaser agrees with this determination, then the costs of rectification and transport under this clause 20.2 shall be borne by the Purchaser.

the Manufacturer shall provide the Purchaser with a new warranty in respect of such Major Component which shall commence on the date of delivery of the replacement or Reconditioned Major Component to the Purchaser for a further period equal to the remaining Component Life Warranty of the original Major Component. The provisions of this clause 20.2 shall apply to such replacement Major Component and Major Component warranty.

20.3 **General Warranty for Train Warranty Period**

- (a) This clause 20.3 applies without prejudice to clauses 20.2 and 20.4 and subject to clause 20.3(h).
- (b) Without prejudice to clause 7.11(h), if a Fault arises on any Train, item of Equipment or Part during the Train Warranty Period, the Manufacturer shall:
 - (i) in the case of any Fault which the Parties have not agreed is a Purchaser Fault, remedy the Fault as soon as possible (and in any case within such reasonable period as is notified to the Manufacturer by the Purchaser) and undertake necessary rectification (whether by Reconditioning or replacement) to such Train, item of Equipment or Part and execute such rectification work (whether by Reconditioning or replacement) as may be required either:
 - (A) at the Depot; or
 - (B) at the Manufacturer's Premises, other Manufacturer site or any third party site in which case the Manufacturer shall arrange for the movement or transport of the relevant Train, Part or item of Equipment to and from such site to undertake such Reconditioning or replacement; and
 - (ii) where the Manufacturer fails to remedy such fault within the reasonable period as is notified to the Manufacturer by the Purchaser (other than where clause 20.3(d) or 20.3(e) (below) applies), at the request of the Purchaser, indemnify the Purchaser in respect of the full cost (including the cost of movement or transport of the relevant Train, item of Equipment or Part) incurred by the Purchaser in rectifying, or procuring the rectification of, the Fault.
- (c) Within 20 Working Days of the date on which the affected Train, item of Equipment or Part was made available for collection or rectification at the Depot by the Manufacturer, the Manufacturer shall:
 - (i) analyse such Train, item of Equipment or Part and provide a report or notification to the Purchaser, confirming details of the Fault that has occurred;
 - (ii) submit to the Purchaser its assessment of what further work is required for rectification of such Fault; and
 - (iii) submit to the Purchaser a determination of whether the Fault is a Manufacturer Fault or a Purchaser Fault, providing all supporting evidence as may be required by the Purchaser.
- (d) Where the Manufacturer demonstrates that the Fault was a Purchaser Fault, and the Purchaser agrees with this determination, then the costs of rectification and transport under this clause 20.3 shall be borne by the Purchaser.
- (e) Where the Parties agree that a Fault is a Purchaser Fault, the Manufacturer shall, at the Purchaser's cost, remedy the Fault as soon as possible and undertake

necessary rectification (whether by Reconditioning or replacement) to such Train, item of Equipment or Part and execute such rectification work (whether by Reconditioning or replacement) as may be required by the Purchaser either:

- (i) at the Depot; or
- (ii) at the Manufacturer's Premises, other Manufacturer site or any third party site,

(and the Purchaser shall arrange and pay for the movement of the relevant Train, Part or item of Equipment to and from the Manufacturer's Premises, other Manufacturer site or any third party site where necessary to undertake such rectification) in order to permit the relevant Train, item of Equipment or Part to operate in accordance with the Train Technical Requirements.

- (f) In respect of any Train or Part which is replaced or, where appropriate, Reconditioned, the Manufacturer shall provide the Purchaser with a new warranty in respect of such Train or Part which shall commence on the date of re-delivery of such Train or Part back to the Purchaser and ending on the later of (i) the last day of the Train Warranty Period; and (ii) the date which is two (2) years after the date of such re-delivery. The provisions of this clause 20.3 shall apply to such replacement Train or Part and warranty for that Train or Part.
- (g) In respect of any item of Equipment which is replaced or, where appropriate, Reconditioned, such item of Equipment shall be re-tendered for Equipment Acceptance in accordance with clauses 15.20 to 15.23, and the Manufacturer shall provide the Purchaser with a new warranty in respect of such item of Equipment which shall commence on the date of Equipment Acceptance of that item of Equipment pursuant to this clause 20.3(g) and ending on the later of (i) the last day of the Train Warranty Period; and (ii) the date which is two (2) years after the date of such Equipment Acceptance. The provisions of this clause 20.3 shall apply to such replacement item of Equipment and warranty for that item of Equipment.
- (h) From the later of: (i) the date of expiry of the warranty under clause 13.1.1 of the Thales Contract; and (ii) if applicable to the relevant item of Thales Equipment, the date of expiry of the warranty under paragraph 5 of Annex 8 of the Thales Contract, this clause 20.3 shall not apply with respect to any Fault arising on the Thales Equipment.

20.4 Recurrent Defects

- (a) Without prejudice to clauses 20.2 and 20.3, if, during the Recurrent Defect Period, either Party becomes aware that a Recurrent Defect has occurred, that Party shall notify the other Party and the Manufacturer warrants to the Purchaser that it shall:
 - (i) remedy such Recurrent Defect as soon as possible from the date that the Manufacturer becomes aware of the Recurrent Defect (and in any case within such reasonable period as is notified to the Manufacturer by the Purchaser) and undertake equivalent rectification work on all Trains, items of Equipment and Parts as if the same Recurrent Defect had become apparent on such Train, item of Equipment or Part, in each case as may be required in order to enable all Trains, Spares, Consumables, Special Tools, Simulator and Parts (as the case may be) to continue in Unrestricted Passenger Revenue Earning Service in compliance with the terms of this Agreement pending such rectification; and
 - (ii) where the Manufacturer fails to remedy such Recurrent Defect within the reasonable period as is notified to the Manufacturer by the Purchaser, at the

request of the Purchaser, indemnify the Purchaser in respect of the full cost incurred by the Purchaser in carrying out, or procuring the carrying out, of such rectification work.

- (b) Within 20 Working Days after having been notified of such Recurrent Defect by the Purchaser, the Manufacturer shall submit to the Purchaser for Approval within a period of 28 Working Days a programme for the rectification work referred to in clause 20.4(a) as soon as is practicable, and pending this work being carried out, do such rectification work as may be feasible in order to enable such Trains, Spares, Consumables, Special Tools, Simulator and Parts (as the case may be) to continue in Unrestricted Passenger Revenue Earning Service in compliance with the terms of this Agreement pending such rectification.

20.5 Liquidated Damages for warranty work/Spares provision

Without prejudice to the Manufacturer's other obligations under this Agreement, if a Train is taken out of, or is otherwise not available for, revenue earning service:

- (a) as a result of, or to rectify a Manufacturer Fault (including a Recurrent Defect) whether required by the Manufacturer or by/on behalf of the Purchaser, that the Manufacturer is obliged to remedy in accordance with this clause 20; or
- (b) as a result of the Manufacturer not:
 - (i) providing adequate Warranty Spares or Maintenance Spares at the Depot in accordance with clause 7.15(a); or
 - (ii) replenishing or Reconditioning Warranty Spares or Maintenance Spares as soon as reasonably practicable after they have been used in accordance with clause 7.15(c)(i); or
 - (iii) replenishing or Reconditioning Purchaser Fault Spares as soon as reasonably practicable after they have been used where the Manufacturer has been required to do so pursuant to clause 7.15(c)(ii),

the Manufacturer shall pay the Purchaser liquidated damages at the rate of [REDACTED] commencing on the date upon which the Train is removed from revenue-earning service up to and including the date upon which that Train (or Part) the subject of the relevant warranty work, maintenance or Fault rectification is returned to the Purchaser or the Franchisee in a condition which enables the Purchaser or the Franchisee to operate the Train in revenue-earning service.

- 20.6 The Manufacturer's liability to pay liquidated damages pursuant to clause 20.5 shall be in full and final settlement of any losses suffered by the Purchaser as a result of the Purchaser or the Franchisee being unable to operate the relevant Train in revenue-earning service, including any delays to the service after revenue-earning service re-commences, but without prejudice to the Manufacturer's obligation to rectify, or indemnify the Purchaser in respect of the Manufacturer Fault or any other consequences of the Manufacturer Fault. The Manufacturer acknowledges and agrees that the liquidated damages specified in clause 20.5 represent a genuine pre-estimate of the Purchaser's loss as a result of the Franchisee being unable to operate the Train arising from the Fault or failure to which they relate.

20.7 Interface with Fleet Support Agreement

- (a) Where the provisions of this Agreement (including this clause 20) apply such that the Manufacturer is required to carry out work to rectify any Manufacturer Fault or Recurrent Defect or indemnify the Purchaser for the cost of procuring the repair by a third party or to carry out any obligation under this Agreement (or any

Manufacturer obligation is otherwise covered by this Agreement), the Purchaser shall not be required to pay and the Manufacturer shall have no right to request payment from the Purchaser or the Service Provider for such work/rectification or any related Services or advice under the Fleet Support Agreement.

- (b) Where the Manufacturer pursuant to this Agreement and the Service Provider pursuant to the Fleet Support Agreement are members of the same Group, the Purchaser shall be entitled to claim liquidated damages:

- (i) pursuant to Schedule 10 of the Fleet Support Agreement for Trains being Unavailable (as defined in the Fleet Support Agreement); or
- (ii) pursuant to clause 20.5 of this Agreement for Trains being taken out of revenue earning service,

provided that the Purchaser shall not be entitled to recover liquidated damages pursuant to clause 20.5 of this Agreement for a Train being taken out of revenue earning service on a particular day to the extent that the Purchaser has already received payment in respect of such Train being Unavailable on such day pursuant to Schedule 10 (Performance Regime) of the Fleet Support Agreement.

20.8 Limitation on liability under warranties

The Manufacturer will not be liable under this clause 20 to the extent that a Manufacturer Fault results from a Modification which has not been performed by or on behalf of the Manufacturer so long as the Manufacturer is not in default in relation to such work or the Modification does not arise from a default by the Manufacturer under this Agreement and/or is not the subject of a Change Confirmation Notice.

20.9 Payments by the Purchaser

Amounts payable by the Purchaser under clauses 20.2(d), 20.2(e), 20.3(d), 20.3(e) and 20.5 shall be invoiced by the Manufacturer on the last Working Day of each TfL Period and paid by the Purchaser at the end of the TfL Period following the TfL Period in which the invoice is received, and the Total Contract Price shall increase by the actual amount paid.

20.10 Survival

The provisions of this clause 20 shall survive the expiry or termination of this Agreement.

21. RIGHT OF THE PURCHASER TO AUTHORISE WORK BY OTHERS

21.1 Right of the Purchaser to Perform Work

Without prejudice to any other right or remedy of the Purchaser under this Agreement, if the Manufacturer fails to provide any Purchased Item in accordance with, or fails to carry out any of its obligations under, this Agreement, the Purchaser may give the Manufacturer notice requiring the Manufacturer to supply that Purchased Item or carry out the relevant obligation within the period specified in such notice or, if none, within 30 days of the date of the notice. If the Manufacturer fails to supply the Purchased Item or carry out the relevant obligation the Purchaser may procure (providing it is acting reasonably) the supply of that Purchased Item or perform such obligation using its own or third party personnel and resources.

21.2 Recovery of Costs

Without prejudice to clauses 20.2 and 20.3, all costs and expenses properly and reasonably incurred by the Purchaser pursuant to clause 21.1, together with VAT

chargeable thereon, shall be recoverable by the Purchaser from the Manufacturer within ten (10) Working Days of a demand from the Purchaser as a debt due and owing from the Manufacturer together with Default Interest from the date of demand until payment in full by the Manufacturer.

21.3 Relationship with Fault Rectification Obligations

- (a) Subject to clause 20.8 any remedial work undertaken by the Purchaser or a third party authorised by the Purchaser pursuant to this clause 21 shall not affect or relieve the Manufacturer of its obligation to comply with the requirements of clause 20 (Warranties) or any other provision of this Agreement or the Service Provider's obligations under the FSA, provided that the Manufacturer shall have the right (but no obligation) to supervise any Fault rectification work subject to the Purchaser's reasonable requirements.
- (b) The Parties acknowledge that the Purchaser shall have no obligation to pay any amount in respect of work under the Fleet Support Agreement for any payments that are covered by and included in payments made or to be made by the Purchaser under this Agreement for any work undertaken by the Manufacturer (or a third party authorised by the Manufacturer) in connection with the warranties provided by the Manufacturer under clause 20.

22. TOTAL AND PARTIAL LOSS OF TRAIN

22.1 Consequence of an Event of Loss

Without prejudice to clause 41 (Dispute Resolution), in the event that any Train suffers an Event of Loss at any time prior to Acceptance (a **"Lost Train"**), the Manufacturer shall:

- (a) promptly notify the Purchaser; and
- (b) at the Purchaser's option (in its absolute discretion) either:
 - (i) at no additional cost, replace the Lost Train in accordance with clause 22.2; or
 - (ii) stop performing its obligations under this Agreement with respect to the Lost Train, in which case the provisions of clause 22.5 shall apply.

22.2 Replacement

If the Purchaser elects to require the replacement of a Lost Train pursuant to clause 22.1(b)(i):

- (a) the Manufacturer shall deliver, as soon as practicable, a plan for the carrying out of the works necessary to replace the Lost Train (the **"Replacement Works"**), including the proposed terms and timetable upon which the Replacement Works are to be effected, the final terms of which shall be subject to the approval of the Purchaser (such approval not to be unreasonably withheld or delayed) (the **"Replacement Strategy"**); and
- (b) provided that the Purchaser approves the Replacement Strategy, the Replacement Strategy will be adopted and:
 - (i) the Manufacturer shall carry out the Replacement Works in accordance with the Replacement Strategy and the provisions of this Agreement and (to the extent that the Purchaser and the Manufacturer agree that the Replacement Works shall not be to the Train Technical Requirements) in accordance with

drawings and specifications that shall first be submitted for approval in writing by the Purchaser; and

(ii) the Purchaser agrees and undertakes:

- (A) that, subject to compliance by the Manufacturer with its obligations under this clause 22.2, it shall not exercise any right which it might otherwise have to terminate this Agreement by virtue of the event which caused the relevant Event of Loss; and
- (B) to use reasonable endeavours to assist the Manufacturer in the carrying out of the Replacement Strategy.

22.3 **Relief from obligations**

The Purchaser and the Manufacturer agree that, where clause 22.2 applies following the occurrence of an Event of Loss, the Manufacturer shall (without prejudice to any accrued liability up to such date) be relieved from its obligations to pay Acceptance Liquidated Damages in respect of the Lost Train until the occurrence of the relevant Contractual Provisional Acceptance Date as amended pursuant to the approved Replacement Strategy, unless the Event of Loss was caused by a breach by the Manufacturer of its obligations under this Agreement, in which case the Manufacturer shall continue to be liable for Acceptance Liquidated Damages in respect of the Lost Train until the Acceptance of the replacement Train.

22.4 **No Compensation**

The Purchaser and the Manufacturer agree that the occurrence of an Event of Loss shall not entitle the Manufacturer to:

- (a) any increase in:
 - (i) the Contract Price for the Train the subject of the Event of Loss;
 - (ii) the Total Contract Price or the Contract Price for any other Train or Equipment; or
 - (iii) the Option Price of any Option;
- (b) any acceleration of the payments due to be made under this Agreement; or
- (c) any other compensation in any form or manner.

22.5 **Cancellation**

If the Purchaser elects to cancel this Agreement in respect of a Lost Train pursuant to clause 22.1(b)(ii):

- (a) the Purchaser shall have no further liability to pay the Manufacturer any sum which would have been due and payable to the Manufacturer had this Agreement not been so cancelled in respect of that Train;
- (b) the Manufacturer shall, on the date of any cancellation of this Agreement in respect of a Lost Train pursuant to clause 22.1(b)(ii), repay to the Purchaser an amount (determined by the Purchaser) equal to all sums previously paid by the Purchaser to the Manufacturer under this Agreement in respect of the Lost Train, together with Default Interest thereon (calculated from the date of the relevant payment by the Purchaser until the date on which such repayment is made); and

- (c) upon payment in full by the Manufacturer of all sums due to the Purchaser pursuant to clause 22.5(b), the obligations of each of the Manufacturer and the Purchaser shall cease in respect of the Train that has been cancelled in accordance with this clause 22.5.

22.6 **Consequence of partial Loss**

In the event that a Train suffers any damage which does not constitute an Event of Loss at any time prior to its Acceptance, the Manufacturer shall be obliged to repair such damage as soon as reasonably practicable (but in any event no later than the Contractual Acceptance Date (as extended by any Compensation Event pursuant to clause 17 (Relief Events and Compensation Events) for such Train).

23. **MANUFACTURING TOOLING**

23.1 **Notification of Manufacturing Tooling**

Within 28 days of the date of Provisional Acceptance of the first Train presented for Provisional Acceptance, the Manufacturer shall provide to the Purchaser a list of all Manufacturing Tooling used in the manufacture of the Trains and the Equipment. This list shall be updated from time to time to reflect any changes in the list of Manufacturing Tooling.

23.2 **Disposal of Manufacturing Tooling**

The Manufacturer shall not dispose, and shall procure that no Subcontractor shall dispose, of any Manufacturing Tooling that is unique to the production of the Trains and Equipment (other than where obsolete, defunct, damaged beyond repair, worn out or faulty and in each case replaced by a comparable item of Manufacturing Tooling) without the Manufacturer serving notice to the Purchaser a reasonable period in advance of the proposed disposal (including details of the original supplier in each such notice) (a "**Disposal Notice**"). Upon receipt of a Disposal Notice the Purchaser may either:

- (a) require the Manufacturer to manufacture or procure the manufacture of a quantity of Spares, Consumables and/or Special Tools of a type or types comprising the Warranty Spares and/or Special Tools specified by the Purchaser using such Manufacturing Tooling and offer to sell such Spares, Consumables and/or Special Tools to the Purchaser; or
- (b) require the Manufacturer to sell or procure the sale of the relevant Manufacturing Tooling to the Purchaser.

23.3 **Final Run of Spares, Consumables and/or Special Tools**

- (a) If the Purchaser notifies the Manufacturer within 90 days of receipt of a Disposal Notice that the Purchaser wishes to purchase a specified quantity of Spares, Consumables and/or Special Tools of the same type as pursuant to clause 23.2(a), the Manufacturer shall not be entitled to dispose and shall procure that any Subcontractor shall be entitled to dispose of the relevant Manufacturing Tooling until the relevant quantity of Spares, Consumables and Special Tools has been produced.
- (b) The Manufacturer shall supply the specified quantity of relevant Spare(s), Consumable(s) and/or Special Tool(s) in accordance with the instructions of the Purchaser.
- (c) The Purchaser shall pay the Manufacturer an amount equivalent to the sum of:

- (i) the price for each Spare and Consumable (by reference to the relevant price set out in the relevant section in the Bill of Materials) ordered by the Purchaser multiplied by the quantity of the relevant Spares and Consumables specified by the Purchaser; and
- (ii) the price for each Special Tool (by reference to the relevant price as set out in the Bill of Materials) ordered by the Purchaser multiplied by the quantity of the relevant Special Tools specified by the Purchaser,

immediately following Acceptance of such Spares, Consumables and/or Special Tools.

- (d) Legal and beneficial title to the Spares, Consumables and/or the Special Tools supplied by the Manufacturer pursuant to this clause 23 shall pass to the Purchaser on Acceptance of such Spares, Consumables and/or Special Tools, free from any Security Interest and with full title guarantee.

23.4 Sale and Purchase of Manufacturing Tooling

- (a) If the Purchaser notifies the Manufacturer within 90 days of receipt of a Disposal Notice that the Purchaser or its nominee wishes to acquire the Manufacturing Tooling the Manufacturer shall provide such Manufacturing Tooling to the Purchaser in consideration of the Purchaser paying the Manufacturer the amount of [REDACTED] representing its fair market value that the Manufacturer is able to demonstrate has been offered by a prospective arms-length purchaser who has the capacity to pay such higher price.
- (b) Upon notification by the Purchaser in accordance with clause 23.4(a), the Manufacturer shall as soon as reasonably practicable deliver (or procure the delivery of) the Manufacturing Tooling to any location specified by the Purchaser or its nominee. Legal and beneficial title to the Manufacturing Tooling shall pass to the Purchaser or its nominee (as the case may be) by delivery (or on payment by the Purchaser if earlier), free from any Security Interest and with full title guarantee.

23.5 Survival

The provisions of this clause 23 shall:

- (a) survive the expiry or termination of this Agreement; and
- (b) be without prejudice to clause 7.15.

24. FREE ISSUE MATERIALS

24.1 Free Issue Materials/third party provided equipment

- (a) The Manufacturer acknowledges that the Purchaser shall be entitled to fit Free Issue Materials on to the Trains either:
 - (i) itself;
 - (ii) through the Manufacturer;
 - (iii) through the Franchisee; or
 - (iv) using a third party.

- (b) Regardless of whether it is the Manufacturer that fits the Free Issue Materials, any impact of the fitment of such Free Issue Materials on the obligations of the Manufacturer under this Agreement, whether during the Works or following Acceptance of a Train to which they are to be fitted, shall be dealt with under the Change Procedure.
- (c) Without prejudice to clause 24.1(a), the Purchaser shall be entitled to invoke a Purchaser Change under the Change Procedure if it requires the installation on any Train of any Free Issue Materials.
- (d) The Purchaser shall be responsible for any repair or rectification required if a Free Issue Material fails to operate once it has been installed onto a Train.
- (e) Any Service Affecting Failure or failure to achieve the reliability requirements of the Train Technical Requirements (including the relevant MDBSAF for each Train) that is wholly or partially caused by Free Issue Materials shall be the responsibility of the Purchaser and:
 - (i) shall not prevent the Manufacturer from:
 - (A) in relation to any Train, meeting the Provisional Acceptance Criteria or the Final Acceptance Criteria in respect of such Train; and
 - (B) meeting the Fleet Acceptance Criteria; and
 - (ii) (in the case of Service Affecting Failures) the clock shall not be re-set to zero.

24.2 **Survival**

The provisions of this clause 24 shall survive the expiry or termination of this Agreement.

25. **MILESTONES AND SECURITY**

25.1 **Milestones and Security**

The Purchaser and the Manufacturer shall comply with the provisions of schedule 10 (Milestones and Security).

25.2 **Re-Profiling Option 1**

- (a) The Purchaser may, by notice to the Manufacturer at any time from the Commencement Date until the earlier of:
 - (i) 30 days before the scheduled date for achievement of the Milestone entitled 'Preliminary Train Design Phase complete' as shown in column (5) of the Schedule of Milestones; and
 - (ii) the date on which the Purchaser issues an Option 2 Re-Profiling Notice to the Manufacturer,

require that the Milestone Payments are re-profiled in accordance with this clause 25.2 (such notice being an "**Option 1 Re-Profiling Notice**").
- (b) Any Option 1 Re-Profiling Notice shall:
 - (i) be in the form set out in appendix 8 (Form of Re-Profiling Notice) to part B of schedule 10;

- (ii) state that it is an Option 1 Re-Profiling Notice issued pursuant to this clause 25.2; and
 - (iii) specify the date from which the re-profiling of Milestone Payments shall become effective (the "**Option 1 Re-Profiling Date**"), which shall be no earlier than five (5) Working Days from the date of the Option 1 Re-Profiling Notice.
- (c) On the Option 1 Re-Profiling Date, with respect to each Milestone for which the scheduled date for achievement (as identified in column (5) of the Schedule of Milestones) falls on or after the Option 1 Re-Profiling Date (each an "**Option 1 Relevant Milestone**"), the amounts of:
- (i) the Milestone Payments associated with such Option 1 Relevant Milestones as specified in column (3) of the Schedule of Milestones; and
 - (ii) the Required APB Bond Amounts associated with such Option 1 Relevant Milestones as specified in column (4) of the Schedule of Milestones,
- shall be deleted and replaced with the corresponding Option 1 Re-Profiled Milestone Payment amounts and Option 1 Re-Profiled Required APB Bond Amounts specified for such Option 1 Relevant Milestones in the Option 1 Re-Profiled Schedule of Milestones.
- (d) On the Option 1 Re-Profiling Date, the table in appendix 2 (Total Contract Price) to Part B (Milestones) of schedule 10 (Milestones and Security) detailing the Contract Price of the Purchased Items and the Total Contract Price shall be deleted and replaced in its entirety with the Option 1 Contract Price Table.
- (e) On and from the Option 1 Re-Profiling Date, all references in this Agreement to Milestone Payments, the Schedule of Milestones, the Contract Price of any item of Purchased Equipment, the Train Capital Cost or the Total Contract Price shall be interpreted as meaning such terms (as applicable) as amended pursuant to this clause 25.2.

25.3 **Re-Profiling Option 2**

- (a) The Purchaser may, by notice to the Manufacturer at any time from the Commencement Date until the earlier of:
- (i) 60 days before the scheduled date for achievement of the Milestone entitled 'First bodyshell delivered to the production line' as shown in column (5) of the Schedule of Milestones; and
 - (ii) the date on which the Purchaser issues an Option 1 Re-Profiling Notice to the Manufacturer,
- require that the Milestone Payments are re-profiled in accordance with this clause 25.3 (such notice being an "**Option 2 Re-Profiling Notice**").
- (b) Any Option 2 Re-Profiling Notice shall:
- (i) be in the form set out in appendix 8 (Form of Re-Profiling Notice) to part B of schedule 10;
 - (ii) state that it is an Option 2 Re-Profiling Notice issued pursuant to this clause 25.3; and

- (iii) specify the date from which the re-profiling of Milestone Payments shall become effective (the "**Option 2 Re-Profiling Date**"), which shall be no earlier than five (5) Working Days from the date of the Option 2 Re-Profiling Notice.
- (c) On the Option 2 Re-Profiling Date, with respect to each Milestone for which the scheduled date for achievement (as identified in column (5) of the Schedule of Milestones) falls on or after the Option 2 Re-Profiling Date (each an "**Option 2 Relevant Milestone**"), the amounts of:
 - (i) the Milestone Payments associated with such Option 2 Relevant Milestones as specified in column (3) of the Schedule of Milestones; and
 - (ii) the Required APB Bond Amounts associated with such Option 2 Relevant Milestones as specified in column (4) of the Schedule of Milestones,

shall be deleted and replaced with the corresponding Option 2 Re-Profiled Milestone Payment amounts and Option 2 Re-Profiled Required APB Bond Amounts specified for such Option 2 Relevant Milestones in the Option 2 Re-Profiled Schedule of Milestones.
- (d) On the Option 2 Re-Profiling Date, the table in appendix 2 (Total Contract Price) to Part B (Milestones) of schedule 10 (Milestones and Security) detailing the Contract Price of the Purchased Items and the Total Contract Price shall be deleted and replaced in its entirety with the Option 2 Contract Price Table.
- (e) On and from the Option 2 Re-Profiling Date, all references in this Agreement to Milestone Payments, the Schedule of Milestones, the Contract Price of any item of Purchased Equipment, the Train Capital Cost or the Total Contract Price shall be interpreted as meaning such terms (as applicable) as amended pursuant to this clause 25.3.

26. **PAYMENTS AND VAT**

26.1 **Payments - Method of Payment**

- (a) Subject to clause 26.1(b), Milestone Payments and all other payments required to be made under this Agreement will be made for value on or prior to the date for payment in cleared funds to the payee's account at a bank in the United Kingdom (as the payee shall have notified to the payer by not less than three (3) Working Days' notice), free and clear of any deduction, withholding, set-off or counterclaim whatsoever, except to the extent required by any Applicable Laws and Standards, or in accordance with the express provisions of this Agreement (including clause 55 (Set Off)).
- (b) If the final due date for any payment falls on a day which is not a Working Day, payment shall be made on the next Working Day thereafter.

26.2 **VAT**

Subject to clause 29.6:

- (a) all amounts due under this Agreement are exclusive of VAT;
- (b) if any supply made or referred to in this Agreement is or becomes chargeable to VAT then the person receiving the supply (the "**Recipient**") shall in addition pay the person making the supply (the "**Supplier**") the amount of that VAT against receipt by the Recipient from the Supplier of a proper VAT invoice in respect of that supply;

- (c) where under this Agreement any amount is calculated by reference to any sum which has or may be incurred by any person on costs related to this Agreement, the amount shall include any VAT in respect of that amount only to the extent that such VAT is not recoverable as input tax by that person (or a member of the same VAT group), whether by set-off or repayment and where the Parties so agree in accordance with this Agreement; and
- (d) the Manufacturer shall provide the Purchaser with any information reasonably requested by the Purchaser in relation to the amount of VAT chargeable in accordance with this Agreement and payable by the Purchaser to the Manufacturer (and vice versa).

26.3 **Default Interest**

If any Party fails to pay any amount payable under this Agreement on or before the final date for payment, interest will accrue (both before and after judgment) on such unpaid amount from day to day (compounding on a monthly basis) during the period commencing on the final date for payment and ending on the date of payment in full, at the Default Rate. All such interest will be calculated on the basis of the actual number of days elapsed and a 365 day year and will be payable on demand of the non-defaulting Party.

26.4 **Payment denomination**

Except where expressly specified otherwise in this Agreement (including in the Schedule of Milestones, Option 1 Re-Profiled Schedule of Milestones and Option 2 Re-Profiled Schedule of Milestones), all payments under this Agreement are denominated in, and shall be made in, Pounds Sterling.

27. **[NOT USED.]**

28. **CHANGE PROCEDURE**

28.1 **Purchaser Changes**

The provisions of part A (General) and part B (Purchaser Changes) of schedule 12 (Change Procedure) shall apply in respect of Purchaser Changes.

28.2 **Manufacturer Changes**

The provisions of part A (General) and part C (Manufacturer Changes) of schedule 12 (Change Procedure) shall apply in respect of Manufacturer Changes.

29. **CHANGE IN LAW**

29.1 **Change in Law**

If a Change in Law occurs, the Manufacturer shall comply with that Change in Law, such compliance to be at its own risk and cost, except where this Agreement expressly provides for the Purchaser to bear some or all of the costs of complying with the Change in Law.

29.2 **Consequences of a Qualifying Change in Law**

The Manufacturer shall only be entitled to compensation and/or to an extension of time for a Change in Law to the extent that:

- (a) it is a Qualifying Change in Law; and

- (b) the Manufacturer has complied with the provisions of part D (Compensation Changes) of schedule 12 (Change Procedure) which shall, subject to clause 29.3, apply in respect of any compensation and/or extension of time for the Manufacturer arising from a Qualifying Change in Law.

29.3 General Change in Law as a Compensation Event

For the purposes of part D (Compensation Changes) of schedule 12 (Change Procedure), where a General Change in Law arises which is a Qualifying Change in Law the Manufacturer shall only be entitled to claim compensation in respect of Capital Expenditure arising from the General Change in Law to the extent that the Manufacturer is not to bear responsibility for Capital Expenditure in accordance with clause 29.4.

29.4 General Change in Law

Where the Manufacturer incurs Capital Expenditure as a result of a General Change in Law which is a Qualifying Change in Law:

- (a) prior to the date which is two (2) years after the Commencement Date in relation to the Base Order, all increased Capital Expenditure required in relation to the Works shall be borne by the Manufacturer; or
- (b) on and from the date which is two (2) years after the Commencement Date in relation to the Base Order, any increased Capital Expenditure shall accrue and shall be borne by the Purchaser.

29.5 Requirement for Manufacturer Change

Where a Change in Law which is not a Qualifying Change in Law will require a Change, the Manufacturer shall request a Manufacturer Change in accordance with clause 28 (Change Procedure) and part C (Manufacturer Changes) of schedule 12 (Change Procedure).

29.6 Payment of Irrecoverable VAT

The Purchaser shall pay to the Manufacturer from time to time as the same is incurred by the Manufacturer sums equal to any Irrecoverable VAT but only to the extent that it arises as a result of a Change in Law. Any such payment shall be made within 28 days of the delivery by the Manufacturer to the Purchaser of written details of the amount involved accompanied by details as to the grounds for and computation of the amount claimed. For the purposes of this clause 29.6, "**Irrecoverable VAT**" means input VAT incurred by the Manufacturer on any supply which is made to it which is used or to be used exclusively in performing the Works (together with input VAT incurred as part of its overhead in relation to such activities) to the extent that the Manufacturer is not entitled to repayment or credit from HM Revenue & Customs in respect of such input VAT.

29.7 Mitigation

Without prejudice to paragraph 1.4 of part D (Compensation Changes) of schedule 12 (Change Procedure), the Manufacturer shall:

- (a) assist the Purchaser or its nominee in making any proposal to change, abolish or derogate from any Applicable Laws and Standards and shall suggest the making of any proposal for such change, abolition or derogation where to do so would assist the provider of the Works; and
- (b) in the event of any proposed Change in Law explore with any relevant Competent Authority steps to mitigate the effects of such Change in Law.

30. **INTELLECTUAL PROPERTY RIGHTS**

30.1 **Ownership of IPR**

Nothing in this Agreement shall operate to transfer any IPR of either Party (or of either Party's Affiliates or subcontractors) to any other person save to the extent set out in this Agreement.

30.2 Other than the Train Data, title to which shall pass to the Purchaser, all IPR developed or created by a Party, or on behalf of that Party, in the course of performing that Party's obligations under this Agreement, or any other Project Document, shall belong to that Party or its subcontractors, as appropriate.

30.3 **Licence granted by the Manufacturer**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

30.4 **Right to Build Out**

Without prejudice to clause 30.5, the Manufacturer hereby grants to the Purchaser an irrevocable, perpetual, cost-free, assignable and non-exclusive licence (or sub-licence, as applicable), with the right to grant sub-licences to any number of tiers, of the Manufacturer IPR in each case for the sole purpose of completing the manufacture of the Fleet and Equipment that have been ordered and/or are under construction at that time, including the further ongoing manufacture of Spares and Consumables on terms which are similar to the specifications of this Agreement. The licence granted pursuant to this clause 30.4 shall only take effect where:

[REDACTED]

[REDACTED]

30.5 **New Trains and Equipment**

- (a) Without prejudice to clause 30.4, the Parties agree that the Purchaser shall be entitled to manufacture or procure the manufacture of additional trains and related equipment, special tools and spares for use on the Network which replicate in some or all material respects the features and capabilities set out in clause 30.5(b) below (the "**Train Features**").
- (b) The Train Features are the following features as they exist (in whole or in part) on (A) the Trains and/or the Equipment from time to time provided or procured by the Manufacturer under this Agreement including the Schedule of Finishes; and/or (B)

the FSA Purchased Items provided or procured by the Service Provider under the FSA:

- (i) the Interior Features and the Exterior Features;
 - (ii) inter-car gangways and detrainment facilities of the Trains;
 - (iii) train engagement points with respect to crashworthiness;
 - (iv) the location and layout on the Trains of the following train operator interfaces: traction and braking control; functions and positions; internal, external and overall layout including train operator sight lines; operator controls and visual and audible displays and contents; door controls including internal and external door releases; saloon controls; and train management system (TMS) messages;
 - (v) the location and layout on the Trains of the following: train and car length; bogie location and wheelbase; saloon door size and positions; shed receptacles design and location; shoe gear locations; jacking points; external indicators; and consumables filling points design and location;
 - (vi) the functionality on the Trains of the following inter-train train recovery interfaces: mechanical coupler interface; and end to end communications between trains;
 - (vii) the functionality on the Trains of the following relating to performance: traction performance curves.
- (c) Without prejudice to the provisions of clause 30.1, clause 30.3 and clause 30.4, the Manufacturer hereby grants to the Purchaser an irrevocable, perpetual, cost-free, assignable, and non-exclusive licence (or sub-licence, as applicable) with the right to grant sub-licences to any number of tiers of the Manufacturer IPR, the Third Party IPR and the FSA IPR in the Train Features in order to manufacture or procure the manufacture of new trains and all Equipment, including Spares, Consumables and Special Tools that might be necessary or desirable in connection with such new trains, in each case for any or all of the purposes set out in clauses 30.3 and 30.5(a).

30.6 **Documentation**

Upon request from the Purchaser, the Manufacturer shall execute such further documents, and do such other things, as the Purchaser may reasonably request in order to obtain for the Purchaser the full benefit of this clause 30, at no cost to the Purchaser.

30.7 **Manufacturer representation and warranty**

The Manufacturer represents and warrants to the Purchaser that:

- (a) in:
 - (i) doing any of those things referred to in clause 30.3, clause 30.4, clause 30.5 and clause 30.12, neither the Purchaser nor any of its sub-licensees, of whatever tier; and
 - (ii) performing its obligations under this Agreement, neither the Manufacturer nor any Subcontractors,

will infringe or make unauthorised use of any IPR of any person; and

- (b) for the purposes of:
 - (i) doing any of those things referred to in clause 30.3, clause 30.4, clause 30.5 and clause 30.12, the Purchaser and each of its sub-licensees of whatever tier, is granted a licence from the Manufacturer for all such purposes, carrying with it the right to grant the sub-licences as referred to in this clause 30 in respect of all the relevant IPR; and
 - (ii) performing its obligations under this Agreement, the Manufacturer and each Subcontractor has either:
 - (A) sole and absolute legal and beneficial title free from all encumbrances; or
 - (B) a licence from a third party for all such purposes referred to in this clause 30 in respect of all the relevant IPR.

30.8 **Manufacturer indemnity**

Without prejudice to:

- (a) clause 30.7; or
- (b) the ability of the Purchaser to claim damages, on any basis available to it, in the event that any of the representations or warranties in clause 30.7 proves to be untrue or misleading or is breached (as the case may be),

the Manufacturer shall indemnify and pay the Indemnified Parties, on demand, the amount necessary to put all such Indemnified Parties and each of their sub-licensees into the position which would have existed if the said representations and warranties had been true and not misleading or not broken (as the case may be), together with all Losses incurred by them as a result of such breach.

30.9 **Remedy for infringement**

Without prejudice to clause 30.7, if in the reasonable opinion of the Purchaser the carrying out of any of the activities in clause 30.3, clause 30.4, clause 30.5 and clause 30.12 might infringe the IPR of a third party ("**Infringement**") the Manufacturer shall, at its own expense, either:

- (a) procure for the Purchaser (and its sub-licensees) a licence to use such IPR as may be applicable in order to remove the risk of such Infringement arising; or
- (b) at the Purchaser's election, either:
 - (i) modify such Train, Equipment or other Technical Documents, Software or Source Code as may be applicable to remove the risk of such Infringement arising; or
 - (ii) replace such Train, Equipment or other Technical Documents, Software or Source Code to remove the risk of such Infringement arising,

provided however that the modification or replacement shall at all times comply with all the requirements of this Agreement and the FSA.

30.10 **Software**

- (a) The Manufacturer shall ensure in respect of all Software that is used for the design, manufacture, construction, testing, commissioning, supply, use, operation,

maintenance, modification, integration or refurbishment of any Train, Equipment and/or any Part or component forming part of a Train and/or any item of Equipment that:

- (i) there is orderly documented progress from the functional requirements to the final code and provision for regular verification and testing at each stage of the Train and Equipment Design process;
 - (ii) the documentation for such Software is such as to enable an appropriately qualified person (who was not involved in the original design) to relate the Software to the performance of the relevant equipment under normal and fault conditions and to verify its compliance with the functional requirements of that equipment; and
 - (iii) where no particular standard is specified by the Train Technical Requirements, and without prejudice to schedule 27 (Cyber Security), it is designed to the appropriate level of safety integrity required by Good Industry Practice and documented following a nationally or internationally recognised standard using recognised quality control methods.
- (b) The Manufacturer (A) shall in respect of Software owned by the Manufacturer; or (B) shall, in respect of Software owned by Key Subcontractors or Affiliates of the Manufacturer, procure that all Key Subcontractors and such Affiliates of the Manufacturer shall; or (C) shall, in respect of Software owned by all other Subcontractors (other than Key Subcontractors and Affiliates of the Manufacturer) use reasonable endeavours to procure that all such other Subcontractors shall, at all times during the period from the Commencement Date until the end of the [REDACTED] of each Train:
- (i) retain updated "as made" copies, in machine readable form, of the final structure of the Software, and of the intermediate stages leading to it (including Source Code and object codes);
 - (ii) retain updated usable copies of any ancillary computer programs used to generate such codes (including compilers);
 - (iii) without prejudice to the provisions of any Escrow Agreement entered into under clause 30.12 (or any escrow agreement that may be entered into under the FSA), keep copies of the materials referred to in this clause 30.10 in a secure manner and place such that they will not deteriorate;
 - (iv) retain the Software (including Source Code) designed by the Manufacturer and/or the Subcontractor (as appropriate); and
 - (v) allow the Purchaser reasonable access to the Software of the Manufacturer and/or the Subcontractor (as appropriate) (excluding the Source Code) and all relevant documentation.
- (c) The Manufacturer shall supply to the Purchaser all Software used to:
- (i) update Train and Equipment software and parameters (including all related encryption software);
 - (ii) download and interpret recorded Train Data; and
 - (iii) interface with the Trains and Equipment,
- collectively the "**Train Support Software**".

- (d) The Train Support Software shall be compatible with standard PC operating platforms and suitable for installation on industry standard laptop PCs, tablets and equivalent standard portable electronic devices.
- (e) The Train Support Software used to analyse Train Data shall provide an export of raw and interpreted data in an open format that can be loaded into applications such as the Microsoft Office applications Word, Excel and PowerPoint.

30.11 Cessation of Software Support

If the Manufacturer or any Subcontractor supplying any of the Software stops trading or withdraws (or makes known its intention to withdraw) support for that Software, the Manufacturer shall, without additional charge, use reasonable endeavours to procure the transfer to the Purchaser of all rights in and to the Software in question for the Trains or the relevant type of Equipment or enter into reasonable alternative arrangements to ensure continued supply and support of such Software for the purposes of this Agreement.

30.12 Escrow Agreement

- (a) On or prior to the date on which the first Source Code or Software is required to be placed in escrow pursuant to clause 30.12(b), the Manufacturer shall execute and deliver to the Purchaser the Escrow Agreement with respect to the Source Code and the Software in the form contained in part A (Software Escrow Agreement) of schedule 23 (Intellectual Property) and shall procure that the Escrow Agent has also signed such Escrow Agreement on or prior to such date.
- (b) Subject to clause 30.12(f), the Manufacturer shall place the Source Code and any relevant Software and any Source Code and any relevant Software provided by the Service Provider pursuant to the FSA (the "**Escrow Material**"), in escrow with the Escrow Agent on the terms set out in the Escrow Agreement as soon as reasonably possible after its completion (it being acknowledged that Escrow Materials cannot be placed into escrow until they are actually available) and in any event within 28 days of the commencement of the Testing Programme (in the case of all such Escrow Material in existence by that date). Thereafter the Manufacturer shall update (and in respect of any Escrow Material provided under the FSA, shall procure that the Service Provider shall effect updates of) the version of the Source Code in escrow:
 - (i) immediately after the Purchaser notifies the Manufacturer that the Detailed Design Phase has been completed following Approval of the Detailed Design Submissions as set out in paragraph 12.6 of schedule 6 (Assurance) (or at such later date as may be agreed by the Purchaser);
 - (ii) on Provisional Acceptance of the first Train to be Provisionally Accepted;
 - (iii) at the point that the Minimum Fleet has been Provisionally Accepted;
 - (iv) on Final Acceptance of the final Train to be Finally Accepted; and
 - (v) on Fleet Acceptance,

unless the Escrow Agreement states more frequently in which case the Manufacturer shall update (and in respect of any Escrow Material provided under the FSA, shall procure that the Service Provider shall update) the Source Code in escrow in accordance with this clause 30.12(b) and the Escrow Agreement. Thereafter, the Manufacturer shall update (and in respect of any Escrow Material provided under the FSA, shall procure that the Service Provider shall update) within 20 Working Days of any Change and any FSA Variation Order (as defined in the FSA) that may impact on the Software and every time the Software is updated, and

the Manufacturer shall ensure (and in respect of any Escrow Material provided under the FSA, shall procure that the Service Provider shall ensure) that the Source Code shall be up to date on any termination of this Agreement.

- (c) The Manufacturer and the Purchaser shall pay the fees of the Escrow Agent in connection with the placement, storage and release of the Source Code in the proportions set out in the Escrow Agreement.
- (d) Without prejudice to clause 30.3, clause 30.4 and clause 30.5, the Manufacturer hereby grants to the Purchaser a perpetual, non-exclusive, irrevocable, cost-free licence to use, reproduce, modify, adapt and enhance the Source Code and to authorise a third party to do so for all of the purposes set out in clauses 30.3 to 30.5 (including those purposes that relate to the FSA). The Purchaser shall be entitled to grant sub-licences and to assign this licence provided that the licence granted under this clause 30.12(d) shall only become effective if the Purchaser becomes entitled to obtain access to the Source Code pursuant to the terms of the Escrow Agreement.
- (e) The Escrow Material shall be released to the Purchaser on the occurrence of an Escrow Release Event pursuant to the Escrow Agreement, provided that Third Party Escrow Materials and Escrow Materials owned by Key Subcontractors shall only be released to the Purchaser if the Escrow Release Event that occurs relates to the Key Subcontractor or third party that owns such Escrow Materials.
- (f) For any Escrow Materials pertaining to Intellectual Property Rights owned by a third party (the **"Third Party Escrow Materials"**) the Manufacturer: (A) in relation to Third Party Escrow Materials owned by Key Subcontractors or any Affiliate of the Manufacturer, shall procure; and (B) in relation to Third Party Escrow Materials owned by Subcontractors other than Key Subcontractors and Affiliates of the Manufacturer, use reasonable endeavours to procure:
 - (i) the right to place such Third Party Escrow Materials in escrow and shall deliver; or
 - (ii) where the Manufacturer is not permitted to deposit such Third Party Escrow Materials into escrow, that the relevant third party shall deliver,

such Third Party Escrow Materials in escrow in accordance with clause 30.12(b). In relation to Third Party Escrow Materials owned by Subcontractors (other than Key Subcontractors or any Affiliate of the Manufacturer), the obligations in clauses 30.12(b) and (d) shall be construed such that the Manufacturer shall use reasonable endeavours to procure the performance of the relevant third party to comply with those obligations in relation to the Third Party Escrow Materials.

30.13 **Corporate IPRs and Train Data**

- (a) Without limiting clause 30.1, the Purchaser (or relevant member of the TfL Group) retains all rights and interests to IPR owned by the Purchaser or any member of the TfL Group and the Manufacturer shall obtain no rights or interest to any such IPR other than as set out in this clause 30.13.
- (b) The Manufacturer shall be liable for all acts and omissions of any person to whom it sub-licenses any Corporate IPR or Train Data that, if done or omitted to be done by the Manufacturer, would be a breach of the licences granted to the Manufacturer pursuant to this clause 30 or would otherwise breach any of the obligations of the Manufacturer contained in this clause 30.
- (c) The Purchaser hereby grants to the Manufacturer a non-exclusive, non-transferable, royalty-free licence to the Manufacturer to use, and allow its Subcontractors to use,

the Corporate IPRs and the Train Data for the duration of this Agreement for the sole purpose of enabling the Manufacturer to comply with its obligations under this Agreement and the Service Provider's obligations under the FSA.

- (d) The Manufacturer shall use, and shall procure that its Subcontractors and the Service Provider shall use, the Corporate IPRs and Train Data in compliance with this Agreement, the FSA, Applicable Laws and Standards, the standards set out in part B (Corporate IPR) of schedule 23 (Intellectual Property) and any other applicable guidelines or policies relating to use of Purchaser's trademarks as notified by the Purchaser to the Manufacturer.
- (e) The Manufacturer shall not use, and shall procure that its Subcontractors shall not use, the Corporate IPRs or Train Data in combination with any other IPR without the Purchaser's prior written consent, in the Purchaser's absolute discretion.
- (f) On written request by the Purchaser, the Manufacturer shall supply to the Purchaser copies or details of items on or in relation to which it uses the Corporate IPRs or Train Data or (as requested) details of the manner in which either are used (in addition to any such information in part B (Corporate IPR) of schedule 23 (Intellectual Property)). If the Purchaser reasonably determines that any use of the Corporate IPRs or Train Data falls below the standards set out in part B (Corporate IPR) of schedule 23 (Intellectual Property) and/or the standards referred to in clause 30.13(d) or is not otherwise permitted by this Agreement, the Purchaser shall give the Manufacturer written notice of that fact and the Manufacturer shall correct the use so as to comply with the Applicable Laws and Standards taking into account the Purchaser's instructions.
- (g) The Manufacturer or its Subcontractors shall not be entitled to bring any action against any third party for infringement relating to the Corporate IPRs or Train Data and the Purchaser shall not be obliged to bring or extend any proceedings relating to the Corporate IPRs or Train Data if it decides in its sole discretion not to do so.
- (h) As soon as reasonably practicable after expiry or termination of this Agreement for any reason, the Manufacturer and its Subcontractors shall remove or destroy any Corporate IPRs and any Train Data that are not on the Trains or any Purchased Items or FSA Purchased Items or, if the Purchaser so elects, deliver such Corporate IPRs and Train Data and all related items and documents to the Purchaser or any other company or person designated by the Purchaser for that purpose.

30.14 **Branding and advertising**

- (a) The Manufacturer acknowledges that all advertising on the Trains shall be the responsibility and domain of the Purchaser or its nominees, and the Manufacturer has no right to place any advertising on to the Trains other than at the specific request of the Purchaser (or the Purchaser's nominee). Any revenue from any advertising placed on the Trains shall be for the benefit of the Purchaser.
- (b) The Manufacturer shall not, and shall procure that third parties including the Service Provider (except the Purchaser and any other third party approved in writing by the Purchaser) shall not:
 - (i) use:
 - (A) any of their trademarks, service marks, symbols, logos, company names, trade names, domain names, designs, get-up, livery, taglines, advertising or other indicators of origin; or

- (B) any marketing, promotional and/or advertising material, in any media (whether now known or hereafter developed, including any printed media, display screen, transmission and/or telecommunications system),

on or in any part (including any interior or external surface) of any Train that is visible to passengers during normal operation; or

- (ii) authorise, permit, procure, assist or enable any third party to do any of the acts referred to in clause 30.14(b)(i).

30.15 **Language**

Except to the extent required by local patent registries, all documents which contain or show evidence of IPR licensed under this Agreement by the Manufacturer shall be in English. Where a document containing or showing evidence of IPR is in a language other than English, the Manufacturer shall provide a translation into English.

30.16 **Joint development of IPR**

- (a) The Parties acknowledge that any Specially Designed IPR resulting from a Joint Development is Manufacturer IPR (or Third Party IPR) and is accordingly subject to the provisions of this Agreement which relate to Manufacturer IPR (or Third Party IPR) including clause 30.3.
- (b) The Manufacturer shall not commercially exploit any Specially Designed IPR without prior written consent from the Purchaser, and subject to the agreement between the Parties of a suitable gainshare mechanism for the profit generated by such exploitation, such consent not to be unreasonably withheld or delayed.

30.17 **Survival**

The provisions of this clause 30 shall survive the expiry or termination of this Agreement.

31. **MANUFACTURER DEFAULT**

31.1 **Manufacturer Events of Default**

The occurrence of one or more of the following shall constitute a Manufacturer Event of Default:

- (a) an Insolvency Event occurs in relation to the Manufacturer or the Guarantor;
- (b) the Manufacturer fails to make payment of any sum(s) (including any liquidated damages) which are not in dispute and which either singly or in aggregate exceeds [REDACTED] (Indexed), when due and payable to the Purchaser in accordance with this Agreement and which remains unpaid 30 days after a written demand for payment from the Purchaser;
- (c) the Manufacturer commits a material breach of its obligations under this Agreement, other than breaches of the nature set out in the other sub-clauses of this clause 31.1;
- (d) the occurrence of a Persistent Breach;
- (e) a Change of Control occurs in relation to the Manufacturer to which the Purchaser has not consented;

- (f) Acceptance of any Train has not occurred on or before the Train Longstop Date for that Train;
- (g) the Manufacturer abandons, without any intention to resume, the Works or any material part thereof;
- (h) there is a breach by the Manufacturer of its obligations under clause 44 (Assignment, Transfer and Sub Contracting by the Manufacturer) or clause 45 (Assignment and Novation or Granting of Security by the Purchaser);
- (i) the maximum amount of liquidated damages payable by the Manufacturer pursuant to clause 16.3 shall have accrued unless by mutual agreement the Parties have agreed to increase such maximum amount;
- (j) the Manufacturer commits a breach of clause 9.1 (Manufacturing Facilities);
- (k) the Manufacturer fails to take out and/or maintain any of the insurances required in accordance with the provisions of clause 19 (Insurance) and schedule 13 (Insurance);
- (l) a Guarantee Event occurs and the Manufacturer fails to procure a replacement valid and enforceable guarantee on terms reasonably satisfactory to the Purchaser (acting in its absolute discretion) together with any supporting legal opinions reasonably requested by the Purchaser within five (5) Working Days of such Guarantee Event;
- (m) the Guarantor or an Advance Payment Bond Provider fails to comply with any payment or performance obligations expressed to be assumed by it in the Guarantee or any Advance Payment Bond;
- (n) a Bond Event occurs or any other event that causes the Manufacturer to extend or replace any Advance Payment Bond or provide alternative security in each case as required by the relevant provisions of part A (Advance Payment Bond) of schedule 10 (Milestones and Security) and the Manufacturer fails to extend or replace the relevant Advance Payment Bond or provide alternative security in accordance with the requirements of this Agreement; or
- (o) there has been a Manufacturer Serious Infringement under clause 34.4(b)(i).

31.2 **Persistent breach**

- (a) If the Manufacturer breaches any of its obligations (where those obligations are of the same type or nature) under this Agreement more than twice then the Purchaser may serve a notice on the Manufacturer:
 - (i) specifying that it is a formal warning notice;
 - (ii) giving reasonable details of such breach;
 - (iii) requiring the production of a remedial plan ("**Remedial Plan**") acceptable to the Purchaser within 14 days of such notice, such Remedial Plan to include as a minimum:
 - (A) criteria for the success of the Remedial Plan;
 - (B) a time period for achievement of success;
 - (C) resources to be allocated to the Remedial Plan; and

- (iv) stating that such breach is a breach which, if it continues unremedied or recurs within six (6) months of the date of service of the notice, or if the Manufacturer is in breach of the Remedial Plan, may result in a termination of this Agreement in accordance with this clause 31.2.
 - (b) If, following service of a warning notice pursuant to clause 31.2(a), the breach(es) specified has continued unremedied or has recurred more than twice (which shall include breaches of the Remedial Plan) within the four (4) month period following the date of service of such notice, then the Purchaser may serve another notice on the Manufacturer:
 - (i) specifying that it is a final warning notice;
 - (ii) stating that the breach specified has been the subject of the relevant warning notice served under clause 31.2(a) within the four (4) month period prior to the date of the final warning notice;
 - (iii) requiring a further Remedial Plan containing the information required by clause 31.2(a)(iii) (updated as appropriate); and
 - (iv) stating that if such failure continues unremedied or recurs (which shall include breaches of the Remedial Plan) more than twice within the six (6) month period commencing two (2) months after the date of service of the final warning notice, this Agreement may be terminated.
 - (c) A warning notice may not be served in respect of any breach in respect of which a separate warning notice has already been served until a period of three (3) months has elapsed since the date of the previous warning notice.
- 31.3 The continuance of any failure to remedy specified in the final warning notice or any further breach of the same type or nature within the six (6) month period referred to in clause 31.2(b)(iv) shall constitute a **"Persistent Breach"** for the purposes of clause 31.1(d).
- 31.4 **Notification of a Manufacturer Event of Default**
- The Manufacturer shall notify the Purchaser promptly on the Manufacturer becoming aware of the occurrence of a Manufacturer Event of Default.
- 31.5 **Deemed Rectification of a Manufacturer Event of Default**
- Where a Manufacturer Event of Default listed in clause 31.1(f) has occurred and the relevant delayed Train is Accepted by the Purchaser before a Purchaser Termination Notice is issued to the Manufacturer, the relevant Manufacturer Event of Default shall be deemed to have been remedied upon the date of such Acceptance.
- 31.6 **Minimum Fleet Handback Notice**
- If any Manufacturer Event of Default occurs and is continuing before the Purchaser has Accepted the Minimum Fleet, then the Purchaser may serve a notice on the Manufacturer (a **"Minimum Fleet Handback Notice"**) specifying:
- (a) the Manufacturer Event of Default in question;
 - (b) the date on which this Agreement shall terminate in respect of the Trains;
 - (c) if different from the date specified in clause 31.6(b), the date on which the Purchaser shall deliver to the Manufacturer the Trains and other Equipment that it

has Accepted on or prior to the date of termination of this Agreement (the **"Minimum Fleet Handback Date"**);

- (d) the proposed location where the delivery of the Trains and Equipment will occur;
- (e) a statement showing the aggregate of all payments and other amounts the Purchaser has paid to the Manufacturer in respect of the Trains and Equipment the subject of the Minimum Fleet Handback Notice; and
- (f) the painted number of each of the Trains to be delivered to the Manufacturer on the Minimum Fleet Handback Date.

31.7 **Termination Notice for a Manufacturer Event of Default**

If a Manufacturer Event of Default occurs and is continuing after the Purchaser has Accepted the Minimum Fleet, the Purchaser may, if it wishes to terminate the continued manufacture of the Purchased Items under this Agreement, deliver a notice in writing to the Manufacturer, signed on behalf of the Purchaser (**"Purchaser Termination Notice"**). The Purchaser Termination Notice shall specify the Manufacturer Event of Default in question, giving reasonable details, and either:

- (a) in the case of a Manufacturer Event of Default under any of clauses 31.1(a), (b) and (d) to (o) and (in the case of a Manufacturer Event of Default under any of clauses 31.1(a), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m), (n), and (o)) where the Purchaser has not elected for clause 31.7(b) to apply, that this Agreement is to terminate with effect from the date specified in the Purchaser Termination Notice; or
- (b) in the case of a Manufacturer Event of Default under clause 31.1(c) or, at the Purchaser's absolute discretion, in the case of any other Manufacturer Event of Default under any of clauses 31.1(a), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m), (n) and (o) which is capable of remedy, that this Agreement will terminate with effect from the date falling 60 days after the date of the Purchaser Termination Notice, unless:
 - (i) the Manufacturer puts forward a plan (a **"Rectification Plan"**) acceptable to the Purchaser in its absolute discretion within 28 days of the date of service of the Purchaser Termination Notice, such Rectification Plan to specify the proposed actions in reasonable detail and the latest date by which it is proposed that those actions will be completed; and
 - (ii) the Manufacturer rectifies in accordance with the Rectification Plan the relevant Manufacturer Event of Default within 60 days of the date of service of the Purchaser Termination Notice or any other period agreed in accordance with clause 31.7(b)(i) (such periods to run concurrently with the 28-day period in clause 31.7(b)(i)).

31.8 **Rectification Plan**

Where the Purchaser serves a Purchaser Termination Notice in accordance with clause 31.7(b) and the Manufacturer either:

- (a) rectifies the Manufacturer Event of Default within 60 days of the date of service of the Purchaser Termination Notice; or
- (b) implements the Rectification Plan agreed by the Purchaser in accordance with its terms,

the Purchaser Termination Notice will be deemed to be revoked and this Agreement will continue.

31.9 No Rectification

Where the Purchaser serves a Purchaser Termination Notice in accordance with clause 31.7(b) and the Manufacturer fails either to:

- (i) rectify the Manufacturer Event of Default within 60 days of the date of service of the Purchaser Termination Notice; or
- (ii) implement the Rectification Plan agreed by the Purchaser in accordance with its terms,

this Agreement will terminate on the date falling 60 days after the date of service of the Purchaser Termination Notice unless the Purchaser notifies the Manufacturer otherwise.

31.10 Termination where Rectification not permitted

Where the Purchaser serves a Purchaser Termination Notice in accordance with clause 31.7(a), this Agreement will terminate on the date set out in that Purchaser Termination Notice.

32. PURCHASER DEFAULT

32.1 Purchaser Event of Default

A Purchaser Event of Default shall occur when:

- (a) the Purchaser fails to make payment of any sum(s) which are not in dispute and which [REDACTED], when due and payable to the Manufacturer in accordance with this Agreement and which remains unpaid 30 days following a subsequent written demand for payment; or
- (b) an Insolvency Event occurs in relation to the Purchaser; or
- (c) the circumstances identified in clause 46.1(g) (Restriction on Change of Control) occur.

32.2 Notification of a Purchaser Event of Default

The Manufacturer and the Purchaser agree to notify each other of the occurrence of any Purchaser Event of Default as soon as they become aware of such occurrence.

32.3 Procedures in relation to Termination for a Purchaser Event of Default

- (a) On the occurrence of a Purchaser Event of Default, if the Manufacturer wishes to terminate this Agreement, the Manufacturer must serve a termination notice on the Purchaser (a "**Manufacturer Termination Notice**") within 60 days becoming aware of such Purchaser Event of Default. The Manufacturer Termination Notice must specify and give reasonable details of the Purchaser Event of Default which has occurred.
- (b) This Agreement will terminate on the day falling 30 days after the date the Purchaser receives the Manufacturer Termination Notice, unless the Purchaser rectifies the Purchaser Event of Default within 28 days of receipt of the Manufacturer Termination Notice, in which case the Manufacturer Termination Notice will be deemed to be revoked and this Agreement will continue.

33. **FORCE MAJEURE**

33.1 **Relief from obligations**

Neither Party shall:

- (a) be entitled to bring a claim for a breach by the other Party of an obligation under this Agreement (other than a payment obligation); or
- (b) incur any liability to the other Party for any losses or damages incurred by that other Party,

to the extent that a Force Majeure Event occurs and the other Party is prevented from performing that obligation in whole or in part by that Force Majeure Event or its consequences.

33.2 **Notification of Force Majeure**

If either Party becomes aware of a Force Majeure Event which has affected or is likely to affect its ability to perform its obligations under this Agreement (the "**FM Affected Party**") it shall, as soon as reasonably practicable and in any event no more than five (5) Working Days after the start of the claimed Force Majeure Event serve notice in writing upon the other Party:

- (a) specifying the act, event or circumstance relied on as a Force Majeure Event;
- (b) detailing why the Force Majeure Event will prevent it performing its obligations; and
- (c) setting out its proposals to mitigate the consequences of the Force Majeure Event in accordance with clause 33.5.

33.3 As soon as practicable and no later than three (3) Working Days following a notification under clause 33.2, the Parties shall consult with each other in good faith and use all reasonable endeavours to agree appropriate terms to mitigate the consequences of any Force Majeure Event and to facilitate the continued performance of this Agreement.

33.4 The FM Affected Party shall provide periodic written updates (on at least a weekly basis or such other period as the Parties may agree acting reasonably) to the other Party of the effects of, and any proposals to mitigate the effect of the claimed Force Majeure Event, including any reasonable alternative means for performance of the affected obligations; and shall provide any information relating to the claimed Force Majeure Event and its effects that the other Party may reasonably request.

33.5 **Mitigation of Force Majeure**

- (a) The FM Affected Party shall at all times following the occurrence of a Force Majeure Event use all reasonable endeavours to prevent and mitigate the effects of the claimed Force Majeure Event (including, in the case of the Manufacturer, taking all steps in accordance with Good Industry Practice to overcome or minimise the effects of the Force Majeure Event and complying with the requests of the Purchaser Contract Manager) and to continue to perform its obligations under this Agreement and to resume performance as soon as possible.
- (b) The FM Affected Party shall not be relieved from liability under this Agreement to the extent that it is not able to perform its obligations under this Agreement due to its failure to comply with its obligations under clause 33.5(a) above.

33.6 **Termination for Force Majeure**

If there is no agreement as to the mitigation terms to adopt pursuant to clause 33.3 on or before the date falling twelve (12) months after the date of commencement of the Force Majeure Event and such Force Majeure Event (or its consequences) is continuing or its consequences remain such that the FM Affected Party is unable to comply with its material obligations under this Agreement for that period of twelve (12) months, either Party may give notice to terminate this Agreement to the other Party in whole or in part and the provisions of clause 34 (Force Majeure Termination/Declaration of Ineffectiveness) shall apply.

33.7 Cessation of Force Majeure

As soon as practicable after a Force Majeure Event ceases or no longer causes the FM Affected Party to be unable to comply with its obligations under this Agreement, the FM Affected Party shall notify the other Party in writing of such occurrence and shall resume performance of its obligations under this Agreement in so far as this Agreement has not been terminated (in whole or in part) in accordance with clause 33.6.

34. FORCE MAJEURE TERMINATION/DECLARATION OF INEFFECTIVENESS

34.1 Notice of termination

- (a) If the Purchaser serves a notice to terminate on the Manufacturer pursuant to clause 33.6 then this Agreement shall terminate on the date set out in that notice.
- (b) If the Manufacturer serves a notice to terminate on the Purchaser under clause 33.6, then the Purchaser has the option either to accept such notice (in which case this Agreement shall terminate on the date set out in that notice) or to respond in writing on or before the date falling ten (10) Working Days after the date of its receipt stating that it requires this Agreement to continue (a "**Continuation Notice**").
- (c) If the Purchaser gives the Manufacturer a Continuation Notice then this Agreement will not terminate pursuant to the Manufacturer's notice under clause 33.6 but will terminate on the earliest to occur of:
 - (i) expiry of written notice (of at least 28 days) from the Purchaser to the Manufacturer served at any time while the Force Majeure Event (or its consequences) is continuing stating that the Purchaser wishes this Agreement to terminate;
 - (ii) the second anniversary of the occurrence of the relevant Force Majeure Event provided such Force Majeure Event (or its consequences) is continuing as at such date; and
 - (iii) this Agreement being terminated in accordance with any other provisions of this Agreement.
- (d) If, during the currency of any Continuation Notice, termination occurs pursuant to clause 34.1(c)(iii) as a result of a Manufacturer Default, then the Purchaser shall pay the Manufacturer the applicable amount set out in schedule 20 (Termination Payments).

34.2 Deemed notice

If the Purchaser fails to respond to the notice given by the Manufacturer pursuant to clause 34.1(b) within the specified ten (10) Working Day period then the Purchaser shall be deemed to have served notice requiring this Agreement to continue.

34.3 Declaration of Ineffectiveness

- (a) In the event that a third party starts proceedings seeking a Declaration of Ineffectiveness and, as a result of such proceedings, a relevant court declares that this Agreement is Ineffective, then this Agreement will terminate with immediate effect.
- (b) Where the Purchaser is served with any third party proceedings in relation to the subject matter of this clause 34.3, the Purchaser undertakes to serve a notice on the Manufacturer forthwith to keep the Manufacturer informed of the progress of said proceedings, including in relation to any determination or order of the nature described in clause 34.3(a).

34.4 **Utilities Contract Regulations**

(a) **Substantial Modification**

If there is an order of a court of competent jurisdiction, which is binding on the Purchaser, that this Agreement has been subject to a substantial modification which would have required a new procurement procedure pursuant to Article 90(a) of Directive 2014/25/EU of the European Parliament and Council dated 26 February 2014 (a "**Substantial Modification**"), the Purchaser shall be entitled, in its absolute discretion, to terminate this Agreement on giving reasonable notice to the Manufacturer.

(b) **Serious Infringement**

- (i) If this Agreement should not have been awarded to the Manufacturer in view of a serious infringement by the Manufacturer of the obligations referred to in Article 90(c) of Directive 2014/25/EU of the European Parliament and Council dated 26 February 2014 (a "**Manufacturer Serious Infringement**"), it shall constitute a Manufacturer Event of Default.
- (ii) If this Agreement should not have been awarded to the Manufacturer in view of a serious infringement by the Purchaser of the obligations referred to in Article 90(c) of Directive 2014/25/EU of the European Parliament and Council dated 26 February 2014 (a "**Purchaser Serious Infringement**"), the Purchaser shall be entitled, in its absolute discretion, to terminate this Agreement on giving reasonable notice to the Manufacturer.

35. **PROHIBITED ACT AND SAFETY BREACH TERMINATION**

35.1 **Prohibited Act**

The Manufacturer shall notify the Purchaser promptly on the Manufacturer becoming aware of the occurrence of a Prohibited Act.

35.2 If the Manufacturer or any Subcontractor (or anyone employed by or acting on behalf of or associated with any of them or any of its or their agents or shareholders) commits any Prohibited Act, then the Purchaser may deliver a notice in writing to the Manufacturer, signed on behalf of the Purchaser ("**Prohibited Act Notice**") and the Purchaser shall be entitled to act in accordance with clauses 35.4 to 35.8.

35.3 For the purposes of clauses 35.1 to 35.10, whether a person is associated with the Manufacturer or any of its Subcontractors shall be determined in accordance with section 8 of the Bribery Act 2010.

35.4 **Party committing the Prohibited Act**

If a Prohibited Act is committed by the Manufacturer (including any of its officers) or by an employee not acting independently of the Manufacturer, then the Purchaser may

terminate this Agreement by giving notice to the Manufacturer, provided that, if the Prohibited Act is an offence under section 7(1) of the Bribery Act 2010, the Purchaser may only terminate this Agreement if, acting reasonably, it considers termination of this Agreement to be in the best interests of the Project.

- 35.5 If the Prohibited Act is committed by an employee of the Manufacturer acting independently of the Manufacturer, then the Purchaser may give notice of termination of this Agreement to the Manufacturer and this Agreement will terminate, unless within 28 days of receipt of such notice the Manufacturer terminates the employee's employment and (if necessary) procures performance of the relevant activities by another person.
- 35.6 If the Prohibited Act is committed by a Subcontractor (including any of its officers) or by an employee of that Subcontractor not acting independently of that Subcontractor, then the Purchaser may give notice of termination of this Agreement to the Manufacturer and this Agreement will terminate, unless within 28 days of receipt of such notice the Manufacturer terminates the relevant Subcontract (providing the Purchaser with appropriate evidence) and, in accordance with clause 44.1 (Subcontracting), procures the performance of such part of the Project by another person provided that, if the Prohibited Act is an offence under section 7(1) of the Bribery Act 2010, the Purchaser may only terminate this Agreement if, acting reasonably, it considers termination of this Agreement to be in the best interests of the Project.
- 35.7 If the Prohibited Act is committed by an employee of a Subcontractor acting independently of that Subcontractor, then the Purchaser may give notice of termination of this Agreement to the Manufacturer and this Agreement will terminate, unless within 28 days of receipt of such notice the Subcontractor terminates the employee's employment and (if necessary) procures performance of the relevant activities by another person.
- 35.8 If the Prohibited Act is committed by another person not specified in clauses 35.4 to 35.7, then the Purchaser may give notice of termination of this Agreement to the Manufacturer and this Agreement will terminate unless within 28 days of receipt of such notice, the Manufacturer procures the termination of such person's involvement (and of the involvement of his employee) and (if necessary and in accordance with clause 44.1 (Subcontracting)) procures performance of the relevant activities by another person provided that, if the Prohibited Act is an offence under section 7(2) of the Bribery Act 2010, the Purchaser may only terminate this Agreement if, acting reasonably, it considers termination of this Agreement to be in the best interests of the Project.
- 35.9 The Manufacturer undertakes to the Purchaser that it will throughout the duration of this Agreement have in place adequate procedures (as referred to in section 7(2) of the Bribery Act 2010) designed to prevent persons associated with the Manufacturer from bribing any person with the intention of obtaining or retaining business for the Manufacturer or with the intention of obtaining or retaining an advantage in the conduct of business for the Manufacturer.
- 35.10 **Termination notice for Prohibited Act**
- (a) Any notice of termination under clauses 35.1 to 35.9 shall specify:
- (i) the nature of the Prohibited Act;
 - (ii) the identity of the party whom the Purchaser believes has committed the Prohibited Act; and
 - (iii) the date on which this Agreement will terminate in accordance with the applicable provisions of clause 35.1 to this clause 35.10.
- (b) In any case, where a Prohibited Act has been committed, and the Purchaser elects not to terminate this Agreement in accordance with this clause 35.10 (without

prejudice to the Purchaser's right to terminate this Agreement at a later stage as a result of such Prohibited Act), the Purchaser may require that:

- (i) the Manufacturer puts forward a rectification plan acceptable to the Purchaser in its absolute discretion within 28 days of the date of service of the Prohibited Act Notice, such rectification plan to specify the proposed actions in reasonable detail and the latest date by which it is proposed that those actions will be completed; and
 - (ii) the Manufacturer rectifies in accordance with the rectification plan the relevant Prohibited Act within 60 days of the date of service of the Prohibited Act Notice or any other period agreed in accordance with clause 35.10(b)(i) above (such periods to run concurrently with the 28-day period in clause 35.10(b)(i)).
- (c) Nothing in clauses 35.1 to 35.10 shall prevent the Purchaser from exercising its discretion to terminate this Agreement for a Prohibited Act that falls within limb (e) of the definition of Prohibited Act where it is required to do so by the Utilities Contract Regulations.

35.11 Safety Breach

- (a) The Manufacturer shall notify the Purchaser promptly on the Manufacturer becoming aware of the occurrence of a Safety Breach.
- (b) If the Manufacturer or any Subcontractor commits any Safety Breach, then the Purchaser may deliver a notice in writing to the Manufacturer, signed on behalf of the Purchaser (a "**Safety Breach Notice**") and the Purchaser shall be entitled to act in accordance with clauses 35.12(a) to 35.12(e).

35.12 Party committing the Safety Breach

- (a) If a Safety Breach is committed by the Manufacturer (including any of its officers) or by an employee not acting independently of the Manufacturer, then the Purchaser may terminate this Agreement by giving notice to the Manufacturer.
- (b) If the Safety Breach is committed by an employee of the Manufacturer acting independently of the Manufacturer, then the Purchaser may give notice of termination of this Agreement to the Manufacturer and this Agreement will terminate, unless within 28 days of receipt of such notice the Manufacturer terminates the employee's employment and (if necessary and in accordance with clause 44.1 (Subcontracting)) procures performance of the relevant activities by another person.
- (c) If the Safety Breach is committed by a Subcontractor (including any of its officers) or by an employee of that Subcontractor not acting independently of that Subcontractor, then the Purchaser may give notice of termination of this Agreement to the Manufacturer and this Agreement will terminate, unless within 28 days of receipt of such notice the Manufacturer terminates the relevant Subcontract (providing the Purchaser with appropriate evidence) and, in accordance with clause 44.1 (Subcontracting), procures the performance of such part of the Project by another person.
- (d) If the Safety Breach is committed by an employee of a Subcontractor acting independently of that Subcontractor, then the Purchaser may give notice of termination of this Agreement to the Manufacturer and this Agreement will terminate, unless within 28 days of receipt of such notice the Subcontractor terminates the employee's employment and (if necessary and in accordance with

clause 44.1 (Subcontracting)) procures performance of the relevant activities by another person.

- (e) If the Safety Breach is committed by another person not specified in clauses 35.12(a) to 35.12(d), then the Purchaser may give notice of termination of this Agreement to the Manufacturer and this Agreement will terminate unless within 28 days of receipt of such notice, the Manufacturer procures the termination of such person's involvement (and of the involvement of his employee) and (if necessary and in accordance with clause 44.1 (Subcontracting)) procures performance of the relevant activities by another person.

35.13 Termination notice for Safety Breach

Any notice of termination under clauses 35.11(a) to 35.12(e) shall specify:

- (a) the nature of the Safety Breach;
- (b) the identity of the party whom the Purchaser believes has committed the Safety Breach; and
- (c) the date on which this Agreement will terminate, in accordance with the applicable provisions of clause 35.11(a) to this clause 35.13.

In any case, where a Safety Breach has been committed, and the Purchaser elects not to terminate this Agreement in accordance with this clause 35.13 (without prejudice to the Purchaser's right to terminate this Agreement at a later stage as a result of such Safety Breach), the Purchaser may require that:

- (i) the Manufacturer puts forward a rectification plan acceptable to the Purchaser in its absolute discretion within 28 days of the date of service of the Safety Breach Notice, such rectification plan to specify the proposed actions in reasonable detail and the latest date by which it is proposed that those actions will be completed; and
- (ii) the Manufacturer rectifies in accordance with the rectification plan the relevant Safety Breach within 60 days of the date of service of the Safety Breach Notice or any other period agreed in accordance with clause 35.13(c)(i) (such periods to run concurrently with the 28-day period in clause 35.13(c)(i)).

36. CONSEQUENCES OF TERMINATION

36.1 Payment

If this Agreement is terminated:

- (a) as a result of a Manufacturer Event of Default in accordance with clause 31 (Manufacturer Default), paragraph 1, paragraph 2 and paragraph 3 of schedule 20 (Termination Payments) shall apply;
- (b) as a result of a Purchaser Event of Default in accordance with clause 32 (Purchaser Default) or voluntarily by the Purchaser pursuant to clause 37 or as a result of a Purchaser Serious Infringement as referred to in clause 34.4(b)(ii) paragraph 4 of schedule 20 (Termination Payments) shall apply;
- (c) as a result of a Force Majeure Event pursuant to clause 33.6 (Termination for Force Majeure), paragraph 4 of schedule 20 (Termination Payments) shall apply;

- (d) as a result of a Prohibited Act or Safety Breach pursuant to clause 35 (Prohibited Act and Safety Breach Termination), paragraph 1, paragraph 2 and paragraph 3 of schedule 20 (Termination Payments) shall apply;
- (e) as a result of Ineffectiveness under clause 34, paragraph 5 of schedule 20 (Termination Payments) shall apply,

and for each of clauses 36.1(a) to 36.1(e) paragraphs 6 and 7 of schedule 20 (Termination Payments) shall (to the extent applicable) apply, in each case to determine the amounts payable by one Party to the other in relation to such termination of this Agreement.

36.2 Title in the Trains and Equipment

Upon termination of this Agreement, title in the Trains and Equipment shall transfer, if applicable, in accordance with schedule 20 (Termination Payments).

36.3 Termination and Change

Save where this Agreement is terminated at any time prior to Acceptance of the Minimum Fleet as a result of a Manufacturer Event of Default in accordance with clause 31 or as a result of a Prohibited Act pursuant to clause 35, any termination of this Agreement shall only have effect with regard to any Trains and other Equipment which both (i) have not been Accepted, and (ii) are not otherwise to be delivered to the Purchaser upon or following such termination in accordance with this Agreement. Accordingly, upon any such termination, subject to any express provision in this Agreement to the contrary, this Agreement and the rights and obligations of the Parties hereunder shall continue in relation to all Trains and other Equipment in relation to which the Works are not so terminated.

36.4 Assignment of warranties and guarantees

- (a) The Manufacturer shall procure that all warranties and guarantees in respect of the Works, Trains or Equipment that remain in force at the date of termination of this Agreement are capable of assignment and shall, upon any termination of this Agreement, upon the written request of the Purchaser, assign to the Purchaser or its nominee the benefit free from any Security Interest of any or all such warranties and guarantees in relation to any Trains or Equipment to which the Purchaser retains or will acquire title upon or following such termination in accordance with the terms of this Agreement.
- (b) Where this Agreement has been terminated or, if earlier, there is, in the Purchaser's reasonable opinion, a realistic prospect of this Agreement being terminated on the occurrence of an Event of Default, the Purchaser shall be entitled to require the Manufacturer to provide all drawings of all Parts, Major Components and/or Recurrent Defect Extension Components, all design, technical and maintenance records relating to the Purchased Items including all Manuals relating to the Purchased Items for operating the Purchased Items in Unrestricted Passenger Revenue Earning Service to the extent the same have not been provided in accordance with this Agreement and such information shall be treated as Manufacturer IPR for the purposes of this Agreement.

36.5 Handover of documentation

The Manufacturer shall ensure that:

- (a) all Technical Documents to which the Purchaser retains or will acquire title upon or following the relevant termination of this Agreement and the rights to use and copy such documentation; and

- (b) the Technical Library and the rights to use and copy any documentation comprising the Technical Library,

in each case required to use the Trains and Equipment for all purposes contemplated under this Agreement (including clause 30.3, clause 30.4 and clause 30.5) and the FSA, shall be up to date, accurate and complete and, to the extent the same have not otherwise been provided in accordance with this Agreement and if the Purchaser so requires, handed over to the Purchaser upon termination of this Agreement.

36.6 Saving Provisions

Any termination of this Agreement shall be without prejudice to any right or remedy of either Party against the other accruing or accrued prior to such termination including any right to claim damages for any antecedent breach of this Agreement and/or in respect of those clauses referred to in clause 36.10 occurring after termination and any right to claim damages or other relief in relation thereto but subject, in the case of the Manufacturer, to clause 36.1.

- 36.7 The rights of the Purchaser in respect of termination are in addition and without prejudice to any right which the Purchaser may have to obtain redress or relief available at Law (whether by way of damages, specific performance or otherwise) in respect of a Manufacturer Default provided that the Purchaser shall not be entitled to recover twice in respect of the same loss.

- 36.8 Save as set out in this clause 36 and in schedule 20 (Termination Payments) or as otherwise expressly stated in this Agreement, the Manufacturer shall not be entitled to any payment or any other remedy as a consequence of termination of this Agreement.

- 36.9 Neither Party shall be entitled to terminate this Agreement except as expressly set out in this Agreement.

36.10 Survival

Upon termination or expiry of this Agreement, whether in respect of any one Purchased Item or all Purchased Items, the obligations of the Parties under this Agreement in respect of the terminated Purchased Item shall cease except for:

- (a) any rights and obligations arising as a result of any antecedent breach of this Agreement or any rights and obligations which shall have accrued or become due prior to the date of termination; and
- (b) the provisions of the following clauses shall remain in full force and effect notwithstanding the expiry or termination of this Agreement: 1 (Definitions and Interpretation), 3 (Representations and Warranties), 9.3 to 9.8, 20 (Warranties), 23 (Manufacturing Tooling), 26 (Payments and VAT), 29 (Change in Law), 30 (Intellectual Property Rights), 31 (Manufacturer Default), 32 (Purchaser Default), 33 (Force Majeure), 34 (Force Majeure Termination/Declaration of Ineffectiveness), 35 (Prohibited Act and Safety Breach Termination), 36 (Consequences of Termination), 37 (Voluntary Termination by the Purchaser), 38 (Indemnities and Limitations on Liability), 39 (Confidentiality), 40 (Freedom of Information), 41 (Dispute Resolution), 43 (Safety, Quality and Environmental Plan), 44 (Assignment, Transfer and Sub Contracting by the Manufacturer), 48 (Notices) and 49 (Entire Agreement) to 63 (Governing Law and Jurisdiction) and the related clauses and schedules (including schedule 20 (Termination Payments)) required to give effect to those clauses in relation to such termination or the consequences of such termination.

36.11 Co-operation on termination

Without prejudice to the rest of this clause 36, the Manufacturer shall, following termination of this Agreement, co-operate generally with the Purchaser in relation to the consequences of such termination including:

- (a) ensuring the continuity of performance of and an orderly handover of control of the Works (including the return to the Purchaser or Franchisee by the Manufacturer of any Free Issue Materials);
- (b) taking such steps as may be reasonably requested by the Purchaser in connection therewith;
- (c) making appropriately skilled and qualified employees of the Manufacturer and any Subcontractors reasonably available to provide assistance and advice and attend such meetings with the Purchaser, the Franchisee, members of the TfL Group and other relevant third parties (including any train manufacturer appointed to complete any of the Works that remained unperformed at the time of termination) as are reasonably required in order to determine those actions that are required in order to facilitate such continuity and orderly handover;
- (d) continuing to grant the Purchaser access to the Test Track Facilities to the extent required to complete any Test that has commenced before termination but has not been completed; and
- (e) providing such records and information relating to or connected with the Works as the Purchaser may reasonably require.

37. VOLUNTARY TERMINATION BY THE PURCHASER

37.1 The Purchaser shall have the right, at its absolute discretion, to terminate this Agreement after the issue of the Notice to Proceed under clause 4 (Notice to Proceed and Voluntary Cancellation) provided that the Purchaser complies with its obligations under this clause 37.

37.2 If the Purchaser wishes to terminate this Agreement under this clause 37, it must give notice to the Manufacturer stating that:

- (a) the Purchaser is terminating this Agreement under this clause 37; and
- (b) this Agreement will terminate on the date stated in the notice falling no earlier than 12 months after the date of such notice.

37.3 This Agreement will terminate on the date set out in the notice referred to in clause 37.2 above and clause 36.1(b) shall apply.

38. INDEMNITIES AND LIMITATIONS ON LIABILITY

38.1 Indemnity by Manufacturer

- (a) The Manufacturer shall, subject to clause 38.1(c), be responsible for, and shall release and indemnify the Indemnified Parties on demand on an after-Tax basis from and against all liability for:
 - (i) death or personal injury;
 - (ii) loss or damage to property;
 - (iii) breach of statutory duty; and

- (iv) third party actions, claims, demands, costs, charges and expenses (including legal expenses on an indemnity basis) brought against any Indemnified Party,

which may arise in each case out of, or in consequence of:

- (A) the design, construction, manufacture testing, commissioning or testing of the Trains, the Equipment and/or any System, Part, Major Component or Recurrent Defect Extension Component forming part of any Train);
 - (B) the operation and use of the Trains or the Equipment;
 - (C) the performance or non-performance by the Manufacturer, a Subcontractor of the Manufacturer or its or their respective servants, employees or agents, of the Manufacturer's obligations under the Project Documents; or
 - (D) the presence on the Relevant Property of the Manufacturer, a Subcontractor of the Manufacturer or its or their respective servants, employees or agents, in each case in connection with the Project Documents.
- (b) The Manufacturer shall, subject to clause 38.1(c), be responsible for and shall release and indemnify the Indemnified Parties on demand on an after-Tax basis from and against all Losses whatsoever suffered or incurred by the Indemnified Parties as a result of:
- (i) the negligence or wilful misconduct of; or
 - (ii) breach of any Project Documents by,
- the Manufacturer, any Subcontractor, the Guarantor or its or their respective servants, Affiliates, employees or agents (including any such Losses arising on a termination of this Agreement).
- (c) The Manufacturer shall not be responsible or be obliged to indemnify the Indemnified Parties:
- (i) pursuant to clauses 38.1(a) or 38.1(b) for any of the matters referred to in clauses 38.1(a)(i) to 38.1(a)(iv) or 38.1(b) which arises as a direct result of the Manufacturer acting in accordance with an instruction in writing given by the Purchaser as part of a Change, provided that the Manufacturer objected in writing to the giving of the instruction prior to its implementation and such objection was considered by the Purchaser to be reasonable or (in the case of disagreement) the objection is determined, pursuant to the Dispute Resolution Procedure, to be reasonable;
 - (ii) for any liability or Losses to the extent that the relevant liability or Loss is of such nature as is intended to be compensated by the payment of liquidated damages pursuant to this Agreement;
 - (iii) pursuant to clause 38.1(a) or 38.1(b), for any liability or Losses caused by the negligence or wilful misconduct of any of the Indemnified Parties or by the breach by the Purchaser of its obligations under this Agreement;
 - (iv) except in respect of any liability suffered or incurred under a Disclosed Contract, for any Uninsured Losses [REDACTED]; or [REDACTED]

- (v) for any loss of revenue suffered by any of the Indemnified Parties, save in respect of any IPR claims which a party may become aware of which might give rise to liability for the other under clause 30.8,

except to the extent that such Losses are recoverable (or should be recoverable assuming the Required Insurances have been taken out and maintained in force in accordance with this Agreement) under the Required Insurances and any other insurances required pursuant to paragraph 1.2 of schedule 13 (Insurance) to be taken out by the Manufacturer in accordance with clause 19 (Insurance) and schedule 13 (Insurance), taking no account of any qualifications set out in the Insurance Differential Letter.

38.2 **No Double Recovery**

An indemnity by either Party under any provision of this Agreement shall be without limitation to any indemnity by that Party under any other provision of this Agreement or the FSA provided that nothing in this Agreement shall give either Party the right to any double recovery. In addition and for the avoidance of doubt, liability under any indemnity or other liability in this Agreement or the FSA other than this clause 38 shall be disregarded in determining any limitation on liability under this clause 38.

38.3 **Mitigation**

Each Indemnified Party shall at all times take all reasonable steps to minimise and mitigate any injury or Loss for which it is entitled to bring a claim against the Indemnifying Party pursuant to this Agreement.

38.4 **Resistance of claims**

- (a) If one Party (the "**Recipient**") becomes aware of any third party claim against the Recipient which may result in a claim by the Recipient against the other Party under any of the indemnities contained in this Agreement, the Recipient shall give notice to the Indemnifying Party as soon as is reasonably practicable thereafter. The Indemnifying Party shall be entitled at its discretion (but after consultation with the Recipient) to resist at the Indemnifying Party's own expense such claim on behalf of the Recipient provided that:
 - (i) the Recipient shall be kept fully informed of all matters pertaining to the claim;
 - (ii) the Indemnifying Party shall, in resisting any such claim, comply with the terms of any relevant policies of insurance issued pursuant to clause 19 (Insurance) and schedule 13 (Insurance);
 - (iii) the Indemnifying Party shall not be entitled to resist any such claim before any court unless it has been advised by leading counsel, after disclosure of all relevant information and documents, that it is reasonable to resist such claim in the manner proposed by the Indemnifying Party; and
 - (iv) the Recipient is indemnified and secured to its reasonable satisfaction by the Indemnifying Party against all Losses which may thereby be incurred.
- (b) The Recipient shall give the Indemnifying Party and the insurer, if any, under a policy of insurance issued pursuant to clause 19 (Insurance) and schedule 13 (Insurance) all reasonable co-operation, access and assistance, technical or otherwise for the purpose of resisting such a claim, subject as provided in clause 38.4(a)(iv).

- (c) If the Indemnifying Party does not request the Recipient to take any appropriate action or shall fail to indemnify and secure the Recipient to its reasonable satisfaction within 15 Working Days of the said notice to the Indemnifying Party, the Recipient shall be free to pay or settle the claim on such terms as it may in its absolute discretion think fit. The Recipient shall make no admission prejudicial to the resistance of such claim prior to the expiry of the notice period and then only if the Indemnifying Party has either:
 - (i) not requested the Recipient to take any appropriate action; or
 - (ii) not indemnified and secured the Recipient to its reasonable satisfaction or within 15 Working Days of such notice to the Indemnifying Party.

38.5 **Limitation on Manufacturer's liability**

- (a) Subject to clauses 38.5(b) and 38.6, the Manufacturer's liability to the Indemnified Parties under this Agreement (whether arising by way of indemnity, in contract, tort (including negligence), breach of statutory duty or otherwise and including the Acceptance Liquidated Damages and any other liquidated damages), shall not exceed an aggregate amount equal to [REDACTED] (the "**Maximum Liability**").
- (b) Upon any change to the Total Contract Price resulting from a Change Confirmation Notice, Claim Confirmation Notice or Option Train Change pursuant to clauses 6.7(a) or 6.7(b):
 - (i) if the Total Contract Price increases, the Maximum Liability shall be increased by [REDACTED] of the relevant increases in the Total Contract Price; or
 - (ii) if the Total Contract Price decreases, the Maximum Liability shall be decreased by [REDACTED] of the relevant decrease in the Total Contract Price,

and any such increase or decrease in the Maximum Liability shall be expressed as an amount in Pounds Sterling by converting the Euro and Canadian Dollar Currency Elements of such increase or decrease in the Total Contract Price to Pounds Sterling using the relevant spot exchange rates as shown in the Bank of England's 'Daily spot exchange rates against Sterling' with respect to the effective date of the relevant increase or decrease resulting from any such Change Confirmation Notice, Claim Confirmation Notice or Option Train Change.

38.6 The following shall not contribute to the Maximum Liability (being the "**Excluded Liabilities**"):

- (a) any liability of the Manufacturer to the Indemnified Parties arising as a result of or in connection with:
 - (i) death or personal injury;
 - (ii) fraud, fraudulent misrepresentation or corruption by the Manufacturer or any member of the Manufacturer Group; or
 - (iii) wilful default or abandonment;
- (b) any costs or expenses which the Manufacturer is obliged or does expend during the term of this Agreement in carrying out its obligations;
- (c) any costs incurred in satisfying Preconditions;

- (d) Losses suffered or incurred, to the extent such Loss is or is required to be insured by the Manufacturer in accordance with the provisions of clause 19 (Insurance);
- (e) the Manufacturer's liability (on termination or cancellation (in whole or in part) of this Agreement or otherwise) to refund and pay to the Purchaser all Milestone Payments previously paid by the Purchaser in respect of any Trains or Equipment which are the subject of a termination or cancellation in accordance with this Agreement (together with all interest payable on any such refund or payment), as such refund is calculated in accordance with schedule 20 (Termination Payments);
- (f) the Manufacturer's liability in respect of its express obligations in relation to warranty claims and/or for defect rectification pursuant to each of the Manufacturer's obligations under clause 20 (Warranties);
- (g) the Manufacturer's liability for any IPR claims pursuant to clauses 30.7 or 30.8;
- (h) (except to the extent already provided for under clause 38.6(e)) the Manufacturer's liability to refund or reimburse as expressly provided in this Agreement but for the avoidance of doubt excluding the Manufacturer's liability to indemnify in accordance with clause 38.6(g);
- (i) the Manufacturer's liability to pay any Taxes as expressly provided by this Agreement or as required by Applicable Laws and Standards;
- (j) any interest payable under this Agreement; and
- (k) the cost to the Purchaser of taking out and paying premiums in relation to any relevant policies or contracts of insurance where the Manufacturer has failed to take out or maintain the Required Insurances pursuant to paragraph 1 of part A (Manufacturer's Obligations) of schedule 13 (Insurance),

and no Excluded Liabilities shall be included in calculating any remaining amount of the Maximum Liability (and the Excluded Liabilities shall not contribute to using up the Maximum Liability).

38.7 Purchaser Indemnities

The Purchaser shall not be liable for the Manufacturer's loss of revenue under any indemnity or otherwise under this Agreement.

38.8 Service Provider actions

Notwithstanding any other provision of this Agreement, the Manufacturer shall not be entitled to make any claim, or be entitled to any relief, under or relating to any provision of this Agreement to the extent that such claim or relief arises out of or is increased by any act or omission by the Service Provider under the FSA or otherwise.

38.9 Survival

This clause 38 shall survive the expiry or termination of this Agreement.

39. CONFIDENTIALITY

39.1 Manufacturer's Obligations of Confidentiality

Subject to clause 39.4 and except as otherwise provided in the Project Documents, the Manufacturer shall keep confidential all matters relating to this Agreement and the Project Documents and shall use all reasonable endeavours to prevent its employees, agents and

Subcontractors from making any disclosure to any person of any matter relating to this Agreement and the Project Documents.

39.2 Purchaser's Obligations of Confidentiality

Subject to clause 39.4 and the rest of this clause 39.2, the Purchaser shall have the same obligations as those imposed on the Manufacturer under clause 39.1 in respect of those items of confidential and commercially sensitive information set out in schedule 18 (Manufacturer Confidential Information) until such time as is indicated in column 2 of the same table. Without prejudice to the foregoing and clause 39.4, the Purchaser shall be entitled to:

- (a) disclose Manufacturer Confidential Information where the Purchaser considers that it is obliged to do so under any Applicable Laws and Standards;
- (b) use Manufacturer Confidential Information to the extent necessary to obtain the benefit of the Manufacturer's performance under this Agreement;
- (c) disclose such Manufacturer Confidential Information as may be required to be published in the Official Journal of the European Union;
- (d) disclose such Manufacturer Confidential Information as may be required pursuant to a FOI Information Request or otherwise in accordance with clause 40; and
- (e) publish this Agreement, the FSA, the Escrow Agreement or any other document, contract or data relating to this Agreement to the general public which is required to be published pursuant to the requirements of the Transparency Commitment from time to time.

39.3 For the purposes of clause 39.2(e), the Purchaser may in its absolute discretion prior to publication:

- (a) redact all or part of this Agreement, the FSA, the Escrow Agreement or any other document, contract or data relating to this Agreement which is required to be published pursuant to the requirements of the Transparency Commitment, to take account of the exemptions that would be available in relation to information requested under the FOI Legislation; and
- (b) consult with the Manufacturer regarding any redactions to this Agreement, the FSA, the Escrow Agreement or any other document, contract or data relating to this Agreement which is required to be published pursuant to the requirements of the Transparency Commitment, to be published,

provided that in all cases the Purchaser shall make the final decision regarding publication and/or redaction of this Agreement, the FSA, the Escrow Agreement or any other document, contract or data relating to this Agreement which is required to be published pursuant to the requirements of the Transparency Commitment.

39.4 Permitted Disclosures

The Manufacturer's obligations of confidentiality in clause 39.1 and the Purchaser's obligations of confidentiality in clause 39.2 shall not apply to:

- (a) any disclosure of information that is reasonably required by persons engaged in the performance of obligations set out in this Agreement;
- (b) any matter which a Party can demonstrate is already generally available and in the public domain otherwise than as a result of a breach of this clause 39;

- (c) any disclosure to the Service Provider in connection with the Fleet Support Agreement;
 - (d) any disclosure to enable a determination to be made under schedule 19 (Dispute Resolution Procedure);
 - (e) any disclosure which is required by any Law (including any order of a court of competent jurisdiction), any Parliamentary obligation or the rules of any stock exchange or governmental or regulatory authority having the force of Law;
 - (f) any disclosure of information which is already lawfully in the possession of the receiving party, prior to its disclosure by the disclosing party;
 - (g) any provision of information where it is proposed that a person should or may provide funds (whether directly or indirectly and whether by loan, equity participation or otherwise) to the Purchaser to enable it to carry out its obligations under this Agreement, to that person but only to the extent reasonably necessary to enable a decision to be taken on the proposal;
 - (h) any disclosure of information relating to the design, construction, operation and maintenance of the Trains (including to the Franchisee) and such other information (except pricing information) as may be reasonably required for the purpose of conducting a due diligence exercise to any proposed new contractor and its advisers, should the Purchaser decide to retender this Agreement;
 - (i) any registration or recording of any consents and property registration required;
 - (j) any disclosure of information by the Purchaser in accordance with clause 39.6;
 - (k) any disclosure by the Purchaser of any document related to this Agreement to which it is a party and which the Manufacturer (acting reasonably) has agreed with the Purchaser contains no commercially sensitive information;
 - (l) any disclosure for the purpose of:
 - (i) the examination and certification of the Purchaser's or the Manufacturer's accounts; or
 - (ii) any examination pursuant to section 6(1) of the National Audit Act 1983; and
 - (m) any disclosure to the insurers of the Project;
 - (n) any disclosure by the Purchaser to the Franchisee; and
 - (o) any disclosure by the Purchaser permitted by clause 39.9 below.
- 39.5 Where disclosure is permitted under clause 39.4, other than sub-clauses 39.4(b), 39.4(e), 39.4(f), 39.4(i), 39.4(j) and 39.4(k), the discloser of such information shall procure that the recipient of the information shall be subject to the same obligations of confidentiality as those contained in this Agreement.
- 39.6 Nothing in this Agreement shall prevent the disclosure by the Purchaser of any Confidential Information to SoS, TfL or any other subsidiaries of TfL, the Mayor, the Purchaser's Subcontractors, all respective advisers or any other person or body that the Purchaser from time to time is required to consult with or provide information to. The Parties acknowledge that the National Audit Office has the right to publish details of this Agreement (including commercially sensitive information) in its relevant report to Parliament.

- 39.7 The Manufacturer shall not make use of this Agreement or any information issued or provided by or on behalf of the Manufacturer in connection with this Agreement otherwise than for the purpose of this Agreement and the FSA, except with the written consent of the Purchaser.
- 39.8 Where the Manufacturer, in carrying out its obligations under this Agreement, is provided with information relating to users of the Purchased Item, the Manufacturer shall not disclose or make use of any such information otherwise than for the purpose for which it was provided, unless the Manufacturer has obtained the prior written consent of both the user and the Purchaser.
- 39.9 **DLR Franchise Bidding Procedure**
- (a) The Purchaser, TfL, or any Affiliate of TfL may disclose:
- (i) the Project Documents and/or any information contained within the Project Documents;
 - (ii) any information, documents and matters relating to and/or provided pursuant to the Project Documents; and
 - (iii) any other information, documents and matters which the Purchaser reasonably believes that a potential successor Franchisee would require in order to tender for the right and obligation to provide or operate all or any DLR Train Services,
- (the "**MSA Information**") to any persons who have expressed an interest in becoming the successor Franchisee, provided that such persons have provided an undertaking regarding the confidentiality and use of such information, in substantially the same form as this clause 39.
- (b) The Purchaser may include any of the MSA Information in any documents relating to the invitation to tender or any other procurement documents for the relevant franchise agreement, including any pre-qualifying document and any associated information memorandum (whether preliminary or final).
- (c) Where any MSA Information is in the Manufacturer's possession, the Manufacturer shall, to the extent reasonably requested by the Purchaser, provide such MSA Information to the Purchaser at the Manufacturer's own cost.
- 39.10 **Restrictions on publicity and public relations**
- The Manufacturer shall not by itself, its employees or agents and shall procure that its Subcontractors shall not, communicate with representatives of the press, television, radio or other communications media on any matter concerning this Agreement, the FSA or any Purchased Item without the prior written approval of the Purchaser.
- 39.11 No facilities to photograph or film in or upon any property used in relation to the manufacture and delivery of the Trains or Equipment under this Agreement shall be given or permitted by the Manufacturer unless the Purchaser has given its prior written approval.
- 39.12 Notwithstanding any other provision of this Agreement, including clauses 19 (Insurance) and 38 (Indemnities and Limitations on Liability), the Manufacturer agrees that the Purchaser shall have the right to control and supervise all dealings with the media in respect of any incident, event, claim or action in relation to any part of the Purchased Item.
- 39.13 The Manufacturer shall co-operate with the Purchaser in relation to the Purchaser's publicity of any aspect relating to this Agreement, the FSA or any Purchased Item.

39.14 Data protection

- (a) The Manufacturer and Purchaser shall each comply with its respective obligations under the DP Legislation and neither Party shall do any act that, or omit to do any act the omission of which, puts the other in breach of such obligations. The Parties acknowledge that the Purchaser alone shall determine the purposes for which and the manner in which Personal Data is, or is to be Processed in the performance of the Services and that accordingly:
 - (i) the Purchaser shall be the **"data controller"** (as defined in the European DP Legislation) in respect of all Personal Data; and
 - (ii) the Manufacturer shall be the **"data processor"** (as defined in the European DP Legislation) in respect of Personal Data.
- (b) When Processing any Personal Data the Manufacturer shall:
 - (i) exercise all reasonable care, skill and diligence;
 - (ii) only act in accordance with documented instructions from the Purchaser regarding Processing of Personal Data on behalf of the Purchaser pursuant to this Agreement;
 - (iii) taking into account the nature of the Processing, assist the Purchaser by taking appropriate technical and organisational measures for the fulfilment of the Purchaser's obligations to respond to requests for exercising the rights of Data Subjects;
 - (iv) taking into account the nature of the Processing and the information available to the Manufacturer, assist the Purchaser in ensuring compliance with its obligations under the DP Legislation;
 - (v) make available all information to the Purchaser necessary to demonstrate compliance with the Manufacturer's obligations in the DP Legislation, and allow for and contribute to audits, including inspections, conducted by the Purchaser or another auditor mandated by the Purchaser;
 - (vi) maintain a valid and up-to-date registration or notification under the DP Legislation covering the Processing to be performed in connection with this Agreement; and
 - (vii) shall immediately inform the Purchaser if, in its opinion, any instruction provided by the Purchaser in relation to Processing Personal Data is in breach of DP Legislation or European DP Legislation.
- (c) Security of Processing
 - (i) The Manufacturer shall, taking into account the state of the art, the costs of implementation and the nature, scope, context and purposes of the Processing as well as the risk of varying likelihood and severity for the rights and freedoms of the Data Subjects, implement and maintain at all times appropriate technical and organisational measures to ensure a level of security appropriate to the risk of Processing of the Personal Data, including, as appropriate:
 - (A) taking measures against unauthorised or unlawful Processing of the Personal Data and against accidental loss or destruction of or damage to the Personal Data in accordance with the DP Legislation (and at

the request of the Purchaser shall provide details of all such measures);

- (B) the pseudonymisation and encryption of Personal Data;
 - (C) the ability to ensure the ongoing confidentiality, integrity, availability and resilience of Processing systems and services;
 - (D) the ability to restore the availability and access to Personal Data in a timely manner in the event of a physical or technical incident;
 - (E) a process for regularly testing, assessing and evaluating the effectiveness of technical and organisational measures for ensuring the security of the Processing.
- (ii) In assessing the appropriate level of security the Manufacturer shall take account of the risks that are presented by the Processing of Personal Data, in particular from accidental or unlawful destruction, loss, alteration, unauthorised disclosure of, or access to Personal Data transmitted, stored or otherwise Processed.
 - (iii) Such technical and organisational security measures shall be consistent with those measures used by internationally recognised industry leaders performing services similar to the Services for personal data of a similar nature to the Personal Data and shall in any event be at least in accordance with Good Industry Practice.
 - (iv) The Purchaser may, at reasonable intervals, request a written description of the technical and organisational methods employed by the Manufacturer and the Subcontractors. Within 30 days of such a request, the Manufacturer shall supply written particulars of all such measures detailed to a reasonable level such that the Purchaser can determine whether or not, in connection with the Personal Data, the Manufacturer is compliant with the DP Legislation.
- (d) Subcontractors
- (i) The Manufacturer shall procure that all of its Subcontractors shall only undertake fair and lawful processing of Personal Data reasonably required in connection with this Agreement.
 - (ii) The Manufacturer shall not engage another data processor without prior specific or general written authorisation of the Purchaser. In the case of general written authorisation, the Manufacturer shall inform the Purchaser of any intended changes concerning the addition or replacement of other data processors, thereby giving the Purchaser the opportunity to object to such changes.
 - (iii) Where the Manufacturer engages another data processor for carrying out specific processing activities on behalf of the Purchaser, the same obligations as set out between the Manufacturer and Purchaser in this clause 39.14 shall be imposed on that other data processor by way of a contract, in particular providing sufficient guarantees to implement appropriate technical and organisational measures in such a manner that the processing will meet the requirements of the DP Legislation. Where that other data processor fails to fulfil its data protection obligations, the Manufacturer shall remain fully liable to the Purchaser for the performance of that other data processor's obligations.
- (e) Disclosure

- (i) The Manufacturer shall not disclose any Personal Data other than:
 - (A) to those employees and Subcontractors to whom such disclosure is reasonably necessary in order for the Manufacturer to perform its obligations under this Agreement; or
 - (B) to the extent required under a court order,

provided that disclosure under clause 39.14(e)(i)(A) is made subject to written terms substantially the same as, and no less stringent than, the terms contained in this clause 39.14, and that the Manufacturer ensures such personnel have entered into confidentiality undertakings to protect the confidentiality of the Personal Data, and that the Manufacturer shall give notice in writing to the Purchaser of any disclosure of Personal Data it or a Subcontractor is required to make under clause 39.14(e)(i)(B) immediately once it is aware of such a requirement.
- (f) Notification
 - (i) The Manufacturer shall promptly notify the Purchaser if:
 - (A) it receives any complaints about the Processing of Personal Data from third parties (including Data Subjects), and the Manufacturer shall not make any admissions or take any action which may be prejudicial to the defence or settlement of any such complaint, and shall assist the Purchaser in such manner as it may require in connection with such complaint; and
 - (B) a security breach has occurred or arisen or may occur or arise in relation to the Personal Data and shall co-operate with and provide all assistance in order for the Purchaser to comply with DP Legislation (or, if applicable, any security breach notification and Applicable Laws and Standards) in the event of such breach or threatened breach.
 - (ii) The Manufacturer shall promptly notify the Purchaser if the Manufacturer obtains, on behalf of the Purchaser, any Personal Data from Data Subjects as part of the Services, give such individuals a data protection notice describing the intended use of such Personal Data, in a form approved by the Purchaser.
- (g) Transfer

The Manufacturer shall not transfer any Personal Data to any country or territory outside the European Economic Area without the prior written consent of the Purchaser.
- (h) Termination

Upon termination of this Agreement (howsoever arising), the Manufacturer shall, at the choice of the Purchaser, delete or return to the Purchaser all Personal Data provided to the Manufacturer and delete existing copies (unless any Applicable Laws and Standards requires the Manufacturer to store such Personal Data, in which case the Manufacturer shall store such data in compliance with DP Legislation).
- (i) The Manufacturer shall indemnify and keep indemnified the Indemnified Parties against all Losses incurred by any of the Indemnified Parties in respect of any breach of this clause 39.14 by the Manufacturer and/or any Subcontractor.

39.15 Return of Confidential Information

Save to the extent that the same may reasonably be required in respect of any current or anticipated litigation, on termination of this Agreement howsoever occurring, the Manufacturer shall return to the Purchaser or permanently delete and destroy any Confidential Information (including all copies thereof) supplied to it at any time (including at a time before the date of this Agreement) by the Purchaser or any other person with the knowledge and consent of the Purchaser, except where retention of any such Confidential Information is required by any Applicable Laws and Standards or pursuant to any applicable stock exchange listing requirements (in which case the provisions of clause 39.1 shall continue to apply to such information).

39.16 Continuing obligation following termination of Agreement

The obligations of the Parties under this clause 39 shall continue in full force and effect notwithstanding termination of this Agreement.

39.17 Cyber security

The Manufacturer shall comply with the provisions of schedule 27 (Cyber Security), provided that such provisions shall not apply to Thales and/or the Thales Equipment to the extent that the Manufacturer is unable to so comply with respect to Thales and/or the Thales Equipment (taking into consideration the Manufacturer's rights under the Thales Contract).

40. FREEDOM OF INFORMATION

40.1 For the purposes of this Agreement, **"Information"** means information recorded in any form held by the Purchaser or held by the Manufacturer on behalf of the Purchaser.

40.2 The Manufacturer acknowledges that the Purchaser is subject to the FOI Legislation and agrees to assist and co-operate with the Purchaser to enable the Purchaser to comply with its obligations under the FOI Legislation. This shall not preclude the Manufacturer from objecting to a disclosure of Information.

40.3 Without prejudice to the generality of clause 40.2, the Manufacturer shall and shall procure that its Subcontractors shall:

- (a) transfer to the company secretary of the Purchaser (or such other person as may be notified by the Purchaser to the Manufacturer) all FOI Information Requests received as soon as practicable and in any event within two (2) Working Days of receiving an FOI Information Request; and
- (b) in relation to Information held by the Manufacturer on behalf of the Purchaser, provide to the Purchaser on request, details about and/or a copy of all such Information, such Information to be provided within five (5) Working Days of receipt of a copy of the FOI Information Request (or such other period as the Purchaser may reasonably specify), and in such form as the Purchaser may reasonably specify.

40.4 Where the Purchaser receives an FOI Information Request relating to a Purchased Item, otherwise related to the Works, this Agreement or the FSA, the Purchaser shall as soon as practicable, and in any event within five (5) Working Days, send a copy of such FOI Information Request to the Manufacturer and shall consult the Manufacturer as to how disclosure under the FOI Legislation would affect the Manufacturer's and/or any of the Key Subcontractors' commercial interests.

40.5 The Purchaser shall be responsible for determining whether Information is exempt information under the FOI Legislation and for determining what Information will be disclosed in response to an FOI Information Request in accordance with the FOI Legislation. The Manufacturer shall not itself respond to any person making an FOI Information Request, save to acknowledge receipt, unless expressly authorised to do so by the Purchaser.

40.6 Notwithstanding clause 39, The Manufacturer acknowledges that the Purchaser may be obliged under the FOI Legislation to disclose Information without either consulting with, or obtaining consent from, the Manufacturer.

41. **DISPUTE RESOLUTION**

41.1 Except where expressly designated as an Expert Dispute, any Dispute shall be resolved in accordance with the procedures for Disputes set out in schedule 19 (Dispute Resolution Procedure).

41.2 Nothing in this Agreement shall prevent either Party from seeking injunctive relief, specific performance or other equitable relief.

42. **RESPONSIBLE PROCUREMENT, EQUALITY AND ANTI-BRIBERY**

42.1 The Manufacturer shall comply with the provisions of schedule 14 (Responsible Procurement).

42.2 The Manufacturer shall, at no additional cost to the Purchaser, assist and co-operate with the Purchaser where necessary to assist the Purchaser to comply with:

- (a) all relevant guidance, enactments, orders, regulations or instruments in force from time to time relating to discrimination in employment and the promotion of equal opportunities; and
- (b) its duty under section 149 of the Equality Act 2010 to have due regard to the need to eliminate unlawful discrimination on the grounds of sex, marital or civil partnership status, race, sexual orientation, religion or belief, age, pregnancy or maternity, gender reassignment or disability (a **"Relevant Protected Characteristic"**) (as the case may be) and to promote equality of opportunity between persons who share a Relevant Protected Characteristic and persons who do not share it.

42.3 The Manufacturer shall if required, at no additional cost to the Purchaser, provide in a timely manner all such assistance to the Purchaser as the Purchaser may reasonably require in connection with the Purchaser's anti-corruption and anti-bribery procedures in compliance with the Bribery Act 2010.

42.4 The Manufacturer shall:

- (a) promptly inform the Purchaser where formal proceedings have been issued or commenced against it in relation to an allegation, complaint or information with regard to a Prohibited Act or offence under the Money Laundering Regulations 2007 relating to the Works;
- (b) following any notification pursuant to clause 42.4(a), provide such updates and/or copies of the Manufacturer's Records as the Purchaser may request in relation to such alleged Prohibited Act or offence under the Money Laundering Regulations 2007;
- (c) without prejudice to any similar obligation contained within this Agreement, keep books and records of all financial transactions and expenditures in connection with the Works and permit the Purchaser to review and take copies of the same; and
- (d) ensure that all Subcontracts which are entered into in connection with the Works impose obligations on the relevant Subcontractor which are identical in effect to the obligations set out in clauses 42.4(a) to 42.4(c).

42.5 Notwithstanding any confidentiality obligation contained within this Agreement, the Manufacturer acknowledges, and shall procure that all Subcontractors acknowledge, that all information acquired by the Purchaser pursuant to clause 42.4 may be provided to any bank or other institution which may be providing finance to any member of the TfL Group in connection with this Agreement.

43. **SAFETY, QUALITY AND ENVIRONMENTAL PLAN**

43.1 **Health, Safety and Environment**

The Manufacturer shall be responsible for health and safety management in accordance with its certified health and safety management systems pursuant to the requirements of schedule 16 (Health, Safety and Environment).

43.2 **Quality**

(a) The Manufacturer shall establish, implement and maintain the Quality Management Plans in accordance with paragraph 10 of schedule 5 (Contract Management) and accordingly be responsible for quality management for the Fleet until Fleet Acceptance and shall ensure that its Subcontractors have similarly certified quality management systems in place.

(b) **Quality Standards**

(i) The Manufacturer shall establish quality standards ("**Quality Standards**") to be used throughout the provision of the Works in order to maintain quality and consistency. The Quality Standards shall be based upon photographic or diagrammatic material and, where appropriate, shall be supported by physical "glass case" samples. The format and content of the Quality Standards shall be submitted to the Purchaser for Approval and the Manufacturer shall ensure that copies of the Quality Standards are placed in the Technical Library. The Manufacturer shall ensure that copies of the Quality Standards are used by the Manufacturer's and Subcontractor's manufacturing personnel and quality assurance personnel where relevant.

(ii) The Quality Standards shall include, but not be limited to, the following areas:

- (A) wiring – including harness runs, cable ties, protective sheathing, screening, markers, labelling, termination, connectors, enclosure wiring, segregation and cleanliness of cable routes;
- (B) piping – including piping runs, hose orientations and clamping;
- (C) train interior – including panel fit, colour match, paint finish, seats and armrests, pattern matching, flooring, lighting, maps and signage;
- (D) equipment installation - including torque marking, secondary locking and secondary retention;
- (E) car body – including welds, paint finish, glazing, insulation and signage;
- (F) control consoles; and
- (G) gangways.

44. **ASSIGNMENT, TRANSFER AND SUB CONTRACTING BY THE MANUFACTURER**

44.1 **Subcontracting**

(a) Subject to clause 9.1 and the remainder of this clause 44.1, the Manufacturer shall be free to subcontract any of its obligations under this Agreement, provided that the Manufacturer shall retain full responsibility and liability for the performance of its Subcontractors, and shall procure that such Subcontractors, in the performance

of their respective obligations, observe and comply with all undertakings relating to their respective obligations on the part of the Manufacturer in this Agreement.

(b) The Manufacturer shall not:

- (i) enter into a Key Subcontract;
- (ii) terminate or agree to the termination of all or part of any Key Subcontract;
- (iii) make or agree to any material variation of any Key Subcontract;
- (iv) in any material respect depart from its obligations (or waive or allow to lapse any rights it may have in a material respect), or procure that others in any material respect depart from their obligations (or waive or allow to lapse any rights they may have in a material respect), under any Key Subcontract;
or
- (v) enter into (or permit the entry into by any other person of) any agreement replacing all or part of (or otherwise materially and adversely affecting the interpretation of) any Key Subcontract,

without the prior written consent of the Purchaser in each case to such proposed course of action.

- (c) The Manufacturer shall obtain prior written consent from the Purchaser in relation to the identity of each Key Subcontractor and the replacement of the same and in executing this Agreement, the Purchaser hereby provides such consent to the identity of each of the Key Subcontractors listed as having been approved at the date of this Agreement in column 5 of the table in schedule 11 (Subcontracts).
- (d) Unless the Purchaser otherwise agrees, in respect of a Key Subcontract, the Manufacturer shall not enter into any such Key Subcontract unless the counterparty to that prospective Key Subcontract has entered into a Direct Agreement with the Purchaser in respect of such Key Subcontract.
- (e) The Purchaser shall be deemed to have approved any amendment to the Key Subcontracts which is required as a result of any change made to this Agreement agreed by the Parties in accordance with the terms of this Agreement (provided that any such changes are made in accordance with the Change Procedure and the Key Subcontractor changes correspond in all material respects with the change made to this Agreement).
- (f) For the avoidance of doubt, the giving of consent by the Purchaser to the identity of the Key Subcontractors or the knowledge, review or approval of the terms of any Key Subcontract shall not relieve the Manufacturer of any of its obligations under this Agreement, or allow the Manufacturer to amend or alter any of the Manufacturer's obligations under this Agreement, or entitle the Manufacturer to any relief or compensation, or render the Purchaser in any way liable to any Key Subcontractor.

44.2 **Assignment**

Without prejudice to clause 44.1, the Manufacturer shall not:

- (a) assign (whether absolutely or by way of security), transfer, mortgage, charge, declare itself a trustee for a third party of, or otherwise dispose of (in any manner whatsoever) this Agreement or any benefit or interest therein:

- (i) to any member of the Manufacturer's Group except by way of assignment, transfer or novation of all of the Manufacturer's rights, title and obligations under this Agreement:
 - (A) where the Guarantor has to the reasonable satisfaction of the Purchaser provided a guarantee in the form of the Guarantee in respect of the assignee's rights and obligation; and
 - (B) with the prior written consent of the Purchaser (not to be unreasonably withheld or delayed); nor
- (ii) to any other person without the prior written consent of the Purchaser (acting in its absolute discretion); or
- (b) create or agree to create or permit to subsist any Security Interest on or over the Trains or the Equipment without the prior written consent of the Purchaser (acting in its absolute discretion),

and any purported dealing in contravention of this clause 44.2 shall be ineffective.

44.3 **Indemnity**

The Manufacturer shall indemnify the Purchaser on an after tax basis against any costs, expenses and liabilities it would not have incurred but for an assignment, charge or other dealing in accordance with (and to the extent permitted under) clause 44.2.

45. **ASSIGNMENT AND NOVATION OR GRANTING OF SECURITY BY THE PURCHASER**

45.1 **Transfer etc. by the Purchaser**

Without prejudice to clause 45.3, the Purchaser shall be entitled to assign (whether absolutely or by way of security and whether in whole or in part), transfer, novate, mortgage, charge, or otherwise dispose of any or all of its rights and/or obligations under this Agreement (including its payment obligations):

- (a) without the consent of the Manufacturer:
 - (i) to any member of the TfL Group or a Minister of the Crown;
 - (ii) to a third party provided that such third party is a Suitable Lessor; or
 - (iii) to a third party which is neither a Suitable Lessor nor a Competitor where the manner of the assignment, novation, mortgage, charge or other disposal of the rights and/or obligations under this Agreement is such that where the assignee, novatee or other beneficiary of the transferred rights and/or obligations does not fully perform the transferred obligations then the responsibility for the discharge of such unperformed obligations shall revert to the Purchaser or other member of the TfL Group; or
- (b) with the prior written consent of the Manufacturer (such consent not to be unreasonably withheld), to any third party (but without prejudice to clause 45.3).

The Purchaser shall notify the Manufacturer where it has assigned, transferred, novated, mortgaged, charged or otherwise disposed of any or all of its rights and/or obligations without the consent of the Manufacturer (in accordance with this clause 45) in accordance with this Agreement (including its payment obligations).

45.2 **Implementation of Transfers**

If the Purchaser wishes to deal with its rights and/or obligations in this Agreement (either in whole or in part) pursuant and subject to clause 45.1, the Manufacturer shall execute such documents and do such other things as the Purchaser may reasonably request in order to facilitate and perfect such dealing.

45.3 **Purchaser Novation**

- (a) Without prejudice to clauses 45.1 and 45.2, the Purchaser may at any time elect to novate its rights and obligations under this Agreement to:
 - (i) a Minister of the Crown; or
 - (ii) a member of the TfL Group,each, a **"Permitted Party"**.
- (b) If the Purchaser wishes to exercise its right of novation under this clause 45.3, it shall give due notice to the Manufacturer no later than 28 days prior to such novation.
- (c) The Manufacturer shall, within 14 days of a notice from the Purchaser pursuant to clause 45.3(b):
 - (i) enter into a deed of novation in the form or substantially in the form of the deed of novation in part B (Deed of Novation) of schedule 21 (Pro Forma Certificates) with the Purchaser and the relevant Permitted Party; and
 - (ii) enter into any other documents reasonably requested by the Purchaser in relation to such novation.

46. **CHANGE OF CONTROL OF THE PURCHASER**

46.1 **Restriction on Change of Control**

- (a) For the purposes of this clause 46.1, a **"Change of Control of the Purchaser"** means the Purchaser (which, for the purposes of this clause 46.1 includes reference to any other person in whom all or any of the rights and obligations in the Project Documents expressed to be rights and obligations of the Purchaser are vested for the time being) ceasing to be owned and controlled directly or indirectly by or on behalf of one or more of the following:
 - (i) a Minister of the Crown; or
 - (ii) the Mayor or the Greater London Authority or any statutory successor thereto; or
 - (iii) TfL or any statutory successor thereto; or
 - (iv) any public or statutory corporation or limited liability company which is owned and controlled directly or indirectly by any of the persons referred to in clause 46.1(a)(i) or 46.1(a)(ii).
- (b) For the purposes of this clause 46.1, the expression **"owned and controlled"** shall mean possessing:
 - (i) in relation to a body corporate having a share capital, 90 per cent or more of the issued equity share capital of that body having voting power exercisable at general meetings of that body; and

- (ii) in relation to any other body (whether or not corporate), the power to appoint or remove all or substantially all of the members of the Board of that body and the term **"Board"** shall mean the persons who have the management and control of the relevant entity and similar powers and responsibilities to those of directors of a body corporate.
- (c) For the purposes of this clause 46.1, a **"statutory successor"** means, in relation to a person, the person in whom the statutory functions of such first mentioned person relating to the development, operation and funding of road and rail transport in Greater London are vested from time to time.
- (d) For the purposes of this clause 46.1, the **"Relevant Date"** means the date on which a Change of Control of the Purchaser takes place.
- (e) The Purchaser shall give to the Manufacturer at least 90 days' notice prior to the date on which the Purchaser reasonably believes the Relevant Date is likely to occur.
- (f) If the Purchaser gives notice to the Manufacturer under clause 46.1(e), then:
 - (i) the Purchaser may propose alternative arrangements to the Manufacturer; and
 - (ii) the Manufacturer shall consider on a reasonable basis such proposed alternative arrangements,

such that this Agreement may be continued on its then existing terms without the Manufacturer seeking to exercise its right to terminate this Agreement in accordance with clause 32 (Purchaser Default).
- (g) If the Manufacturer and Purchaser are not able to agree as to alternative arrangements set out in clause 46.1(f), and the Manufacturer demonstrates to the reasonable satisfaction of the Purchaser that the Change of Control of the Purchaser has resulted in a material adverse effect on the Manufacturer, then a Purchaser Event of Default shall be deemed to have occurred as of the Relevant Date in accordance with clause 32 (Purchaser Default) otherwise, this Agreement will continue on its existing terms.
- (h) The Parties acknowledge that the provisions of this clause 46.1 are intended to ensure that the Manufacturer is placed in a no less favourable and a no more favourable position, as a result of a Change of Control of the Purchaser, than if the Relevant Date had not occurred, and the Manufacturer and the Purchaser undertake to exercise their respective rights under this clause 46.1 in a reasonable manner so as to give effect to the intention of the Parties as set out in this clause 46.1(h).

47. **CHANGE OF CONTROL OF THE MANUFACTURER**

47.1 **Restriction on Change of Control**

- (a) Subject to clauses 47.1(b), 47.1(c) and 47.1(d) the Manufacturer shall procure that at any time prior to Fleet Acceptance, no Change of Control occurs in respect of:
 - (i) the Manufacturer; and/or
 - (ii) any person who has a direct or indirect shareholding or interest in the Manufacturer, including any member of the Manufacturer Group who has a direct or indirect shareholding or interest in the Manufacturer,

without the prior consent to such Change of Control being given by the Purchaser in writing.

- (b) Subject to clause 47.1(c) the provisions of clause 47.1(a)(ii) shall not apply to any Change of Control in a person whose direct or indirect shareholding or interest in the Manufacturer solely arises from holding equity securities or securities convertible into equity securities in a person ("**Listed Person**") who has a direct or indirect shareholding or interest in the Manufacturer and those equity securities or securities convertible into equity securities are listed on a Recognised Investment Exchange.
- (c) Clause 47.1(b) shall only apply for so long as the equity securities or securities convertible into equity securities in the Listed Person are quoted on a Recognised Investment Exchange, and the sale or disposal of equity securities and/or securities convertible into equity securities as a result of which any third party acquiring title to such equity securities and/or securities convertible into equity securities becomes capable of and/or proposes to remove the equity securities of the Listed Person from being quoted on a Recognised Investment Exchange shall constitute a Change of Control and the provisions of this clause 47 shall apply.
- (d) The provisions of clause 47.1 shall not apply to any Change of Control to the Manufacturer and/or a person described in clause 47.1(a)(ii) if following the Change of Control the Manufacturer or the person described in clause 47.1(a)(ii) (as the case may be) continues to be part of the Manufacturer Group.

47.2 **Procedure for Approving Change of Control**

- (a) In the event that a Change of Control is proposed in respect of the Manufacturer and/or any person described in clause 47.1(a)(ii) the Manufacturer shall (unless prevented from doing so by any law or securities regulation applicable to the Manufacturer or any member of the Manufacturer's Group) give the Purchaser not less than 60 days written notice of the proposed Change of Control together with all such information about the proposed Change of Control as may be reasonable for the Purchaser to determine whether it ought to consent to such Change of Control.
- (b) If the Purchaser does not consent to the proposed Change of Control the Manufacturer shall withdraw the proposed Change of Control and shall procure that such Change of Control is not implemented by any person.
- (c) Where the Manufacturer is not permitted by law or securities regulation to give the Purchaser at least 60 days prior notice of a proposed Change of Control, the Manufacturer shall give the Purchaser written notice of the Change of Control as soon as it is permitted to do so in accordance with such law or securities regulation.

47.3 **Grounds of Objection**

Without limitation to the Purchaser's right to withhold its consent to a Change of Control, the Manufacturer acknowledges and agrees that, it shall be reasonable for the Purchaser to withhold its consent to a proposed Change of Control where:

- (a) the transfer of equity securities and/or securities convertible into equity securities does not comply with the requirements of this clause 47;
- (b) the proposed new holder of equity securities and/or securities convertible into equity securities is an Undesirable Transferee;
- (c) the Change of Control would result in a breach of the terms of any Relevant Approval;

- (d) the Purchaser reasonably considers that as a result of the proposed Change of Control the Manufacturer would:
 - (i) be unable to perform, or would be materially prejudiced in its ability to perform, its obligations under this Agreement;
 - (ii) cease to be able to satisfy the relevant Competent Authority as to its ability to continue to satisfy the requirements of the ROGS;
 - (iii) cease to have the appropriate management skills, resources, technical competence and financial standing (or the technical and financial resources available) to enable it to perform its obligations under this Agreement;
 - (iv) cease to have the requisite capacity, power, and authority (including any necessary authorisations and consents) to perform its obligations under this Agreement; and/or
 - (v) cease to be able to provide the requisite stability of service delivery to enable it to perform its obligations under this Agreement.

47.4 **Unapproved Change of Control**

If a Change of Control occurs without the written approval of the Purchaser being given under this clause 47, a Manufacturer Event of Default shall be deemed to have occurred in accordance with clause 31.1(e) of this Agreement.

48. **NOTICES**

48.1 **Requirement for notice in writing**

Any notice, consent, approval, Approval, certificate or determination to be given or issued by any person under this Agreement shall be deemed a "**notice**" and shall be in writing unless otherwise specified and the words "**notify**", "**consent**", "**approve**", "**certify**" and "**determined**" shall be construed accordingly.

48.2 The Parties shall comply with the requirements of schedule 5 (Contract Management) in respect of the form of communications to be served under this Agreement.

48.3 **Service of notices**

Subject to clause 48.4, any notice made under or in connection with the matters contemplated by this Agreement shall be deemed duly given if delivered personally or sent by email or by prepaid first-class post or by airmail (if posted to or from a place outside the United Kingdom) in accordance with the requirements of this clause 48.

48.4 The service of any certificate, Change Confirmation Notice in accordance with schedule 12 (Change Procedure) or notice of termination pursuant to this Agreement shall be effected by any means specified in clause 48.3 (including as a scan of the original signed document attached to an email) except in the body of an email.

48.5 The relevant details of each Party at the date of this Agreement are:

Purchaser

Address: Docklands Light Railway Limited
55 Broadway
London
United Kingdom
SW1H 0BD

Email: [REDACTED]

Attention: Company Secretary

Manufacturer

Address: 4M Building
Malaga Avenue
Manchester Airport
M90 3RR

Tel.: [REDACTED]

Email: [REDACTED]

Attention: Project Director: [REDACTED]

48.6 Time of service

A notice shall be deemed to have been received:

- (a) if delivered by hand, at the time when the notice is left at the address of the Party to be served;
- (b) if sent by first-class post, on the first Working Day following the day of posting or, if the day of posting was not a Working Day, the second Working Day;
- (c) if sent by airmail, five (5) Working Days after the day of posting; and
- (d) if sent by email, upon receipt by the sender of a "delivered" confirmation (provided that the sender shall not be required to produce a "read" confirmation),

provided that if, in accordance with the above provision, any such notice would otherwise be deemed to be given or made after 5.00 p.m. such notice shall be deemed to be given or made at 9.00 a.m. on the next Working Day. For the purposes of this clause 48.6, all times are to be read as local time in the place of deemed receipt.

48.7 Change of details

A Party may notify the other Parties to this Agreement of a change to its name, relevant addressee, postal address or email address to update the information in clause 48.5 provided that such notification shall only be effective:

- (a) on the date specified in the notification as the date on which the change is to take place; or
- (b) if no date is specified or the date specified is less than five (5) Working Days after the date on which notice is given, the date falling five (5) Working Days after notice of any such change has been given.

49. ENTIRE AGREEMENT

This Agreement together with the other Project Documents constitute the entire agreement between the Parties hereto in connection with the subject matter of this Agreement. No party has relied upon any representation save for any representation expressly set out in the Project Documents.

50. **PRIORITY OF DOCUMENTS**

Without prejudice to clause 7 (Manufacturer's General Obligations) and clauses 8.1, 8.2 and 8.6, in the case of any inconsistency or discrepancy between the documents forming part of this Agreement, the body of this Agreement shall take precedence over the schedules.

51. **NO PARTNERSHIP OR AGENCY**

Nothing in this Agreement and no action taken by the Parties pursuant to this Agreement shall constitute, or be deemed to constitute, a partnership, unincorporated association or other co-operative agency. The Manufacturer shall not be or be deemed to be the agent of the Purchaser and the Manufacturer shall not hold itself out as having authority or power to bind the Purchaser in any way.

52. **STATUTORY NOTICES**

52.1 If any statutory notice relating to the subject matter of this Agreement or naming the Purchaser or a member of the Tfl Group as a party is served on the Manufacturer or any of its Subcontractors, the Manufacturer shall immediately (or in the case of a statutory notice served on a Subcontractor, immediately such statutory notice comes into the Manufacturer's possession provided that the Manufacturer imposes a requirement in its Subcontracts or supply contracts that the Subcontractors forward any such statutory notices to the Manufacturer) inform the Purchaser and provide the Purchaser with a copy of such statutory notice.

52.2 Where the Manufacturer receives any "letters of claim", writs and/or summons naming the Purchaser or a member of the Tfl Group as a party or which may affect the Manufacturer's ability to perform this Agreement, it shall provide the same or a copy immediately to the Purchaser.

52.3 Where the Manufacturer receives any letters, faxes, emails or other communication from any person holding the Purchaser, any member of the Tfl Group and/or any of their respective employees, agents or contractors responsible for any incident, the Manufacturer shall consult immediately with the Purchaser and obtain the Purchaser's approval prior to giving any response to such letters, faxes or other communication.

53. **SOLE REMEDY AND DISCLAIMER**

53.1 **Rights of the Manufacturer**

Without prejudice to any entitlement of the Manufacturer:

- (a) to specific performance of any obligation under this Agreement;
- (b) to injunctive relief; or
- (c) to seek redress from the Purchaser for any liability relating to death or personal injury caused by the Purchaser,

the Manufacturer's sole remedy in relation to matters for which an express right or remedy is stated in this Agreement shall be that right or remedy and the Manufacturer shall have no additional right or remedy arising by common law, in equity, by statute or otherwise.

53.2 **Disclaimer**

Without prejudice to clause 53.1 and except in the case of fraud, wilful default or gross negligence on the part of the Purchaser or any of its officers, employees and agents, the

Purchaser shall not be liable to the Manufacturer (whether in contract, tort or otherwise howsoever caused) in respect of any inaccuracy, error, omission, unfitness for purpose, defect or inadequacy of any kind whatsoever in the Disclosed Data. For the purpose of this Agreement, "**Disclosed Data**" means the materials, documents and data made available by the Purchaser or on behalf of the Purchaser to the Manufacturer prior to the date hereof in relation to the obligations undertaken by the Manufacturer under this Agreement. The Disclosed Data includes, without limitation, all such materials, documents and data which were provided to the Manufacturer, the Subcontractors or their respective officers, employees, agents, contractors and advisers in connection with the instruction to bidders issued in connection with the Project.

53.3 No liability for review and approval by the Purchaser

The Manufacturer acknowledges that it shall rely entirely on its own skill and judgment in the performance of its duties and obligations under this Agreement. Accordingly:

- (a) the duties, obligations and liabilities of the Manufacturer shall not be released, diminished or in any other way affected by any instruction, direction, admission, consent, approval, confirmation, comment, sanction, acknowledgment or advice made or given by or on behalf of the Purchaser or by any independent entity into any relevant matter which may be made or carried out by or on behalf of the Purchaser nor by any act or omission of any person carrying out such enquiry, whether or not such act or omission might give rise to an independent liability of such person to the Purchaser; and
- (b) the Manufacturer shall not be entitled to make any claim against the Purchaser or to seek any relief or remedy of any nature by reason of any such action by or on behalf of the Purchaser.

54. FURTHER ASSURANCE

Each Party agrees that it shall now or at any time during the subsistence of this Agreement, do or procure the doing of all such acts and/or execute or procure the execution of all such documents in a form satisfactory to the other Parties, as the other Parties may reasonably require for giving full effect to and obtaining the full benefit of the rights, powers and remedies conferred upon such other Party or Parties by this Agreement.

55. SET OFF

- 55.1 The Manufacturer shall not be entitled to retain or set off from any amount due to the Purchaser by it, but the Purchaser may retain or set off any amount owed to it by the Manufacturer under this Agreement or the Service Provider under the FSA which has fallen due and payable against any amount due to the Manufacturer under this Agreement.
- 55.2 If the payment or deduction of any amount referred to in this Agreement is disputed then any undisputed element of that amount shall be paid and the disputed element shall be dealt with in accordance with schedule 19 (Dispute Resolution Procedure).
- 55.3 Where the Purchaser is entitled to net off or set off any amount due to the Manufacturer under this Agreement in respect of supplies made by the Manufacturer under this Agreement, the Manufacturer shall ensure that the full value of the supplies is recognised for the purpose of accounting for any VAT due (i.e. the value before any related payments are offset under this clause 55).

56. NO WAIVER

- 56.1 No term or provision of this Agreement shall be considered as waived by any Party to this Agreement unless a waiver is given in writing by such Party.

56.2 No waiver under clause 56.1 shall be a waiver of a past or future default or breach, nor shall it amend, delete or add to the terms, conditions or provisions of this Agreement unless (and then only to the extent) expressly stated in that waiver.

56.3 No variation to this Agreement shall be effective unless recorded in a written instrument in accordance with schedule 12 (Change Procedure).

57. **ILLEGALITY AND SEVERABILITY**

If at any time any provision of this Agreement (or part thereof) is or becomes illegal or invalid or unenforceable in any respect under the law of any relevant jurisdiction, such illegality, invalidity or unenforceability shall not affect or impair the legality, validity or enforceability in that jurisdiction of any other part of that provision or any other provision of this Agreement or, in any other jurisdiction, of that provision or part thereof or any other provision of this Agreement.

58. **COSTS**

Each Party shall be responsible for their own costs (including legal costs) in relation to the negotiation and execution of this Agreement.

59. **LANGUAGE**

The language of this Agreement is the English language.

60. **EXCHANGE RATE RISK**

[REDACTED]

61. **THIRD PARTY RIGHTS**

61.1 A person who is not a Party or an Indemnified Party has no right under the Contracts (Rights of Third Parties) Act 1999 to enforce a right expressly or impliedly conferred by this Agreement. This does not affect any right or remedy of a third party which exists or is available apart from under the Contracts (Rights of Third Parties) Act 1999.

61.2 Any amendment, variation or termination of this Agreement may be effected by the Parties to this Agreement in accordance with its terms and without the consent of any Indemnified Party (other than the Purchaser), notwithstanding the rights of that Indemnified Party under the Contracts (Rights of Third Parties) Act 1999.

62. **COUNTERPARTS**

This Agreement may be executed in any number of counterparts and by the several Parties to it on separate counterparts, each of which when so executed and delivered shall be an original, but all the counterparts shall together constitute one and the same instrument.

63. **GOVERNING LAW AND JURISDICTION**

This Agreement and any non-contractual relations arising out of or in connection with it shall be governed by and construed in accordance with English law and, subject to the provisions of clause 41 (Dispute Resolution), shall be subject to the exclusive jurisdiction of the English Courts.

IN WITNESS whereof this document has been executed and delivered as a deed on the date first above written.

Executed as a deed by)
CONSTRUCCIONES Y AUXILIAR DE)
FERROCARRILES S.A. acting by)

under a power of attorney:

Authorised signatory

Executed as a deed by affixing the)
common seal of)
DOCKLANDS LIGHT RAILWAY LIMITED)
in the presence of:)

Authorised signatory

Name of authorised signatory

SCHEDULE 1

Train Technical Specification

SCHEDULE 2

Manufacturer Train Proposal

The Manufacturer Train Proposal forms part of this Agreement and is contained on a USB flash drive initialled by the Parties as at the date of this Agreement.

SCHEDULE 3

Project Programme

Part A - Key Programme Dates






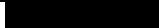


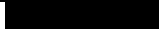
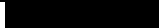
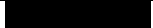
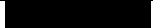
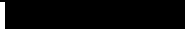

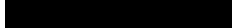
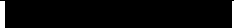












Part B - Project Programme

Part A - Key Programme Dates






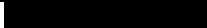

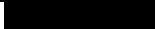
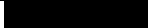
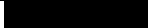
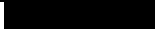

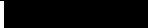


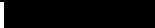

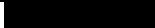
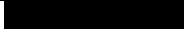
Column A	Column B
Milestone summary	Date
Purchaser supplied dates	
Contract award	
Commencement Date	
Initial Purchaser Depot Works complete and access to Depot available to Manufacturer	
First two trains to be delivered for Network Testing	
Final Purchaser Depot Works complete	
Design	
Design submission programme submitted to the Purchaser for Acceptance	
Last Preliminary Design Phase submission submitted to the Purchaser for Acceptance	
Last Detailed Design Phase submission submitted to the Purchaser for Acceptance	
Permitted Design Change freeze dates	
Mock-up delivered to the Purchaser	
Key Subcontracts	
Key Subcontracts signed with Key Subcontractors	
• Thales Contract	
• Bodysell	
• Shoegear	
• Traction system	
• Bogie frame	
• Brakes and air supply	
• Electrical systems	

Column A	Column B
• Pipe and wire and general underframe equipment	
• Heating, ventilation and air-cooling equipment	
• Doors	
• Saloon Interior	
• Train Data Recorder	
• Electronic and safety systems	
• Mechanical systems	
• Audio/visual communication	
• Emergency equipment	
• CCTV System	
• Gangways	
• Batteries	
• Train Control and Management System	
• Simulator	
• Mock up	
• Portable Saloon Door Training Rig	
• Automatic Train Scanning System	
• Manufacturer Depot Equipment	
All orders placed for Capital Spares, Warranty Spares, Purchaser Fault Spares and Maintenance Spares Accepted	
All orders placed for Special Tools	
All orders placed for Manufacturer Depot Equipment	
All Capital Spares, Warranty Spares, Purchaser Fault Spares, Maintenance Spares Accepted	
Special Tools Accepted	
All Manufacturer Depot Equipment delivered and Accepted by the Purchaser	
Portable Saloon Door Training Rig Accepted	

Column A	Column B
Automatic Train Scanning System Accepted	
First bodysell on the production line (underframe structure/side structures/roof structure/end structures connected together)	
Testing	
Testing Programme, Testing Strategy and Schedule of Tests submitted to the Purchaser for Approval	
Train FAT Tests start	
First Train FAT Tests complete	
43rd Train FAT Tests complete	
Relevant Approvals for Network Testing obtained by the Manufacturer	
Network Testing start	
First two (2) Trains Network Testing complete	
43rd Train Network Testing complete	
Pre Provisional Acceptance	
1st Train offered for Pre-Provisional Acceptance	
2nd Train	
3rd Train	
4th Train	
5th Train	
6th Train	
7th Train	
8th Train	
9th Train	
10th Train	
11th Train	
12th Train	
13th Train	
14th Train	

Column A	Column B
15th Train	
16th Train	
17th Train	
18th Train	
19th Train	
20th Train	
21st Train	
22nd Train	
23rd Train	
24th Train	
25th Train	
26th Train	
27th Train	
28th Train	
29th Train	
30th Train	
31st Train	
32nd Train	
33rd Train	
34th Train	
35th Train	
36th Train	
37th Train	
38th Train	
39th Train	
40th Train	
41st Train	
42nd Train	

Column A	Column B
43rd Train offered for Pre-Provisional Acceptance	
Contractual Provisional Acceptance Date	
1st Train offered for Provisional Acceptance	
2nd Train	
3rd Train	
4th Train	
5th Train	
6th Train	
7th Train	
8th Train	
9th Train	
10th Train	
11th Train	
12th Train	
13th Train	
14th Train	
15th Train	
16th Train	
17th Train	
18th Train	
19th Train	
20th Train	
21st Train	
22nd Train	
23rd Train	
24th Train	
25th Train	
26th Train	

Column A	Column B
27th Train	
28th Train	
29th Train	
30th Train	
31st Train	
32nd Train	
33rd Train	
34th Train	
35th Train	
36th Train	
37th Train	
38th Train	
39th Train	
40th Train	
41st Train	
42nd Train	
43rd Train offered for Provisional Acceptance	
Contractual Final Acceptance Dates	
1st Train offered for Final Acceptance	
2nd Train	
3rd Train	
4th Train	
5th Train	
6th Train	
7th Train	
8th Train	
9th Train	
10th Train	

Column A	Column B
11th Train	
12th Train	
13th Train	
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15th Train	
16th Train	
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19th Train	
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29th Train	
30th Train	
31st Train	
32nd Train	
33rd Train	
34th Train	
35th Train	
36th Train	
37th Train	
38th Train	

Column A	Column B
39th Train	
40th Train	
41st Train	
42nd Train	
43rd Train offered for Final Acceptance	
Contractual Fleet Acceptance Date	
Simulator, Training & Manuals	
Simulator Preliminary Design Phase submissions complete and submitted to the Purchaser for Approval	
Simulator Detailed Design Phase submissions complete and submitted to the Purchaser for Approval	
Simulator testing start	
Simulator testing complete	
Simulator delivered to the Purchaser	
Simulator Acceptance Date	
Training Materials delivered to the Purchaser	
Final version of Manuals delivered to the Purchaser	
Maintenance Plan submitted to the Purchaser for Approval	
Manufacturer commences training of Purchaser's maintenance staff	

Part B - Project Programme

SCHEDULE 4

Training

1. GENERAL REQUIREMENTS FOR TRAINING

- 1.1 The Manufacturer shall provide, or procure the provision of, training in accordance with this schedule 4 to the breadth and depth required to enable the Purchaser's and the Franchisee's nominated staff to acquire all relevant knowledge, skills and competence required in order to operate and maintain the Trains and Equipment in accordance with all Applicable Laws and Standards. Following provision of such training, the Manufacturer shall assess and certify the competency of all of the Purchaser's and Franchisee's nominated staff for such purpose. The Purchaser's and the Franchisee's nominated staff may include, without limitation, operators, maintainers, engineering personnel, maintenance control unit personnel and ERU personnel, as the Purchaser and the Franchisee respectively require.
- 1.2 The Manufacturer shall complete predictive task analysis and develop, deliver and evaluate separate training courses in relation to the following activities associated with the Purchased Items:
 - (a) test-train operation;
 - (b) operation (in normal, abnormal, degraded and emergency conditions);
 - (c) maintenance (including vehicle awareness, planned preventative maintenance, corrective maintenance, diagnostic and monitoring activities, fault and failure diagnosis and rectification and overhaul);
 - (d) specialist engineer investigations (including principal specialist engineers and depot specialist engineers); and
 - (e) ERU recovery.
- 1.3 The format of all documentation (provided to support training) shall be proposed by the Manufacturer for Approval by the Purchaser not less than six (6) months before the intended date for Pre-Provisional Acceptance of the first Train as set out in the Key Programme Dates.
- 1.4 The introduction of technical enhancements on the Trains and Equipment and/or any other changes introduced, such as those arising from the rectification of Manufacturer defects, shall be analysed by the Manufacturer, in consultation with the Purchaser, to determine whether further training is required. Any such training identified shall fall within the provisions of this Agreement and shall be delivered by the Manufacturer at no additional cost to the Purchaser.
- 1.5 The Manufacturer shall be responsible for the modification of the training approach, materials and resources in consultation with the Purchaser, in light of training pass/fail rates, in-service operations and maintenance experience.
- 1.6 The Manufacturer shall provide sufficient training and documentation to ensure that:
 - (a) those personnel nominated by the Purchaser to attend training acquire all relevant knowledge, skill and competence in relation to the operation of the Trains, Equipment, asset(s) and system(s) being supplied, including all facets relating to the function, malfunction (including the range and ramification of potential fault and failure conditions), operation and use of the Trains, Equipment, asset(s) and system(s) that are relevant to end-user operators;

- (b) those personnel nominated by the Purchaser to attend training acquire all relevant knowledge, skill and competence in relation to the maintenance of the Trains, Equipment, asset(s) and system(s) being supplied, including all maintenance activities required over the life of the Trains, Equipment, asset(s) and system(s) that are relevant to end-user maintainers. Such activities shall include inspection, preventative maintenance, casualty maintenance, diagnostic and monitoring maintenance activities, fault diagnosis, fault rectification and overhaul;
 - (c) those principal specialist engineers nominated by the Purchaser to attend training acquire a detailed understanding of the Train and relevant Equipment systems' design parameters and underpinning rationale, sufficient to enable them to carry out incident investigations and explain why the parameters provided have been chosen and the ramifications of any changes to such parameters;
 - (d) depot specialist engineers nominated by the Purchaser to attend training acquire a detailed understanding of the Train and relevant Equipment systems' design parameters and underpinning rationale, sufficient to enable them to undertake incident investigation on the Train and relevant Equipment safety-related systems; and
 - (e) ERU personnel nominated by the Purchaser to attend training acquire all relevant knowledge and skill relevant for the recovery of the Trains, Equipment, asset(s) and systems(s) being supplied in the event of degraded or emergency operating conditions (such as in the event of a derailment or collision) including provision of, and training on, an emergency breakdown manual.
- 1.7 Subject to paragraph 1.8 below, in relation to each Training Course identified for delivery by the Manufacturer, the Manufacturer shall provide training for any number of nominees as the Purchaser may require.
- 1.8 The number of times each individual Training Course is delivered shall be dependent upon:
- (a) the maximum number of attendees determined by the Training Needs Analysis; and
 - (b) the actual number of personnel that the Purchaser elects to attend,
- provided always that in the event that the Purchaser requires the Manufacturer to provide such training to more than 150 individuals, the training of any such personnel in excess of 150 individuals shall be at the Purchaser's cost.
- 1.9 For the avoidance of doubt:
- (a) and by way of illustration, if the Training Needs Analysis determines that a maximum of four (4) trainees can be accommodated on a particular Training Course, that Training Course will be required to be delivered: (i) once if the Purchaser elects to train four (4) nominees; (ii) twice if the Purchaser elects to train eight (8) nominees; (iii) three (3) times if the Purchaser elects to train twelve (12) nominees; and so on, such that the relevant Training Course is delivered as many times as may be necessary to ensure that all personnel that the Purchaser has elected to attend have attended such Training Course once;
 - (b) different Purchaser nominees are likely to attend different training modules/courses within a defined subject area, such as fault-finding. For example, while specialist brake maintainers/engineers are likely to attend the brakes fault-finding module/course, other nominees, such as specialist doors maintainers/engineers, are likely to attend the doors fault-finding module/course; and

- (c) if the Purchaser requires additional training, the provisions of paragraph 13 of this schedule 4 shall apply.
- 1.10 The Manufacturer shall, as part of the Training Programme, and for the Purchaser's subsequent use for training, provide all tools and equipment associated with the Trains, Equipment, asset(s) and system(s) for which training is being provided. Title and risk in such tools and equipment shall pass to the Purchaser or, at the Purchaser's discretion, the Owner, from the date of provision by the Manufacturer, and the Manufacturer warrants that such title shall be with full title guarantee and free and clear of all Security Interests.
- 1.11 Training shall be provided in the set-up, use and maintenance of all:
 - (a) tools provided to support training;
 - (b) e-learning; and
 - (c) equipment, including diagnostic equipment and off-Train equipment testing and analysis tools.
- 1.12 The training provided by the Manufacturer shall cover the operation and maintenance of the Trains and Equipment under normal, abnormal, degraded and emergency conditions and shall address all normal modes of operation, the symptoms of failure modes, corrective actions to be taken, safety precautions, the level of intervention that is permissible by the Purchaser and the events that would necessitate the Manufacturer's involvement. Such training shall include, but shall not be limited to:
 - (a) the location, purpose and function of all systems and components relevant for the following activities associated with the supplied assets(s)/system(s):
 - (i) operation (including operation of a Train during testing, and in normal, abnormal, degraded and emergency conditions);
 - (ii) maintenance;
 - (iii) specialist engineer investigations; and
 - (iv) ERU recovery;
 - (b) the operation and maintenance (including all relevant instructions and processes for operation and maintenance, fault diagnosis, rectification and testing) of the supplied asset(s)/system(s);
 - (c) system interfaces and associated failure modes and effects;
 - (d) calibration, adjustment and use of Special Tools;
 - (e) the asset(s)/system(s) design, performance limits and capability (to ensure that the Purchaser has the capability to undertake specialist engineer investigations); and
 - (f) such other content as the Manufacturer shall propose and the Purchaser agree.
- 1.13 A mix of both traditional and technology-based training approaches shall be provided. The traditional training approach shall include both training-room-based and hands-on practical exposure to the operation and maintenance of the Trains and Equipment. The technology-based training approach shall include the Simulator (for operational training) and e-learning (for maintenance training).

- 1.14 The Manufacturer shall provide to the Purchaser, and to the Franchisee as required, all necessary information and support required (including access to technical experts) to develop training (including fault-finding training) in relation to the integrated railway system.
- 1.15 All training shall be provided in accordance with recognised industry practice, including as outlined in the Rail Safety and Standards Board document RS/100, Issue 1, March 2013 – "Good Practice Guide on Competence Development".
- 1.16 At all times prior to the conclusion of the Train Warranty Period, the Manufacturer shall ensure that all Training Modules are updated whenever necessary to reflect any modifications to the Train and Equipment Design or the Train operating and maintenance procedures.
- 1.17 Incremental training updates shall be provided by the Manufacturer whenever there are modifications to the Train and Equipment Design affecting any aspect of the operation or maintenance of the asset(s) or system(s) being supplied.
- 1.18 Instruction manuals provided for diagnostic ancillary equipment (such as interface boxes, laptops and required leads) and data analysis software shall be in such form as to permit users to teach themselves the full functionality of the equipment and software.
- 1.19 Without prejudice to the remaining provisions of this Agreement, technical documentation (such as operator and maintainer manuals) shall be developed by the Manufacturer and Approved by the Purchaser in sufficient time to facilitate the timely development and delivery of all training provided or procured by the Manufacturer.
- 1.20 All training shall be accompanied by a full suite of documentation Approved by the Purchaser including:
 - (a) without prejudice to clause 6.5, operator and maintainer manuals (including detailed instructions for the operation and maintenance of the Trains and Equipment, including training tools and equipment);
 - (b) the documentation necessary to provide specialist engineers with all necessary information to enable them to carry out incident investigations on the asset(s) and system(s) being supplied;
 - (c) an emergency breakdown manual; and
 - (d) Training Materials including Training Plans, training specifications, detailed trainers' notes, presentation materials (e.g. slides, models etc.), formative and summative assessments and trainee material (including, for example, handbooks).
- 1.21 The Manufacturer shall be responsible for the provision of an adequate number of appropriately skilled trainers to complete all aspects of the analysis, design, development delivery and evaluation of training (including, when required by the Purchaser, competency assessments) to meet the provisions of the Training Programme.
- 1.22 Training delivery venues shall be within the confines of the Purchaser's infrastructure within the geographical area of the Network, unless otherwise agreed between the Parties. Where any training can only reasonably be provided by the Manufacturer at a location outside London, the Purchaser shall meet the subsistence costs of the staff to be trained.
- 1.23 The Manufacturer shall provide information, documentation and support to the Purchaser in relation to the development of training for system interfaces, as reasonably requested by the Purchaser.

- 1.24 In order to facilitate the development of technology based training (such as simulation or computer based training) by the Purchaser, the Manufacturer shall provide all required technical information, including documentation such as illustrations, schematics, display screen captures, training manuals and design information relating to the design parameters, operation and maintenance of the Trains and Equipment.

2. **TRAINING STRATEGY**

- 2.1 The Manufacturer shall, within six (6) months of the Commencement Date, submit to the Purchaser for Approval a training strategy ("**Training Strategy**"), in hard copy and electronic copy form.
- 2.2 The Training Strategy shall be reviewed by the Manufacturer in conjunction with the Purchaser and shall be maintained and updated by the Manufacturer as and when necessary, or as requested by the Purchaser, until Acceptance of the last Train in the Fleet and re-submitted to the Purchaser for Approval as required.
- 2.3 The Training Strategy submitted by the Manufacturer shall include details of the approach recommended by the Manufacturer for the most appropriate utilisation of technology (including computer-based training, simulation, emulation and augmented reality applications) to support training (for operators, maintainers, engineering personnel, maintenance control unit personnel and ERU personnel).

3. **TRAINING PROGRAMME**

- 3.1 The Manufacturer shall, within six (6) months of the Commencement Date, submit to the Purchaser for Approval a training programme in hard copy and electronic copy form and once such training programme has been Approved by the Purchaser, it shall be the "**Training Programme**" for the purposes of this Agreement.
- 3.2 The Training Programme shall set out the training that shall be provided by the Manufacturer to enable the Purchaser and the Franchisee to train its employees (or those of the Purchaser's nominees) to operate and maintain the Trains and Equipment in accordance with all Applicable Laws and Standards, Relevant Approvals and the Purchaser's Safety Certificate and Certificate of Technical Conformance.
- 3.3 The Training Programme shall accord with the timescales and duration required by this Agreement.
- 3.4 The Training Programme shall detail all training timescales associated with the:
- (a) production of all Training Materials, in accordance with paragraph 7 of this schedule 4;
 - (b) delivery of all training courses and associated assessments to be provided by the Manufacturer; and
 - (c) delivery of all deliverables under this schedule 4.
- 3.5 At a minimum, in the Training Programme, the Manufacturer shall make programme provision in relation to training as follows:
- (a) Training Strategy: preparation; submission to Purchaser; Purchaser review; update and re-submission to Purchaser (if required); Purchaser Approval; regular review (at least annually).
 - (b) Training Programme: preparation; submission to Purchaser; Purchaser review; update and re-submission to Purchaser (if required); Purchaser Approval; regular review (at least annually).

(c) For each Training Course:

- (i) completion and Manufacturer validation/assurance of Training Needs Analyses (including training task, gap and options analysis);
- (ii) production of a training specification, including: preparation (incorporating Manufacturer validation/assurance); submission to Purchaser; Purchaser review; update and re-submission to Purchaser (if required to address Purchaser comments); and Purchaser Approval;
- (iii) production of a training plan, including: preparation (incorporating Manufacturer validation/assurance); submission to Purchaser; Purchaser review; update and re-submission to Purchaser (if required to address Purchaser comments); and Purchaser Approval;
- (iv) production of technical support documentation, including: operation and maintenance manuals etc.; preparation (incorporating Manufacturer validation/assurance); submission to Purchaser; Purchaser review; update and re-submission to Purchaser (if required to address Purchaser comments); and Purchaser Approval;
- (v) production of training materials, including: preparation (incorporating Manufacturer validation/assurance); submission to Purchaser; Purchaser review; update (to include provision for joint validation/assurance meetings as required); re-submission to Purchaser; update and re-submission to Purchaser (if required to address Purchaser comments); and Purchaser Approval;
- (vi) provision of all training tools and equipment required for the training course concerned;
- (vii) delivery, evaluation and certification of the relevant training (and licensing, if relevant) including provision for required facilities (including access to the Test Track Facilities) and any required competence development and assessment activities;
- (viii) the lead-times required by the Purchaser's internal training programme for the cascade of the training shall be shown and adequate provision (within the Manufacturer's programme) shall be made to accommodate these; and
- (ix) training acceptance by the Purchaser upon the successful delivery of the Training Course concerned,

in each case as required by this schedule 4.

- 3.6 The Training Programme shall be reviewed in conjunction with the Purchaser and shall be maintained and updated as and when necessary or as requested by the Purchaser until Acceptance of the last Train in the Fleet or, if later, until the provision of the last training, and re-submitted for Approval to the Purchaser as required.

4. TRAINING NEEDS ANALYSIS

- 4.1 Prior to the development of the training specifications referred to in paragraph 5 below, the Manufacturer shall undertake Training Needs Analyses in consultation with the Purchaser.

5. **TRAINING SPECIFICATIONS**

- 5.1 The Manufacturer shall submit a training specification for each Training Course to the Purchaser for Approval prior to the development of the respective Training Materials concerned.

6. **TRAINING DEVELOPMENT**

- 6.1 The Manufacturer shall design and develop the Training Courses, and submit them to the Purchaser for Approval in accordance with schedule 6 (Assurance) of this Agreement.

7. **TRAINING MATERIALS**

- 7.1 Without prejudice to paragraph 1.6 above, for each Training Course, the Manufacturer shall submit to the Purchaser, Manufacturer validated/assured training materials for Approval no later than 14 months prior to the Contractual Acceptance Date of the first Train. Such materials shall include Manufacturer validated/assured:

- (a) operator and maintainer documentation, including manuals;
- (b) output of training analysis;
- (c) training specifications;
- (d) Training Plans;
- (e) presentation materials;
- (f) detailed trainer's notes;
- (g) trainee materials, including handbooks, fault guides, handouts and other such materials;
- (h) tools and equipment; and
- (i) formative and summative assessments including, for the summative assessments, a matrix that cross-references each learning objective with all related assessment questions,

together the ("**Training Materials**").

- 7.2 The Training Materials provided by the Manufacturer shall be of sufficient quality and quantity as are reasonably necessary or desirable to permit the Purchaser's nominated trainers to undertake further training of the Purchaser's employees or those of any nominee.
- 7.3 The Purchaser shall be entitled, without further charge, to duplicate as many copies of the Training Materials and other materials provided as it requires.
- 7.4 The Training Materials shall be reviewed in conjunction with the Purchaser and re-submitted for Approval to the Purchaser as required. The Training Materials shall be maintained and updated by the Manufacturer as and when necessary or when requested by the Purchaser, until Acceptance of the last Train in the Fleet, or if later, until the provision of the last item of training.

8. **E-LEARNING**

- 8.1 The Manufacturer shall develop e-learning material to include an interactive 3-D computer model of the Train that provides contextual links to a description, including the names,

location, purpose and function of the Major Components and Recurrent Defect Extension Components on the Train. Such e-learning material shall be supported by high-definition photographs or graphical representations for each of the Major Components and Recurrent Defect Extension Components concerned.

- 8.2 The specification of all e-learning content (including scope, target audience, learning aim(s), learning objectives and outline training course and module content, including detailed storyboard) shall be submitted to the Purchaser for Approval in advance of development, in accordance with the timescales sent out in this schedule 4.
- 8.3 The e-learning material supplied shall be developed to provide a simulated, sequential, step-by-step approach for the removal and replacement of Parts, Major Components and Recurrent Defect Extension Components. Detailed visual representation, including high-definition video, photographs, audio/narrative, HD-graphics as may be agreed by both Parties, shall be provided by the Manufacturer.
- 8.4 For each Major Component and each Recurrent Defect Extension Component on the Train, the Manufacturer shall provide a 'hot-spot' that provides contextual links to the deliverables to be provided by the Manufacturer under paragraph 8.5 below.
- 8.5 For each Major Component and each Recurrent Defect Extension Component on the Train, the Manufacturer shall provide:
 - (a) Train maintenance instructions/processes for all activities related to that Major Component or Recurrent Defect Extension Component;
 - (b) a description of any special tools or equipment required to maintain that Major Component or Recurrent Defect Extension Component (including its removal, replacement and testing) together with supporting video, photographs and/or HD-graphics demonstrating/illustrating the set-up, fitment and use of any such special tooling/equipment required to maintain that Major Component or Recurrent Defect Extension Component; and
 - (c) video (including audio and textual narrative) demonstrating the removal, replacement and testing of the Major Components and the Recurrent Defect Extension Components together with any Special Tools required for their maintenance (including the Special Tools or equipment required for such Major Component or Recurrent Defect Extension Component removal, replacement and testing).
- 8.6 There shall be no restriction as to the number of instances of the e-learning package that the Purchaser may deploy at any one time to facilitate the training of the Purchaser's staff, and the Manufacturer shall not be entitled to charge an additional sum for such deployments.
- 8.7 All CAD modelling and other such files used to develop the e-learning material shall be provided to the Purchaser for use as part of the e-learning deliverable.

9. **TRAINING PLANS**

- 9.1 For each Training Course, the Manufacturer shall submit to the Purchaser a Training Plan (together with all associated Training Materials).
- 9.2 The Purchaser shall be entitled, without further charge, to duplicate as many copies of the Training Plans and other materials provided as it requires for the purposes of training its employees or those of any nominee.
- 9.3 When developing the Training Plans, the Manufacturer shall:

(a) identify each Training Course where recommended attendance is linked to the prior completion of another Training Course; and

(b) limit the number of such dependencies in so far as is reasonably practicable.

10. TRAINING VALIDATION / APPROVAL

10.1 The Manufacturer shall provide to the Purchaser details of the training validation/approval process within six (6) months of the Commencement Date.

11. TRAINING DELIVERY, COST, EVALUATION AND ACCEPTANCE

11.1 Unless otherwise agreed with the Purchaser at the training specifications stage, all training provided by the Manufacturer shall contain formative and summative (immediate outcome level) assessments. Competence assessments shall be provided by the Manufacturer in relation to each of the following activities on the asset(s)/system(s) being supplied:

(a) test-train operation;

(b) planned preventative maintenance;

(c) corrective maintenance; and

(d) fault and failure diagnosis and rectification maintenance.

In relation to each of the activities detailed above, competence assessments shall be provided by the Manufacturer for each individual nominated by the Purchaser pursuant to paragraph 1.7 of this schedule 4. For the avoidance of doubt, this shall include individual competence assessments of each Purchaser nominee across all four activities. Competence assessments shall be undertaken against applicable standards, such as those associated with a nationally recognised framework (for example, National Vocational Qualifications or their equivalent). The standards against which competence assessments will be carried out shall be agreed with the Purchaser at the training specifications stage. The Manufacturer shall provide to the Purchaser's nominees all required support in relation to the achievement of competence, including task coaching, task shadowing and supervised practice.

11.2 All training shall be subject to Approval by the Purchaser. Once the Purchaser confirms its satisfaction with the:

(a) final version of the Training Materials (Approved by the Purchaser pursuant to the Approval Process); and

(b) delivery of the training concerned (to the Purchaser's nominees), including the delivery of training evaluation and the delivery of the competence assessments referred to in paragraph 11.1 above (as required by the Purchaser),

the training course concerned shall be deemed to have been Approved for the purposes of this Agreement.

11.3 Following Approval of the training by the Purchaser, should any alteration be required to the Training Materials in light of in-service operations and maintenance experience, the Manufacturer shall, under the standard provisions of this Agreement and at no additional cost to the Purchaser, complete any necessary analysis and provide updated training materials for the Approval of the Purchaser. All necessary support shall be provided by the Manufacturer to ensure that the Purchaser's nominees acquire all relevant knowledge and skill associated with the changes concerned.

12. **TRAINING LOG**

12.1 The Manufacturer shall prepare, submit and maintain a training log.

13. **ADDITIONAL TRAINING**

13.1 At the Purchaser's request and cost, the Manufacturer shall provide training (including all associated documentation) in addition to that required to be provided pursuant to the rest of this schedule 4, and such training shall be provided at a rate of [REDACTED] or part thereof. For the avoidance of doubt, the Manufacturer shall not be entitled to charge extra for the production of associated documentation.

14. **OPERATOR TRAINING – TEST TRACK FACILITIES**

14.1 The Manufacturer shall make the Test Track Facilities available for those elements of operator training that are required by the Purchaser to be delivered at such Test Track Facilities.

SCHEDULE 5

Contract Management

1. **CONTRACT MANAGERS**

1.1 The Purchaser shall appoint a person to be its contract manager and authorise that person to act as the Purchaser's representative for all purposes of this Agreement (the "**Purchaser Contract Manager**"). The Purchaser shall notify the Manufacturer in writing of the Purchaser Contract Manager's appointment or, where appropriate, the revocation of any such appointment. The Manufacturer shall only be bound by such an appointment or revocation of any such appointment of the Purchaser Contract Manager where it has been given the relevant written notice by the Purchaser of such appointment or revocation. The Purchaser shall endeavour to give one month's written notice to the Manufacturer (or such other period as the Purchaser may consider appropriate) of any replacement of the Purchaser Contract Manager.

1.2 The Purchaser Contract Manager shall exercise such rights, powers, discretion, functions or options provided for in this Agreement on behalf of the Purchaser and, subject to paragraph 1.1, the Purchaser Contract Manager shall have full authority to act on behalf of the Purchaser for the purposes of this Agreement and the Manufacturer shall in all such matters look to the Purchaser Contract Manager as if such person were the Purchaser.

██████████ The Manufacturer shall appoint a suitably qualified person acceptable to the Purchaser to be its contract manager and authorise that person to act as the Manufacturer's representative for all purposes of this Agreement (the "**Manufacturer Contract Manager**"). The Manufacturer shall notify the Purchaser in writing of the Manufacturer Contract Manager's appointment or, where appropriate, the revocation of any such appointment. The Purchaser shall only be bound by such appointment or revocation of any such appointment of the Manufacturer Contract Manager where it has been given the relevant written notice by the Manufacturer of such appointment or revocation. The Manufacturer shall give one (1) month's written notice to the Purchaser of any replacement of the Manufacturer Contract Manager. As at the date of this Agreement the Manufacturer Contract Manager is ██████████

1.4 The Manufacturer Contract Manager shall exercise such rights, powers, discretion, functions or options provided for in this Agreement on behalf of the Manufacturer and, subject to paragraph 1.3, the Manufacturer Contract Manager shall have full authority to act on behalf of the Manufacturer for the purposes of this Agreement and the Purchaser shall in all such matters look to the Manufacturer Contract Manager as if such person were the Manufacturer.

1.5 Save as provided in paragraph 1.2, any instruction, direction or other act of the Purchaser Contract Manager shall bind the Purchaser and save as provided in paragraph 1.4, any instruction, direction or other act of the Manufacturer Contract Manager shall bind the Manufacturer.

2. **AUTHORISATION**

2.1 Without prejudice to clause 5 (Relationship with the Franchisee and Representatives) of this Agreement, each Contract Manager may from time to time as he sees fit authorise an assistant or agent to exercise any of the powers, rights, discretion, options and/or functions vested in him and such authorised functions carried out by such assistant or agent shall bind the Purchaser or the Manufacturer (as the case may be) ("**Authorisation**"). Each Contract Manager may at any time revoke any such Authorisation ("**Revocation**"). Any such Authorisation or Revocation shall be in writing signed by the relevant Contract Manager and shall state which rights, powers, discretion, options or functions are thereby Authorised or Revoked respectively. Each such

Authorisation or Revocation by a Contract Manager shall take effect upon the other Party being given written notice of such Authorisation or Revocation.

- 2.2 The terms of such written Authorisation or Revocation shall be conclusive and the other Party shall have no claim if it relies on communication from any person other than the Contract Manager in the absence of such written Authorisation or disregarding such written Revocation (as the case may be).
- 2.3 If at any time either Party receives what it considers (acting reasonably) to be conflicting communications from the other Party, clarification should be sought from the relevant Contract Manager whose written determination shall be issued within ten Working Days and shall be conclusive as to the Authorisation.

3. **ORGANISATIONAL ARRANGEMENTS**

- 3.1 The Manufacturer's internal organisational arrangements for the management of the Works (including names, qualifications and relevant experience of Key Posts, reporting lines and organisation charts) shall be as set out in the Management Plan.
- 3.2 The Manufacturer shall ensure that the holders of Key Posts are appropriately qualified, experienced and available as necessary to undertake their duties under this Agreement. In particular, the holders of Key Posts shall have an appropriate mixture of the following attributes to support delivery of the Works:
 - (a) leadership skills;
 - (b) relevant experience (such as working with relevant stakeholders, relevant standards, relevant planning regimes and the wider UK rail market); and
 - (c) proficiency in business and technical English sufficient to undertake their duties.
- 3.3 The Key Posts shall be those roles specified in appendix 1 (Key Posts) to this schedule 5 and any additional roles that the Purchaser may add from time to time. One person may undertake more than one Key Post if approved by the Purchaser.
- 3.4 On and from the date of this Agreement, the identity of the person undertaking each Key Post shall be as set out opposite such Key Post in the table in appendix 1 (Key Posts) to this schedule 5. The Manufacturer shall only make changes to the identity of the Key Posts with the prior written approval of the Purchaser and shall provide curriculum vitae for candidates proposed for Key Posts and all additional relevant information that the Purchaser may reasonably request in order to grant such approval.
- 3.5 The Purchaser shall have the right, acting reasonably, to instruct that the Manufacturer remove and replace with an alternative candidate any person carrying out a Key Post and the Manufacturer shall, as soon as practicable, comply with such instructions.
- 3.6 The Key Posts which shall be based in the Project Office during the respective period of engagement in the Works are indicated with an asterisk(*) in appendix 1 (Key Posts) to this schedule 5. All relevant staff supporting the Key Posts shall also be based in the Project Office.
- 3.7 Where a Key Post is required to be away from the Project Office at the Manufacturer's design or manufacturing facilities for a material length of time in order to carry out its obligations, a suitable substitute (approved by the Purchaser) shall be located in the Project Office during his absence.

4. **SENIOR MANAGERS REVIEW MEETINGS**

- 4.1 Every month from the Commencement Date, the Parties shall hold a meeting at operational contract management level to review the progress of the Works and the Manufacturer's performance of its obligations under this Agreement (a "**Contract Management Meeting**"). Following any Contract Management Meeting, if either Party reasonably considers that it is necessary to escalate any matters arising at that Contract Management Meeting to senior representatives, such Party shall be entitled to call a Senior Managers Review Meeting (which shall be additional to the quarterly meetings referred to in paragraph 4.2 below) on no less than ten (10) Working Days' notice to the other Party.
- 4.2 Every three (3) TfL Periods from the Commencement Date, the Parties shall hold a meeting (the "**Senior Managers Review Meeting**") to review the progress of the Works and the Manufacturer's performance of its obligations under this Agreement. The Purchaser shall be entitled to call a Senior Managers Review Meeting more frequently if required. The Senior Managers Review Meeting shall continue to meet every three (3) TfL Periods until such time as the Purchaser instructs otherwise.
- 4.3 The Parties shall each provide a senior representative to attend the Senior Managers Review Meeting (of a more senior position than the respective Contract Manager), along with each Contract Manager. The senior representative shall be an appropriate director of the Party in each case.
- 4.4 The Parties may each invite other representatives of their organisations, subcontractors and third parties to attend the Senior Managers Review Meeting to the extent reasonably necessary to discuss specific agenda items. The Purchaser may request that specified representatives of the Manufacturer or any of its Subcontractors attend the meeting, and the Manufacturer shall ensure that, provided that the Purchaser has given at least five (5) Working Days' notice of its request, those representatives do attend that meeting.
- 4.5 The Manufacturer shall provide to the Purchaser any agenda items for discussion at the Senior Managers Review Meeting at least five (5) Working Days prior to the meeting, accompanied by a paper summarising the issues to be discussed. The Purchaser shall prepare and distribute an agenda and papers in advance of the meeting including any issues the Purchaser wishes to discuss together with details of the location for such meeting. The agenda at each meeting shall also include a discussion of any current Disputes, but this shall be without prejudice to any ongoing formal dispute proceedings.
- 4.6 The Purchaser shall take minutes at each Senior Managers Review Meeting and circulate copies of the minutes to the Manufacturer for agreement. Once agreed by the Parties, these minutes shall form a full and accurate record of the meeting.

5. **COMMUNICATIONS AND DOCUMENT CONTROL**

5.1 **Communications**

- (a) The Purchaser and Manufacturer shall agree a communications procedure. All communications shall be sent electronically in the format and using the software set out in this Agreement or as may be otherwise specified by the Purchaser from time to time, and shall include the following:
- (i) project name and identifying number;
 - (ii) subject;
 - (iii) unique reference number;
 - (iv) date; and

- (v) name of author (a representative holding delegated powers compatible with the subject matter);
- (b) All communications of a formal nature between the Purchaser and the Manufacturer shall be sent in accordance with paragraph 5.1(a), on the originator's letterhead with the signature of the author. Scanned versions shall be clear and in a searchable PDF format.
- (c) Unless otherwise agreed with the Purchaser, each communication shall cover one subject only, and shall bear an individual sequential number in accordance with a system agreed between the Purchaser and the Manufacturer.
- (d) The Contract Managers shall nominate users for this system in each case and each Contract Manager shall notify the other Contract Manager of any changes necessary to user accounts and shall co-operate to prevent the misuse of these systems.

5.2 Document Control and Management

- (a) Unless instructed otherwise by the Purchaser, the Manufacturer shall submit all written documents (including programmes and drawings) to be provided pursuant to this Agreement to the Purchaser in accordance with clause 48 (Notices) and:
 - (i) in English;
 - (ii) in electronic form;
 - (iii) in industry standard formats which are accessible using standard tablet devices and PCs, and unless agreed in advance by the Purchaser shall be compatible with PDF and common Microsoft Office formats;
 - (iv) in a format capable of being printed by the Purchaser and be legible when printed on sheets no larger than A3 or equivalent ISO standard A-size paper;
 - (v) in good legible quality;
 - (vi) where required by the Purchaser, in an editable form;
 - (vii) where applicable, incorporating definitions, a graphic scale, and/or any other appropriate guide for interpretation; and
 - (viii) under cover of a document transmittal in a format to be specified by the Purchaser.
- (b) The Manufacturer shall submit all programmes (including the Project Programme) to the Purchaser in Primavera P6 or in such other form as the Purchaser may specify from time to time.
- (c) The Purchaser shall utilise a web based document management system for document control and management. The Purchaser shall provide a limited number of licenses to the Manufacturer for the use of this system.
- (d) Subject to clause 5 (Relationship with the Franchisee and Representatives) of this Agreement, all correspondence between the Manufacturer on the one hand and other parties appointed or under the control of the Purchaser or any member of the TfL Group on the other relating or linked to this Agreement or the subject matter of this Agreement, shall be made through the Purchaser Contract Manager, except where the Purchaser Contract Manager directs that contact should be direct with such parties provided that in such cases, copies of correspondence and details of

liaison are provided to the Purchaser Contract Manager by the Manufacturer as soon as reasonably practicable after such contact.

- (e) The Manufacturer shall be responsible for training its staff on the use of the Purchaser's web based document management system and following the document management procedures prescribed by the Purchaser.
- (f) All documentation shall be version controlled.
- (g) The Purchaser shall utilise a Building Information Management (BIM) system for storage of all drawings, CAD models, Manuals as well as all health and safety details for the Trains and the Equipment.
- (h) The Manufacturer shall ensure that every submission clearly displays the Purchaser's numbering as provided by the Purchaser.

5.3 **Design Submissions**

Without prejudice to the Manufacturer's obligations under this schedule 5 and schedule 6 (Assurance), the Manufacturer shall supply each submission to be provided pursuant to this Agreement to the Purchaser in a form that is compatible with the Purchaser's software (as may be notified to the Manufacturer by the Purchaser from time to time) and which therefore will enable the information and/or evidence produced by the Manufacturer in its submissions to be used and edited by the Purchaser. The Manufacturer shall fully co-operate with the Purchaser to mitigate any incompatibility between the Purchaser's and the Manufacturer's respective systems.

5.4 **Time for communications**

Save as expressly provided to the contrary in this Agreement or as otherwise agreed between the Parties from time to time, each Party shall respond to communications from the other Party within ten Working Days of their receipt of such communication.

6. **PROJECT PROGRAMME**

6.1 **Representation and Warranty**

The Manufacturer represents and warrants to the Purchaser that the Project Programme complies with the requirements described in this paragraph 6 and part A (Key Programme Dates) of schedule 3 (Project Programme).

6.2 **Project Programme Requirements**

- (a) The Project Programme shall be in Primavera P6 (version 8.2 or later) and shall clearly identify the start and finish dates and the critical path for the Works up to and including Fleet Acceptance. Interfaces with other parties, including but not limited to the Franchisee and neighbouring railways shall also be shown clearly on the Project Programme.
- (b) The Project Programme shall be in logic linked network format employing critical path method (CPM) analysis showing the critical path(s), early start and finish dates, late start and finish dates and total float. Submissions shall be made in electronic (Primavera .xer) formats.
 - (i) The project structure in the Project Programme (Work Breakdown Structure ("**WBS**")/Cost Breakdown Structure ("**CBS**") shall be Approved by the Purchaser.
 - (ii) [Not used.]

- (iii) Scarce or specialist resources must be identified and Approved by the Purchaser and coded within the Project Programme. Time phased resource usage and forecast profiling must be undertaken and presented as part of the Project Review Meetings referred to in paragraph 8 of this schedule 5.
 - (iv) Purchaser dependencies and activities must be identified and Approved by the Purchaser and coded within the Project Programme.
 - (v) In accordance with schedule 7 (Testing), once the Manufacturer has secured access rights for carrying out testing, the Manufacturer's requirements and process for access to the Purchaser or third party infrastructure pursuant to clause 15 (Acceptance of Trains and Equipment) and schedule 7 (Testing) (for example, in relation to engineering hours) shall be identified and coded within the Project Programme, and all relevant enabling works shall be logic linked to their associated access activity.
 - (vi) Pursuant to the Training Programme and schedule 4 (Training), the Manufacturer shall, within the Project Programme, identify, and make adequate provision for, the Purchaser's requirements in relation to the analysis, design, development, delivery and evaluation of training.
 - (vii) Any activity that is deemed to have an impact on the operation of the Network must be identified and coded so that an impact assessment can be undertaken and necessary actions derived.
 - (viii) Any changes to the Project Programme shall require the Approval of the Purchaser.
- (c) **Project Programme Quality**
- (i) The level of detail held in the Project Programme must be fit for purpose and sufficient to manage the Project.
 - (ii) Activity descriptions within the Project Programme should not be generic (i.e. not rely solely on the WBS for their context).
 - (iii) All Purchaser dependencies should have 'TFL' as the first three (3) characters of their activity ID, in addition to being coded as Purchaser dependencies.
 - (iv) Actual costs for the purpose of earned value management ("**EVM**") and financial forecasting shall be captured within the schedule using WBS summary bars.
 - (v) The Project Programme must be capable of generating earned value reports. Physical percentage complete must be based on units and volumes where possible, and activity rate of progress (percentage complete) must align with the activity forecast completion dates (unless agreed otherwise by the Purchaser). Earned value will not be measured against level of effort costs such as project management and support as they can undermine the usefulness of EVM.
 - (vi) Planned work should be routinely reforecast based on actual performance achieved and available resources.
 - (vii) The Manufacturer shall maintain a hierarchy of programmes that support each other whilst keeping detail at the appropriate level within the hierarchy. In this way duplication of effort during the update cycle should be avoided.

- (viii) Adequate time risk provision must be discretely identified against the relevant activities within the Project Programme.
 - (ix) Project risks identified in the Manufacturer's risk register shall, where possible, be linked to the corresponding activity within the Project Programme (with the associated time and cost assumption). Within the Manufacturer's risk register a unique identifier code shall be used against each risk to enable direct mapping to the relevant activity within the Project Programme. Ideally this would take the form of the Project ID linked with the Activity ID.
 - (x) Planning assumptions must be documented and subsequent changes noted and reviewed at the Project Review Meetings referred to in paragraph 8 of this schedule 5 in order to ensure robust forecasting. Scheduling assumptions likely to have an impact on project delivery must be entered into the risk register and then subject to impact assessment through quantitative schedule risk assessment.
- (d) **Project Programme Progress**
- (i) The Project Programme progress and update cycle shall be aligned with the Purchaser's reporting process and subsequent progress accruals or assumed progress shall be highlighted by the Manufacturer (i.e. updated to include the last week of the previous period in addition to three (3) weeks of actual progress in the period supplemented with one week of assumed progress).
 - (ii) The Project Programme shall use TfL standard calendars. Any need for Manufacturer specific calendars will require the Purchaser's Approval.
 - (iii) Work package specific performance metrics shall be used to inform Project Programme progress, and will require the Purchaser's Approval.
 - (iv) Progress methodology for all Project Programme activities will require the Purchaser's Approval.
- (e) Approved changes shall be recorded and appropriately identified in the Project Programme.
- (f) No activity in the Project Programme should last longer than 20 Working Days with the exception of submission review/acceptance and material fabrication/procurement activities and the through life elements.
- (g) The Project Programme shall include activity descriptions which describe which work is to be carried out and where and use of the Primavera Log for additional descriptive information, as required.
- (h) No more than 25 per cent of the activities that constitute the controlling operations or critical path shall be critical (critical activities being defined as float in the range of one to ten Working Days).
- (i) The following table identifies each level of the programme hierarchy:

Prog. Level	Description	Comments	Software
Level 1	Manufacturer's high level summary schedule	1-2 page summary of the Project Programme	P6

Prog. Level	Description	Comments	Software
Level 2	Manufacturer's low level summary schedule	Logic-linked CPM networked summary of Level 2 Project Programme	P6
Level 3	Manufacturer's summary engineering, assurance, procurement, design, fabrication, construction and commissioning schedule	Resource logic-linked CPM networked Level 3 Project Programme	P6
Level 4	Manufacturer's detailed engineering, assurance, procurement, design, fabrication, construction, testing, commissioning, integration and assimilation schedule	Detailed resource logic-linked CPM networked Level 4 Project Programme for use in co-ordinating the said activities	P6
Level 4	Project Progress Report	Detailed management tool identifying each major deliverable and status	Excel
Level 4	Manufacturer's Earned Value Report	Detailed management control tool identifying cost value earned by the manufacturer by completion of programme activities against the baseline schedule	Excel
Level 4	Manufacturer's procurement schedule	Detailed procurement control tool identifying all major purchase orders and subcontracts and their status	Excel
Level 4	Manufacturer's weekly work plan (four week rolling programme)	Suitable level of detail to assess progress and plan work operations on a weekly basis	Excel

6.3 Contents of Project Programme

Without prejudice to the Train Technical Requirements and paragraph 6.2, the Project Programme shall set out, as a minimum, start and finish dates and dependencies for each of the following which shall reflect and be consistent with the other requirements of this Agreement:

- (a) in respect of the Trains:
 - (i) each Stage, in accordance with schedule 6 (Assurance);
 - (ii) the design review process for each System and each item of Equipment in accordance with schedule 6 (Assurance);
 - (iii) the delivery of each submission in accordance with the Design Submission Programme (as described in schedule 6 (Assurance);
 - (iv) the procurement of all contracts for the supply of Major Components, Recurrent Defect Extension Components, Systems and Equipment as well as delivery dates from Subcontractors;
 - (v) supply of Free Issue Materials and third party provided equipment;
 - (vi) the manufacture of each Train, including each stage of production for each car forming part of that Train;
 - (vii) setting up of the Test Track Facilities, any enabling works required for the integration testing and Test Track Facilities;
 - (viii) Type Testing, including static type testing, testing, rig testing, equipment testing, testing on the Test Track Facilities, routine tests of the Trains, testing of all Major Components and Recurrent Defect Extension Components on test-track and testing on the Network, and in each case detailed by test and in accordance with the Testing Programme;
 - (ix) Factory Acceptance Tests of the Trains in accordance with the Testing Programme;
 - (x) all Relevant Approvals as required by this Agreement;
 - (xi) the provision of the Mock-Up and any other mock-ups and the dates for each of the processes associated with the development of each mock-up including inspections and approvals and delivery to the Purchaser for customer acceptance tests;
 - (xii) inspections of each Train (detailed by each inspection and Train);
 - (xiii) the certification by the Manufacturer and external body certification (detailed by item) where relevant;
 - (xiv) the delivery and commissioning of each Train;
 - (xv) achievement of each Acceptance stage for each Train;
 - (xvi) the delivery of each Technical Case in accordance with schedule 6 (Assurance); and
 - (xvii) the start and finish dates and the critical path for each relevant stage to Fleet Acceptance;

- (b) in respect of the Manuals, each stage of the development, review and production of the Manuals;
- (c) in respect of each item of Equipment, other than the Simulator, each stage in the development, design, manufacture, procurement, testing and delivery of such item of Equipment, and achievement of Equipment Acceptance for each such item of Equipment;
- (d) in respect of the Simulator, each stage in the development, design, manufacture, procurement, testing, delivery, installation and commissioning of the Simulator;
- (e) the provision of all Spares and Special Tools and dates for delivery of tranches of each;
- (f) the provision of training in accordance with clause 12 (Training Services) of this Agreement;
- (g) the information, approvals, and/or other inputs that will be required by the Manufacturer from the Purchaser, Competent Authorities and/or other third parties;
- (h) the scheduled Milestone Payments as set out in schedule 10 (Milestones and Security);
- (i) all client witness points;
- (j) all other Plans and other strategies that are applicable that the Manufacturer is required to submit in accordance with this Agreement; and
- (k) all Technical Documents that the Manufacturer is obliged to provide and keep up to date.

6.4 **Additional Detail**

On request by the Purchaser, the Manufacturer shall provide any additional detail, dates or individual programmes relating to a particular aspect of the Project Programme.

6.5 **No Changes**

The Project Programme shall not be changed without the Purchaser's prior written consent or in accordance with a Change Confirmation Notice.

7. **PROJECT PROGRESS REPORTS**

7.1 **Project Progress Reports – General Requirements**

- (a) The Manufacturer shall issue a report to the Purchaser by 11.59 p.m. on the last Friday of each TfL Period. The report shall be in electronic format showing actual progress by the Manufacturer for that TfL Period, and a forecast of the progress of the next TfL Period in connection with the Works and in satisfying the Assurance Regime and each of the other requirements specified in this Agreement (the "**Project Progress Report**").
- (b) The first Project Progress Report shall be produced during the first whole TfL Period to occur after the Commencement Date and shall continue to be produced by the Manufacturer and submitted to the Purchaser in accordance with paragraph 7.1(a) until all Trains have been Provisionally Accepted, or until all activities shown on the Project Programme are complete, whichever is the later.

- (c) The Manufacturer shall ensure that each Project Progress Report continues to clearly identify the start and finish dates and the critical path for the design, manufacture, testing, commissioning and supply of the Trains, Systems and Equipment and without prejudice to the foregoing, the matters set out in paragraph 6.3 of this schedule 5.
- (d) Where a Project Progress Report shows a delay or a potential delay against the Project Programme or any change in the dependencies associated with the Project Programme, the Manufacturer shall provide the Purchaser with a report (the **"Exception Report"**), which shall include, the following:
 - (i) the extent of the delay or the potential delay and/or change and the potential impact on the Project Programme;
 - (ii) the reason for the delay or the potential delay and/or change;
 - (iii) the mitigation measures that the Manufacturer has taken or proposes to undertake to reduce the impact of the delay or the potential delay and/or change; and
 - (iv) the measures taken, and the measures proposed, to prevent recurrence of the event which caused the delay or the potential delay and/or change and/or similar such events in the future.
- (e) The Manufacturer shall include a commentary in the Exception Report for any delayed tasks which are not on the critical path, but which have any potential to become a factor in timescales specified in the Project Programme.
- (f) The Manufacturer shall provide a quality report by reference to the Quality Management Plan in accordance with paragraph 10 of this schedule 5.
- (g) The Manufacturer shall provide a risk management report (**"Risk Management Report"**) by reference to the Risk Management Plan reporting on actual performance for that TfL Period since the submission of the Risk Management Report relating to the preceding TfL Period.
- (h) The Manufacturer shall provide a report on health, safety and environmental matters in accordance with schedule 16 (Health, Safety and Environment).
- (i) The Manufacturer acknowledges and agrees that no Project Progress Report or any other provision in this paragraph 7.1 shall:
 - (i) constitute a Change under the Change Procedure; or
 - (ii) entitle the Manufacturer to an extension of time to the Contractual Acceptance Date or otherwise entitle the Manufacturer to any adjustment to the Project Programme.

7.2 **Content of Project Progress Report**

The Manufacturer shall ensure that each Project Progress Report contains the information described in this paragraph 7.2. The Project Progress Report shall confirm where activities are proceeding as planned, and provide a commentary on any matters of exception. The Project Progress Report shall include:

- (a) the general requirements set out in paragraph 7.1;
- (b) a confirmation that the design, procurement, manufacture, testing, commissioning, interface management and supply of the Trains, Systems and Equipment and

related training is proceeding in accordance with the Project Programme and Key Programme Dates, including the process for obtaining Relevant Approvals (other than as disclosed in the Exception Report);

- (c) the Risk Management Report;
- (d) the Exception Report (as appropriate);
- (e) commentary on any activities where the Manufacturer considers that any problems may arise, including:
 - (i) the reason for the problem;
 - (ii) the extent of the problem and the potential impact on the delivery of any Purchased Item;
 - (iii) the mitigation measures that the Manufacturer has taken or proposes to undertake to reduce the impact; and
 - (iv) the measures taken, and the measures proposed, to prevent recurrence of the event which caused the problem and/or similar such events in the future;
- (f) the physical status of each Train in respect of the design, manufacture, testing, commissioning and supply stages and details of any Modifications;
- (g) a report on the performance and reliability of the in-service Trains (while the manufacture of the remaining Trains is still in progress);
- (h) subject to any obligations of confidentiality to which the Manufacturer is subject, a section highlighting any defects or design, maintenance or operational issues that have arisen in any rolling stock supplied under this Agreement or analogous rolling stock manufactured (or being manufactured) by the Manufacturer or in any rolling stock of which it has knowledge, that may occur or otherwise affect the Trains;
- (i) progress with the submissions of all plans, strategies, programmes and procedures required by this Agreement; and
- (j) Assurance metrics.

7.3 Where an Option has been exercised, Project Progress Reports will be structured, as the case may be, to provide all of the requirements set out in paragraph 7 separately in respect of that Option.

7.4 **Additional Reports**

Without prejudice to the foregoing, the Purchaser shall have the right, acting reasonably, to request additional management reports from the Manufacturer setting out specific details in relation to the Works. The Manufacturer shall provide any such additional report to the Purchaser as soon as reasonably practicable.

8. **PROJECT REVIEW MEETINGS**

8.1 **Project Review Meetings**

- (a) The Parties shall hold a review meeting in relation to the Project Progress Report and related matters once every TfL Period or more frequently upon the request of either Party (the "**Project Review Meeting**").

- (b) The Purchaser shall circulate an agenda prior to each Project Review Meeting, and the Manufacturer shall be entitled to call for the addition of agenda items before or at the commencement of the Project Review Meeting. The agenda circulated prior to each Project Review Meeting shall include specific matters to include, inter alia, those items listed in paragraph 7.2. The Manufacturer shall be entitled to call for the addition of agenda items before or at the commencement of the meeting.
 - (c) The primary purpose of the Project Review Meeting shall be to:
 - (i) monitor the Manufacturer's performance against the requirements of this Agreement;
 - (ii) monitor the activities at the interface between the Manufacturer and the Purchaser and between the other suppliers of systems that interface with the Trains, Systems and Equipment and between the Manufacturer and the Franchisee; and
 - (iii) provide a focal point for the resolution of any problems or issues.
- 8.2 The Project Review Meeting shall achieve the purposes specified in paragraph 8.1(c) by:
- (a) reviewing the Project Progress Report and referring to the Project Execution Plan in order to:
 - (i) compare activity progress against the Project Programme and Key Programme Dates and discuss any variances;
 - (ii) determine whether any further remedial or mitigation actions are needed to correct variances; and
 - (iii) ensure that appropriate responsibility for actions is agreed;
 - (b) reviewing quality, safety and technical matters to ensure that the Trains, Systems and Equipment will comply with this Agreement;
 - (c) reviewing the status of any Changes;
 - (d) identifying matters which could potentially affect either Party's performance of its obligations under the Agreement; and
 - (e) identifying any major concerns regardless of source and ensuring that appropriate actions are agreed to facilitate resolution of such concerns.
- 8.3 Each Project Review Meeting shall take place at the Purchaser's offices or such other place as specified by the Purchaser, in each case with reasonable notice to the Manufacturer in advance of the relevant Project Review Meeting.
- 8.4 The Purchaser Contract Manager and the Manufacturer Contract Manager shall both attend the Project Review Meeting unless otherwise agreed by the Parties. Other employees, agents and/or contractors of each Party including the Franchisee, Key Subcontractors and other employees, agents and/or contractors of the TfL Group may attend a Project Review Meeting. The Purchaser has the right, acting reasonably, to require the attendance of any relevant Subcontractor of the Manufacturer at a Project Review Meeting.
- 8.5 The Parties shall maintain an open and co-operative relationship in order to promote the success of the Project Programme and Key Programme Dates and delivery of the Works.
- 8.6 The Purchaser shall chair the Project Review Meeting and shall produce and circulate the minutes promptly after the completion of each Project Review Meeting.

8.7 Subcontractor Meetings and Demonstrations

The Manufacturer shall advise the Purchaser of any meetings and/or demonstrations between itself, Subcontractors, suppliers and/or any Competent Authority concerning the subject matter of this Agreement. The Purchaser or its nominee reserves the right to attend any or all such meetings and/or demonstrations, to the extent reasonably necessary (such right is not, for the avoidance of doubt, to include meetings between the Manufacturer and its Subcontractors and suppliers relating to their commercial relationship).

8.8 Liaison Meetings

The Manufacturer shall, from time to time, attend additional liaison meetings as required by the Purchaser, as part of a process of assuring the Purchaser that the obligations of the Manufacturer under this Agreement are being achieved. Such meetings are expected to be held with, inter alia, the Franchisee and other stakeholders and are expected to cover design, manufacture, statutory body approval, testing and commissioning of the Trains, Systems and Equipment and the introduction of Trains into service.

8.9 Testing Progress Meetings

The Parties shall hold a testing progress meeting once every TfL Period on a date specified by the Purchaser or more frequently upon the request of either Party, as part of a process of assuring the Purchaser that the obligations of the Manufacturer in relation to testing pursuant to this Agreement are being achieved.

9. EXECUTION PLAN

9.1 The Manufacturer shall document its plan for delivering the Works (the "**Project Execution Plan**") including, but not limited to:

- (a) how the Manufacturer will manage its performance of the Works (the "**Management Plan**");
- (b) the Manufacturer's management structure accountable and responsible for delivering all facets of the Works, including the proposed names of Key Post holders and their curricula vitae ("**Management Structure**"). The Management Structure shall include the key interfaces with, inter alia, the Purchaser, Franchisee, regulatory and approving bodies and other stakeholders and Key Subcontractors;
- (c) a Manufacturer supplier management plan, showing how the Manufacturer will supervise and manage subcontractors during the design, manufacturing and testing stages;
- (d) its plan for quality management in respect of the Works (the "**Quality Management Plan**"), including the requirements set out in paragraph 10 of this schedule 5 and how the Manufacturer's procedures as set out in the Quality Management Plan will be applied to each stage of the Works and harmonised across multiple design, manufacturing and testing sites, where applicable;
- (e) a design management plan (the "**Design Management Plan**"), updated in accordance with paragraph 12 of schedule 6 (Assurance) including details of how the Manufacturer will mobilise and organise sufficient appropriately qualified and experienced staff and manage the Train engineering and design teams, stating the principal locations where engineering and design teams are located and which shall include the level of engineering and design support to be given to production, reassembling, testing and commissioning operations;

- (f) a manufacturing management plan detailing how the Manufacturer will mobilise and organise sufficient appropriately qualified and experienced staff and suitable facilities of the required capacity for the manufacture of the Trains, Systems and Equipment. The Manufacturer shall state the principal locations where Train manufacturing (including the Manufacturer's Premises) will take place.
- (g) an assurance plan detailing how the Manufacturer will implement procedures that will progressively assure the Purchaser that the Works are delivered in compliance with the requirements of this Agreement, and including the technical assurance requirements of, and the programme for and processes to be used to manage Assurance submissions in accordance with schedule 6 (Assurance);
- (h) how the Manufacturer will mobilise and organise sufficient appropriately qualified and experienced staff and suitable facilities of the required capacity for Testing of the Trains, Systems and Equipment in accordance with schedule 7 (Testing) of this Agreement. The Manufacturer shall state the principal locations for where the Tests shall be performed;
- (i) a description of the Manufacturer's strategy for obtaining all Relevant Approvals to permit Trains to operate or test, as required, on the Network, and in unrestricted passenger service in accordance with this Agreement;
- (j) the Manufacturer's strategy for delivery, commissioning and Pre-Provisional Acceptance and Provisional Acceptance of the Trains and Equipment Acceptance of the Equipment, setting out acceptance activities and locations;
- (k) the Manufacturer's strategy for achieving Final Acceptance and Fleet Acceptance in accordance with the Project Programme;
- (l) how the Manufacturer will develop the Manuals and Training Materials and how training will be delivered in accordance with this Agreement for the Trains, Systems and Equipment;
- (m) how the Manufacturer will develop the Simulator design and programming in accordance with this Agreement;
- (n) a risk management plan detailing the identification and mitigation of technical and commercial project risks during the Project Programme ("**Risk Management Plan**"), changes to be made to the Risk Management Plan only with the approval of the Purchaser, and reporting relating to those risks to be in accordance with the Risk Management Report referred to in paragraph 7.1(c) of this schedule;
- (o) an information modelling and management execution plan showing how the Manufacturer will establish, implement and maintain a common data environment consistent with the requirements of this Agreement. All agreed common data environment changes will be notified to the Purchaser and changes to the information modelling and management execution plan shall only be made with the Approval of the Purchaser; and
- (p) a master information delivery management plan that records all product items including all model files, composite models, non-graphical data, document definitions and document renditions which have been agreed to be produced, maintained, updated and delivered as production information and handover information, that will be updated and maintained (as required) throughout the Works following project change control procedures, using the template included in appendix 4 to this schedule 5,

together forming the Project Execution Plan.

- 9.2 The Manufacturer shall submit the Project Execution Plan to the Purchaser for Approval no later than one month after the Commencement Date and shall promptly update and re-issue to the Purchaser for Approval in the event of any amendments to the Project Execution Plan.

10. **QUALITY MANAGEMENT PLAN**

- 10.1 The Quality Management Plan shall form part of the Project Execution Plan and shall include, but not be limited to, the Manufacturer's:

- (a) quality policy;
- (b) defined product quality objectives;
- (c) quality management organisation;
- (d) quality management systems for, inter alia:
 - (i) project and programme/schedule management;
 - (ii) design;
 - (iii) manufacture;
 - (iv) testing;
 - (v) delivery of the Purchased Items;
 - (vi) management of change and non-conformities; and
 - (vii) project reporting;
- (e) information technology and document control and retention procedures;
- (f) process for the selection of Subcontractors;
- (g) process for the surveillance and verification of Subcontractors performance;
- (h) quality performance indicators;
- (i) quality system review process;
- (j) continuous improvement process;
- (k) inspection and quality control processes (including suppliers and Subcontractors);
- (l) internal auditing requirements and methods;
- (m) Subcontractor auditing requirements and methods;
- (n) non-conformance and corrective action processes;
- (o) risk management processes;
- (p) customer complaints handling process; and
- (q) other applicable quality procedures and all other relevant quality matters envisaged by this Agreement.

- 10.2 The quality management systems referred to in paragraph 10.1(d) above shall be certified to ISO 9001 (or equivalent) and the Manufacturer shall provide supporting evidence satisfactory to the Purchaser of such certification.
- 10.3 The Manufacturer shall ensure that the Quality Management Plan requirements are incorporated throughout the Manufacturer's supply chain.
- 10.4 Without prejudice to clause 44.1 the Manufacturer shall be required to produce and maintain a controlled register of Subcontractors to the satisfaction of the Purchaser. The register shall state the name of the Subcontractor, scope of supply including design responsibility, technical standards, method of quality control and certification to be generated.
- 10.5 Without prejudice to clause 44.1, the Manufacturer shall retain full responsibility for all work performed by Subcontractors regardless of any nominations, instructions, approvals or acceptance granted to the Subcontractors by the Purchaser under this Agreement or any other contract.
- 10.6 The Manufacturer shall carry out reviews of all designs undertaken by Subcontractors. The design documentation produced by a Subcontractor shall be endorsed by the Manufacturer to demonstrate that the Manufacturer accepts the design. The endorsement shall be made by dated signature on the document or on a covering document, if appropriate. The Manufacturer shall maintain a list of persons who are authorised to endorse documents from Subcontractors.
- 10.7 The Manufacturer shall have in place a documented process for the surveillance of Subcontractors in order to mitigate the risk of poor quality not being detected and corrected at the start of the manufacturing and assembly process. This surveillance process shall:
 - (a) be a documented procedure for the inspection and testing of a representative sample of products received from Subcontractors. This inspection shall ensure that delivered products comply with specified requirements in all respects and that they have not been damaged or adversely affected during transit;
 - (b) be carried out on a statistically representative sample size which the Purchaser may increase for safety critical components or where problems have been previously found and/or decreased by the Purchaser where supplier quality confidence is higher;
 - (c) include goods inwards inspection and testing and be supported by on-going robust quality product audits and inspections; and
 - (d) include consumable items in routine use such as fasteners/adhesives where incorrect material grades/properties are not immediately apparent to the user but may have safety/quality implications if the incorrect grade/specification is used.

11. TECHNICAL CHANGE CONTROL

- 11.1 Subject to schedule 12 (Change Procedure), the Manufacturer shall establish and implement a technical change control process ("**Technical Change Control Process**") that is consistent with the Change Procedure. The Technical Change Control Process shall enable the Manufacturer to manage, in a structured manner, any change to the scope, function, timeframes, cost and/or any technical aspect of the Trains or any item of Equipment as a result of a Change or otherwise and to identify whether any Change is a Manufacturer Change or Purchaser Change. The Design Management Plan shall describe the Technical Change Control Process to be implemented by the Manufacturer.

- 11.2 Where a document, drawing and/or other information that has been granted Approval requires amendment in connection with a Change or other requirement of this Agreement, including changes to suppliers of critical risk components, the Manufacturer shall make such amendments as it considers necessary and submit the amended drawing, document and/or information to the Purchaser for Approval.
- 11.3 The Manufacturer will control and document the review, approval and implementation of all Train and Equipment Design changes through the use of an auditable change control system which will undertake and record the formal review of each change and identify:
- (a) potential impacts in other areas of the Train and Equipment Design and to ensure compatibility; and
 - (b) the means by which the Purchaser can manage the configuration of the relevant Fleet and Technical Documents during all stages of the product life cycle.

12. **CONFIGURATION MANAGEMENT**

- 12.1 The Manufacturer shall establish, implement and maintain a configuration management system consistent with the requirements of this Agreement and BS ISO 10007:2003 (Quality management systems – Guidelines for configuration management). All agreed configuration changes will be notified to the Purchaser.
- 12.2 The Manufacturer shall submit the configuration management documentation that records all configuration items of the installed hardware and software upon system handover to the Purchaser for Approval.
- 12.3 **Configuration Management Plan**
- (a) The Manufacturer shall establish an appropriate configuration management methodology for the Project and describe it in a configuration management plan ("**Configuration Management Plan**") which shall be submitted to the Purchaser for Approval.
 - (b) The Manufacturer shall establish, and describe in the Configuration Plan, an appropriate configuration management methodology for the Project.

13. **PERFORMANCE MONITORING**

During the Train Warranty Period, the Manufacturer shall monitor the performance of the Fleet and submit performance data to the Purchaser at each Project Review Meeting. The scope of the performance monitoring shall include:

- (a) the analysis and modelling of Train performance data to produce component and system decay profiles from which accurate life cycle predictions and response triggers can be established; and
- (b) ongoing performance management and improvement recommendations through the definition of suitable metrics and the identification of performance trends for each metric.

The Manufacturer shall apply the performance management data to identify the root cause of problems and the Parties shall identify opportunities for effective actions to achieve improved performance of the Trains.

14. **SPARES MANAGEMENT**

- 14.1 During the Train Warranty Period, the Manufacturer shall on a weekly basis:

- (a) utilise the performance monitoring outputs to:
 - (i) inspect the quantity and quality of Spares and monitor the quantity and quality of Spares being used for the activities set out in clause 7.15(a);
 - (ii) inform the Purchaser where the Spares do not meet the requirements of the Train Technical Requirements, or are not being replenished or Reconditioned at a rate to ensure compliance with clause 7.15(c); and
 - (iii) notify the Purchaser of the stock levels for all Spares and Consumables that the Purchaser will be required to maintain from 12 months following the end of the Train Warranty Period;
- (b) upon written request by the Purchaser, provide the Purchaser with such assistance, including:
 - (i) the provision of technical advice in relation to Spares and Consumables; and/or
 - (ii) information including information relating to the price of any Spare and/or Consumable not listed in the Bill of Materials or parts A (Capital Spares) to C (Special Tools) of schedule 8 (Spares and Special Tools),

in each case as may be reasonably necessary for the Purchaser to understand the pricing, technical and/or logistical aspects of exercising its right to order Option Spares pursuant to clause 6.6 and/or the Purchaser's option to issue an Initial Three Year Spares Option Notice pursuant to the FSA.

15. **REPORTING ON HEALTH, SAFETY AND ENVIRONMENTAL MATTERS**

Throughout the term of this Agreement, the Manufacturer shall report on health and safety and environmental matters in accordance with schedule 16 (Health, Safety and Environment).

APPENDIX 1**Key Posts**

The Key Posts shall be set out in the Management Plan referred to in paragraph 9.1(a) of this schedule 5. Each position identified in the table below is a Key Post and the person named in respect of each Key Post shall carry out such role unless otherwise agreed in accordance with paragraph 3 (Organisational Arrangements) of this schedule 5:

Key Post	Name
Manufacturer Contract Manager*	[REDACTED]
Manufacturer Project Manager*	[REDACTED]
Manufacturer Project Director	[REDACTED]
Manufacturer Engineering Manager (during design)*	[REDACTED]
Bogie Manufacturing Manager	[REDACTED]
Engineering Safety Manager	[REDACTED]
Project Quality Manager	[REDACTED]
Assurance Manager (see paragraph 4.1(b) of schedule 6 (Assurance))	[REDACTED]
Chief Project Engineer	[REDACTED]
HSE Director (see paragraph 4 of schedule 16 (Health, Safety and Environment))	[REDACTED]
Change Manager	[REDACTED]
Manufacturer Systems Integration Manager	[REDACTED]
Schedule Project Manager	[REDACTED]
Manufacturing Project Manager	[REDACTED]
Bodyshell Manufacturing Manager	[REDACTED]
Final Assembly Manufacturing Manager	[REDACTED]
Testing & Commissioning Manager	[REDACTED]
Authorisation/Approvals Manager	[REDACTED]
Warranty Manager	[REDACTED]
Manufacturer Deputy Project Manager	[REDACTED]
Purchasing Manager	[REDACTED]
Risk Manager	[REDACTED]

* denotes each Key Post which will be based at the Project Office during the time of engagement in managing the Works.

APPENDIX 2

Approval Process

1. APPROVAL PROCESS

- 1.1 Where the Manufacturer is required to submit information, drawings and/or documents to the Purchaser for Approval (including pursuant to schedule 6 (Assurance)), the Manufacturer shall comply with the requirements described in this appendix 2.
- 1.2 The Manufacturer shall ensure that each drawing, document, report and/or other information submitted to the Purchaser for Approval shall be in accordance with the requirements of paragraph 5 (Communications and Document Control) of this schedule 5 and is accompanied by a request for review ("**Request for Review**").
- 1.3 Without prejudice to paragraph 5 of this schedule 5, the Manufacturer shall ensure that each Request for Review contains, to the extent applicable, the following information:
 - (a) the submission number (which shall be independent of any drawing number);
 - (b) the drawing and/or document number, including where relevant the revision letter or number;
 - (c) the drawing title and/or title of the document;
 - (d) the date of submission;
 - (e) any supplementary information which is reasonably necessary to enable the Purchaser to make a decision in accordance with paragraph 1.4 below (including, where relevant, a description of the latest revision); and
 - (f) endorsement by the Manufacturer's relevant responsible manager.
- 1.4 Within 20 Working Days of the date the Purchaser receives a submission (provided it has been submitted in accordance with paragraph 5.2 of this schedule 5) from the Manufacturer for Approval (or such different time period, if any, as is specified in this Agreement, or such later date as notified to the Manufacturer in accordance with paragraph 1.5 below) the Purchaser shall review and comment on the information, drawing and/or document that has been submitted or re-submitted by the Manufacturer and return one copy of the Request for Review to the Manufacturer stamped or marked:
 - (a) "BTA – Bar to Acceptance";
 - (b) "CFFA – Comment for Future";
 - (c) "CRNA – Comment Requiring No Action"; or
 - (d) "Cleared".
- 1.5 Where the Purchaser considers that the complexity, detail, scope and/or nature of the drawings, documents and/or information submitted by the Manufacturer for Approval means that it may not be able to respond to the Manufacturer within 20 Working Days (or such different time period, if any, as is specified in this Agreement) of receipt by it of such submission, the Purchaser shall be entitled to an additional period of time to consider the submission provided that the Purchaser notifies the Manufacturer in writing within seven (7) Working Days (or such different time period, if any, as is specified in this Agreement) of the date the Purchaser received the submission that the Purchaser is exercising its rights under this paragraph 1.5. Each notice served by the Purchaser pursuant to this paragraph 1.5 shall specify:

- (a) the details of the relevant submission;
 - (b) the additional period of time required by the Purchaser; and
 - (c) a description in reasonable detail as to the reasons why the additional time is required.
- 1.6 The Manufacturer shall undertake the following actions in relation to the information, drawing and/or document (as the case may be) that has been returned to it by the Purchaser in accordance with paragraph 1.4 and subject to the provisions of paragraph 1.10:
- (a) if such information has been stamped or marked "BTA – Bar to Acceptance", the Manufacturer shall immediately review and revise the relevant drawing, documents and/or information taking into account and incorporating the comments made by the Purchaser pursuant to paragraph 1.4 and shall resubmit such information for Approval by the Purchaser in accordance with this paragraph 1;
 - (b) if such information has been stamped or marked "CFFA – Comment for Future", the Manufacturer shall be entitled to proceed on the basis of the drawing, documents and/or information as amended to incorporate the comments made by the Purchaser, and the information shall be re-submitted for Approval by the Purchaser pursuant to paragraph 1.4 at the next relevant Assurance Stage as required by schedule 6 (Assurance);
 - (c) if such information has been stamped or marked "CRNA – Comment Requiring No Action", the Manufacturer shall be entitled to proceed on the basis of drawings, documents and/or information submitted to the Purchaser, but shall take into consideration any comments made by the Purchaser; and
 - (d) if such information has been stamped or marked "Cleared", the Manufacturer shall be entitled to proceed on the basis of the drawing, document and/or information submitted to the Purchaser.
- 1.7 If the Purchaser does not respond within the timeframe set out in paragraph 1.4 or 1.5 (as applicable), the Manufacturer shall forthwith seek further instruction from the Purchaser.
- 1.8 Unless otherwise required by the Purchaser, the Manufacturer shall only be required to submit one example of any sample, pattern or model in any request for Approval.
- 1.9 The Purchaser shall be entitled at any time, on giving reasonable notice (which in any event shall be not less than two (2) Working Days) to:
- (a) request the Manufacturer to submit any further document, information, design, drawing, calculation, schedule, sample, pattern or model necessary to clarify, support and/or justify any submission for Approval; and
 - (b) (acting reasonably) require the Manufacturer to attend a meeting to discuss any aspect of the drawings, documents and/or information submitted for Approval,
- and the Manufacturer shall comply with any such request from the Purchaser. If the Manufacturer does not comply with any request made under paragraph 1.9(a) or does not attend a meeting required under paragraph 1.9(b) within the time required, then (without prejudice to any other rights of the Purchaser) the Purchaser's period for replying to any submission from the Manufacturer under paragraphs 1.4 and 1.5 shall be extended by the number of Working Days between the expiry of the contractual period for compliance and the actual date of compliance by the Manufacturer with the Purchaser's request pursuant

to this paragraph 1.9 (including the day upon which the request is met or as applicable the meeting takes place).

- 1.10 When considering which category of response to give to a submission by the Manufacturer for Approval, the Purchaser shall not comment adversely on any submission if and to the extent the content of such submission is in accordance with the Train Technical Specification, Applicable Laws and Standards, Good Industry Practice and the provisions of this Agreement, unless there is an unacceptable risk to the safe and reliable operation of the railway or any other ground upon which the Purchaser may comment adversely as set out in this Agreement applies. Otherwise, subject to paragraph 1.11 below, the Manufacturer agrees to incorporate all comments made by the Purchaser before re-submitting any drawing, document or information for Approval.
- 1.11 The Manufacturer may only exclude amendments requested by the Purchaser from the final version of the relevant document if the Manufacturer has satisfied the Purchaser as to the reason for such exclusion.
- 1.12 Once the Purchaser confirms its satisfaction with the final version of the relevant document, then the relevant document shall be "Approved" for the purposes of this Agreement.
- 1.13 Unless expressly indicated otherwise in this Agreement, the Manufacturer shall not proceed without Approval having first been obtained. Where it is expressly indicated that the Manufacturer may proceed without Approval having first been obtained, the Manufacturer may proceed with such action without Approval, but it shall do so at its own risk.
- 1.14 No comment, stamping, marking or categorisation of any information, drawing or document shall diminish or relieve the Manufacturer from any of its obligations under this Agreement nor shall such comment, stamping, marking or categorisation be a Purchaser Change nor shall it permit the Manufacturer to any costs, relief or compensation of any kind.
- 1.15 Unless expressly stated otherwise in this Agreement, the Manufacturer shall not be entitled to amend any Approved document in any manner or form without obtaining prior Approval to such amendment.

APPENDIX 3

[Not used.]

APPENDIX 4

Template for Master Information Delivery Plan

The Template for Master Information Delivery Plan forms part of this Agreement and is contained on a USB flash drive initialled by the Parties as at the date of this Agreement.

SCHEDULE 6

Assurance

1. DEFINITIONS

For the purposes of this schedule 6 the following words and expressions shall have the following meanings:

"Assumptions and Dependencies Register" means the register to be prepared by the Manufacturer in accordance with paragraph 6.1(e) and submitted to the Purchaser in accordance with the TAP;

"BCP-14" means DLR Business Critical Process 14 Assurance of Non-Signalling asset changes, (reference DLR-IMS-GENR-BCP-00014 issue 3), attached as appendix 5 to this schedule 6;

"Change Control Process" has the meaning given to such term in paragraph 10.2(a) of this schedule 6;

"Configuration Management Plan" means the configuration management plan to be provided by the Manufacturer in accordance with the TAP;

"Design Phase" means the period starting on the Commencement Date and ending on the date of the notice served by the Purchaser pursuant to paragraph 12.6(b) of this schedule 6 and includes the Preliminary Design Phase and the Detailed Design Phase;

"Design Submission Programme" has the meaning given to such term in paragraph 12.4(b) of this schedule 6;

"Detailed Design Phase" means that part of the Design Phase commencing on the expiry of the Preliminary Design Phase and ending on the date of the notice served by the Purchaser pursuant to paragraph 12.6(b) of this schedule 6;

"Detailed Design Submissions" has the meaning given to such term in paragraph 12.6 of this schedule 6;

"DRACAS/FRACAS" means the recording analysis and corrective action systems established pursuant to paragraph 9.3 of this schedule 6;

"EMC" means electromagnetic compatibility;

"EMC Control Plan" means the EMC control plan to be prepared by the Manufacturer as described in paragraph 6.6(a) of this schedule 6;

"EMC Technical File" means each EMC technical file to be prepared by the Manufacturer with respect to the Train and each System, in accordance with the TAP;

"EMI" has the meaning given to such term in the Train Technical Specification;

"Engineering Safety Management Plan" means the engineering safety management plan to be prepared by the Manufacturer in accordance with paragraph 6 of this schedule 6;

"ESM" means engineering safety management;

"Hazard Record" means the hazard record to be provided by the Purchaser and updated and used by the Manufacturer to track and manage hazards, as further described in paragraph 6.2 of this schedule 6;

"Hazard Management Procedure" means the procedure for the management of hazards and safety risks as set out in paragraph 6.2 of this schedule 6;

"IHA" means interface hazard analysis;

"Independent Assessment Plan" means the independent assessment plan to be prepared by the Independent Assessor in accordance with the TAP;

"Independent Assessment Report" means each independent assessment report to be prepared by the Independent Assessor in accordance with the TAP;

"Independent Assessor" or **"IA"** means a person or organisation independent of the Manufacturer (and any Subcontractor of the Manufacturer) and having no other involvement or interest in the design, manufacture and commissioning of the Trains, whose role is described in paragraphs 2.4 to 2.7 of this schedule 6 and the TAP;

"Independent Competent Person" or **"ICP"** means a person appointed by the Purchaser as a **"competent person"** in accordance with ROGS. This role is further described in the TAP;

"Integrated Train Safety Case" has the meaning given in the TAP;

"Master Document List" or **"MDL"** means the combined list of documents required as a minimum to be submitted by the Manufacturer at each Assurance Stage, as specified in the TAP (including, following Approval of such master document lists by the Purchaser, each master document list submitted by the Manufacturer as required by the TAP);

"Preliminary Design" means the preliminary design of the Trains, Systems and Equipment, and the production of each of the items described in paragraph 12.5(a) of this schedule 6;

"Preliminary Design Phase" means that part of the Design Phase starting on the Commencement Date and ending on the date of the notice served by the Purchaser pursuant to paragraph 12.5(b) of this schedule 6;

"Preliminary Design Submissions" has the meaning given to such term in paragraph 12.5(a) of this schedule 6;

"RAM" means reliability, availability and maintainability;

"RAM Plan" has the meaning given to such term in paragraph 9.2(a) of this schedule 6;

"RCS" or **"Railway Control System"** has the meaning given to such term in the Train Technical Specification;

"Requirements Management System" has the meaning given to such term in paragraph 10.6(a) of this schedule 6;

"RSRP EMC Strategy" means the Purchaser's EMC strategy with respect to the DLR Rolling Stock Replacement Project, with reference: DLR RSRP Programme - EMC Strategy, 1499901-DLRRSTK-TR600_Z-IE-K-0032;

"Safety Authorisation" has the meaning given to such term in the ROGS;

"Safety Case" means each safety case as referenced in the TAP (including the Integrated Train Safety Case and each System Product Engineering Safety Case);

"Safety Requirements Specification" means the safety requirements specification that the Manufacturer shall prepare in accordance with paragraph 5 of appendix 3 (Engineering Safety Management Plan - Contents) of this schedule 6;

"Safety Verification Plan" means the document with reference DLR-IMS-SAMS-TMP-00007;

"Stage" has the meaning given to such term in the TAP;

"Standards Matrix" has the meaning given to such term in paragraph 10.5(a) of this schedule 6;

"System Product Engineering Safety Case" has the meaning given in the TAP;

"TAP" means the technical assurance plan as set out in appendix 6 to this schedule 6;

"Technical Case" has the meaning given to such term in paragraph 5.1(a) of this schedule 6;

"Technical Case Plan" means the technical case plan to be prepared by the Manufacturer in accordance with the requirements of the TAP;

"Train Breakdown Structure" or **"TBS"** means the document set out in appendix 2 (Train Breakdown Structure) to this schedule 6 as may be amended or updated from time to time in accordance with this Agreement;

"Train Design Management Plan" has the meaning given to such term in paragraph 12.1 of this schedule 6;

"Train Log Book" has the meaning given to such term in paragraph 7.1 of this schedule 6; and

"Verification and Validation Plans" has the meaning given to such term in paragraph 8.1 of this schedule 6.

2. **ASSURANCE PROCESS**

- 2.1 Without prejudice to any of the Manufacturer's other obligations pursuant to this Agreement, the Manufacturer shall comply with the requirements of this schedule 6, including without limitation all obligations with respect to the Assurance process.
- 2.2 The TAP set out in appendix 6 to this schedule 6 details the project specific assurance requirements for the Network. The Manufacturer shall comply with all Assurance requirements in respect of the Trains, Systems and Equipment set out in this schedule 6, including the TAP.
- 2.3 The introduction of the Trains to the Network is a Category 2 change as defined in BCP-14, and the Purchaser shall appoint an Independent Competent Person in respect of such Category 2 change in accordance with the ROGS. The Manufacturer shall fully co-operate with the ICP and provide any support or assistance required, including but not limited to as described in:
 - (a) the TAP; and
 - (b) the Safety Verification Plan.
- 2.4 The Manufacturer shall appoint the Independent Assessor, who shall be responsible for confirming that the Trains, Systems and Equipment comply with:

- (a) this Agreement;
 - (b) statutory requirements;
 - (c) functional requirements;
 - (d) Applicable Laws and Standards;
 - (e) safety requirements;
 - (f) RAM requirements;
 - (g) cyber security requirements;
 - (h) interface requirements;
 - (i) quality requirements;
 - (j) all other specification requirements; and
 - (k) Good Industry Practice.
- 2.5 The Manufacturer shall procure that the Independent Assessor prepares the Independent Assessment Plan, which the Manufacturer shall submit for Approval by the Purchaser as required by the TAP.
- 2.6 The Manufacturer shall procure that the Independent Assessor prepares an Independent Assessment Report to support each Technical Case, which the Manufacturer shall submit for Approval by the Purchaser as required by the TAP.
- 2.7 In the event that the Purchaser does not Approve an Independent Assessment Report, the Purchaser shall provide comments to the Independent Assessor and the Manufacturer. The Manufacturer shall procure that the Independent Assessor responds to and takes into account any such comments, and submits a revised Independent Assessment Report for Approval by the Purchaser.
- 2.8 The Stages for Assurance of the Trains, Systems and Equipment are detailed in the TAP.
3. **SUBMISSIONS**
- 3.1 The minimum requirements for documentation to be submitted by the Manufacturer for Approval by the Purchaser are detailed in the TAP (including, without limitation, the MDL). The Manufacturer may propose any such documents for Assurance as it thinks fit, provided the evidence submitted meets the minimum requirements set out in this schedule 6.
4. **TECHNICAL ASSURANCE**
- 4.1 **TAP**
- (a) During the Assurance Period, the Manufacturer shall in performing its obligations under this Agreement implement and manage a process of Progressive Assurance in order to demonstrate to the Purchaser that the Manufacturer is complying with the requirements of this Agreement in respect of design, manufacture, testing, commissioning and supply of the Trains, Systems and Equipment in accordance with this schedule 6 and the TAP.
 - (b) The Manufacturer shall, no later than one month after the Commencement Date, appoint an individual as its assurance manager. Such assurance manager shall, on

behalf of the Manufacturer, be responsible for ensuring that all of the Manufacturer's obligations with respect to Assurance as set out in this Agreement (including without limitation in the TAP) are carried out correctly.

4.2 **Manufacturer Technical Assurance Plans**

- (a) The Manufacturer shall produce, and submit to the Purchaser for Approval as required by the TAP, manufacturer technical assurance plans as described in this paragraph 4.2 (each an "**MTAP**") with respect to the Train, each System and each item of Equipment.
- (b) Following Approval of each MTAP, the Manufacturer shall comply with such MTAP for the duration of the Assurance Period, subject to any updates or other amendments to that MTAP Approved by the Purchaser pursuant to paragraph 4.2(e) below.
- (c) Each MTAP shall:
 - (i) describe the manner in which the Manufacturer shall demonstrate to the reasonable satisfaction of the IA, the ICP, and the Purchaser that the Train, System or item of Equipment (as applicable) satisfies the relevant requirements specified in this Agreement; and
 - (ii) identify the information and/or evidence to be provided in accordance with this Agreement and at which Stage a particular piece of information and/or evidence will be able to be included in the relevant Technical Case.
- (d) The MTAP with respect to the Train shall describe how it is proposed that the MTAPs with respect to each System will combine in order to deliver the Technical Case in respect of the Works.
- (e) During the Assurance Period, the Manufacturer shall review and update the MTAPs from time to time, including as a minimum at the end of each Stage so that the MTAPs shall satisfy at all times the requirements set out in this schedule 6. Where the Manufacturer proposes to update or otherwise amend any MTAP, it shall submit the modified MTAP to the Purchaser for Approval.
- (f) Each MTAP shall include:
 - (i) an engineering "V" life-cycle model as described in the TAP;
 - (ii) the management processes to be adopted by the Manufacturer in implementing Progressive Assurance (described in paragraph 10), which shall include, as a minimum, the management processes listed in paragraph 4.2(g) below; and
 - (iii) an organisation chart and competence documentation setting out details of the key staff members of the Manufacturer who will be responsible for technical and Progressive Assurance, supported by CVs, details of qualifications and explanations as to how their experience is adequate for the competency requirements of the proposed role.
- (g) The management processes described in paragraph 4.2(f)(ii) above shall include as a minimum:
 - (i) configuration management (as described in paragraph 10.1);
 - (ii) technical change control (as described in paragraph 10.2);

- (iii) defect and corrective action reporting (as described in paragraph 10.3);
 - (iv) hazard management (as described in paragraph 6.2);
 - (v) design management (as described in paragraph 12.1)
 - (vi) systems interface management (as described in paragraph 10.4);
 - (vii) standards management (as described in paragraph 10.5);
 - (viii) requirements management (as described in paragraph 10.6);
 - (ix) RAM management;
 - (x) engineering safety management; and
 - (xi) document management.
- (h) Each MTAP shall be consistent with, and take into account, all railway approval processes required by all Applicable Laws and Standards and shall conform to the requirements of any Relevant Approvals.
- (i) Each MTAP shall include a programme of the information and/or documentation with respect to the Train, System or item of Equipment (as applicable) that will be submitted to the Purchaser for Approval. The Manufacturer shall ensure that the programme is structured to: (A) allow regular intervals between the submission of information and/or documents to the Purchaser; (B) take into account any timeframes and/or approval periods specified in any Applicable Laws and Standards; and (C) be consistent with the Project Programme.

5. TECHNICAL CASES

5.1 Technical Cases

- (a) The Manufacturer shall prepare a Technical Case Plan in accordance with the requirements of the TAP, and submit the Technical Case Plan to the Purchaser for Approval as required by the TAP.
- (b) The Manufacturer shall be responsible for preparing technical cases for each of: (i) the Trains; (ii) the Systems; and (iii) the Equipment as detailed in this schedule 6 and the TAP (each a "**Technical Case**").
- (c) The Manufacturer shall ensure that each Technical Case contains or references such information as listed in the MDL and other evidence as is necessary to demonstrate to the Purchaser's reasonable satisfaction that the Train, System or Equipment complies with:
- (i) the Train Technical Requirements;
 - (ii) functional requirements;
 - (iii) Applicable Laws and Standards;
 - (iv) safety requirements;
 - (v) RAM requirements;
 - (vi) cyber security requirements;

- (vii) interface requirements;
 - (viii) quality requirements;
 - (ix) all other specification requirements; and
 - (x) Good Industry Practice.
- (d) Each Technical Case with respect to Systems and Equipment shall be submitted as part of the Preliminary Design Submissions and Detailed Design Submissions in accordance with paragraphs 12.5 and 12.6.
- (e) Each Technical Case shall have two (2) main parts:
- (i) the first part shall show how the Train, System or Equipment design satisfies each of the requirements set out in the Train Technical Requirements and the TAP, complies with all Applicable Laws and Standards and Relevant Approvals and the other requirements of this Agreement; and
 - (ii) the second part shall contain the process argument, which details the processes which were executed by trained, experienced and competent personnel.
- (f) The Manufacturer shall ensure that each Technical Case is supported by evidence that demonstrates to the reasonable satisfaction of the Purchaser that the requirements of this Agreement relevant to that Train, System or Equipment (as applicable) have been satisfied.
- (g) The Manufacturer shall be entitled to submit as supporting evidence to the Technical Cases any certificates, consents, approvals and/or other equivalent information provided by a Competent Authority and/or any other evidence acceptable to the Purchaser (acting reasonably) in respect of that Train, System or Equipment.
- (h) Where the Manufacturer submits a Technical Case to the Purchaser for Approval at the end of each Stage the Manufacturer shall ensure that such submission is accompanied by an Independent Assessor Report from the IA in accordance with paragraph 2.6.
- (i) The Manufacturer shall manage each Technical Case and progressively revise and submit for Approval each Technical Case at the end of each Stage as required by the TAP to satisfy the requirements of Progressive Assurance throughout the Assurance Period.

5.2 Technical Case Management

Without prejudice to the Manufacturer's obligations under this schedule 6 and schedule 5 (Contract Management), the Manufacturer shall implement management systems that are compatible with standard commercially available software which enables the information and/or evidence produced by the Manufacturer in the Technical Cases to be used and edited by the Purchaser. The Manufacturer shall cooperate with the Purchaser to mitigate any incompatibility between the Purchaser's and the Manufacturer's respective management systems.

5.3 Review of Technical Cases

- (a) The Manufacturer shall submit at each Stage each Technical Case to the Purchaser for Approval as required by the TAP before proceeding to the next Stage and on the dates shown in the Project Programme. Each Technical Case submitted to the

Purchaser shall be progressively revised by the Manufacturer to include additional information and/or evidence that has been obtained during each of the Stages prior to the Technical Case being submitted to the Purchaser for Approval.

- (b) In undertaking Approval of a Technical Case, the Purchaser shall be entitled to review all evidence included or referenced in the Technical Case and on request by the Purchaser, the Manufacturer shall provide copies of such evidence to the Purchaser in a timely manner.

6. **ENGINEERING SAFETY MANAGEMENT PLAN**

6.1 **Engineering Safety Management Plan**

- (a) The Manufacturer shall prepare the Engineering Safety Management Plan in accordance with the form and description set out in appendix 3 (Engineering Safety Management Plan – Contents) of this schedule 6, and shall submit the Engineering Safety Management Plan for Approval by the as required by the TAP.
- (b) Suitable and sufficient risk assessments shall be prepared by the Manufacturer throughout the Project as are necessary to support the required safety deliverables. Risk assessment strategies shall be included in the Engineering Safety Management Plan.
- (c) The Manufacturer shall audit its own internal engineering safety management activities and those of any Subcontractors or suppliers, as appropriate. The Manufacturer shall integrate such engineering safety management auditing within the overall quality management system for the Works and the results of such audits shall be submitted to the Purchaser for Approval. These arrangements shall be confirmed in the Engineering Safety Management Plan.
- (d) The Manufacturer shall describe within the Engineering Safety Management Plan how the relationships with the following are to be managed and coordinated:
 - (i) the commonality between engineering safety and RAM in line with BS EN 50126;
 - (ii) how human factors integration, together with the supporting analyses, will be accounted for within the engineering safety management activities; and
 - (iii) how the safety of the Trains, Systems and Equipment is to be demonstrated prior to testing and commissioning activities.
- (e) The Manufacturer shall prepare and maintain the Assumptions and Dependencies Register in which the dependences, constraints and assumptions identified by the Manufacturer in relation to the Engineering Safety Management Plan will be validated, recorded and managed. The Manufacturer shall submit the Assumptions and Dependencies Register to the Purchaser for Approval as required by the TAP.

6.2 **Hazard Management**

- (a) The Manufacturer's shall create the Hazard Management Procedure in accordance with GE/GN8640 (Guidance on Planning an Application of the Common Safety Method on Risk Evaluation and Assessment) and shall submit the Hazard Management Procedure to the Purchaser for Approval as required by the TAP.
- (b) During the Assurance Period, the Manufacturer shall maintain and update the Hazard Record provided by the Purchaser as may be required from time to time, and shall provide a copy of the updated Hazard Record to the Purchaser upon request and as required at relevant Assurance Stages (as set out in the TAP).

- (c) The Manufacturer shall use the Hazard Record in accordance with the Hazard Management Procedure to track and manage hazards. Throughout the design life of the Trains, the Manufacturer shall promptly notify the Purchaser of any new hazards identified in accordance with the Hazard Management Procedure.
- (d) The Manufacturer shall provide a Hazard Record Report as part of the Technical Case with respect to the Train for each Assurance Stage as required by the TAP.

6.3 Hazard allocation and the ALARP principle

Without prejudice to any of the Manufacturer's other obligations under this Agreement:

- (a) where a hazard is, pursuant to the Hazard Management Procedure, the responsibility of the Manufacturer, the Manufacturer shall demonstrate that it has managed the risks associated with the hazard in accordance with the requirements of this Agreement and such that those risks are tolerable and "as low as reasonably practicable" (ALARP); and
- (b) where a hazard is, pursuant to the Hazard Management Procedure, the responsibility of the Manufacturer together with another person, the Manufacturer shall act reasonably and cooperate fully with such person in order to reach agreement as to an appropriate strategy for managing the risks associated with the hazard such that those risks are tolerable and ALARP.

6.4 Management of interfaces

Without prejudice to any of the Manufacturer's other obligations pursuant to this Agreement:

- (a) The Manufacturer acknowledges and agrees that the management of interfaces is a particular issue affecting safety in the rail industry. The Manufacturer shall produce a description of each of the interfaces including where appropriate those with the RCS, Infrastructure Managers, other users of the Network, neighbours of the Network and neighbouring railways and other delivery partners and submit the same to the Purchaser for Approval by no later than four (4) months after the Commencement Date.
- (b) The Manufacturer shall demonstrate to the Purchaser that all the risks associated with the interfaces described in paragraph 6.4(a) have been reduced to a level that is tolerable and as low as reasonably practicable as part of the System Product Engineering Safety Cases or Integrated Train Safety Case (in each case, as required by the TAP). The Manufacturer will perform and report on an interface hazard analysis (IHA) (as described more particularly in the Engineering Safety Management Plan) to set out how the engineering safety implications at internal and external interfaces will be adequately addressed and managed. The IHA will involve all relevant interfacing contractors, third parties and the Purchaser.
- (c) In each safety analysis and assessment conducted by the Manufacturer, the Manufacturer shall consider the interface between the design of the Trains, the Systems, the RCS and the Network. In particular the Manufacturer shall ensure that the design of the Trains shall not adversely affect the ability of the Purchaser or the Franchisee to obtain their Safety Certificate in relation to operating the Trains on the Network or adversely affect the ability of the Infrastructure Manager of any Network to obtain Safety Authorisation for the operation of that section of the Network.
- (d) The Manufacturer shall provide an Integrated Train Safety Case for Approval by the Purchaser as required by the TAP. The Integrated Train Safety Case shall provide to the Purchaser all necessary evidence of safety adequacy to assist the Purchaser or

the Franchisee in securing all necessary authorisations to operate the railway in accordance with the Applicable Laws and Standards. To facilitate this, the Manufacturer shall be required to make presentations to and secure acceptance of evidence of engineering safety from the Purchaser and any appropriate approvals bodies.

6.5 **Independent safety auditing and assessment**

- (a) The Manufacturer shall, at its own cost, establish and implement independent safety auditing and assessments of its work and practices in accordance with all Applicable Laws and Standards.
- (b) The Manufacturer shall procure that the Independent Assessor carries out an independent safety assessment review of all Technical Cases as well as the design and final engineering safety justification(s) prepared by the Manufacturer, as described in the Engineering Safety Management Plan.
- (c) The findings of all safety reviews shall be formally reported in the relevant Independent Assessor Report.

6.6 **Electromagnetic compatibility**

- (a) The Manufacturer shall prepare the EMC Control Plan as described in this paragraph 6.6 and submit the EMC Control Plan to the Purchaser for Approval as required by the TAP. The EMC Control Plan shall describe the Manufacturer's approach to EMC and provide evidence to assure the Purchaser that:
 - (i) the Trains, Systems and Equipment comply with Applicable Laws and Standards relating to EMC;
 - (ii) the Trains, Systems and Equipment comply with the Train Technical Specification;
 - (iii) compatibility is achieved with the RCS;
 - (iv) compatibility is achieved with the Network, neighbouring railways, London City Airport and Port of London Authority; and
 - (v) the Trains, Systems and Equipment are not adversely impacted by the external EMI environment.
- (b) The EMC Control Plan shall include but not be limited to the following:
 - (i) the Standards to be adopted;
 - (ii) the arrangements for EMC surveys and coupling studies;
 - (iii) the proposals for an EMI hazard analysis and EMI hazard log;
 - (iv) details of the degraded modes and fault conditions to be assessed within the overall EMC strategy;
 - (v) an EMC test plan; and
 - (vi) arrangements for liaison and exchange of information with the Purchaser and other relevant entities.
- (c) The Manufacturer shall at all times comply with the DLR Standard DLR-ENG-STD-ES102 Issue B for EMC and the RSRP EMC Strategy. The Manufacturer shall

prepare EMC Technical Files for each System as well as an EMC Technical File the Train, and in each case shall submit each relevant EMC Technical File for Approval by the Purchaser as required by the TAP.

7. **TRAIN LOG BOOK**

7.1 The Manufacturer shall be responsible for the production and maintenance of a log book for each Train (a "**Train Log Book**"), which shall be in both hard copy and electronic form, and which shall be submitted to the Purchaser for Approval as required by the TAP. The Manufacturer shall obtain the agreement of the Purchaser to the format of the Train Log Book prior to the Manufacturer commencing manufacture of the first Train, and the content shall include as a minimum the following details for each Train:

- (a) build records including technical data such as reference sheets for build records, dimensional and setting checks and for signed-off inspection and FAT Test documentation including EMC testing;
- (b) equipment serialisation of serial-numbered components (including mechanical, pneumatic and electrical items and any other items agreed between the Parties) and configuration charts;
- (c) reference sheets for functional test records;
- (d) reference sheets for commissioning test records and records of maintenance carried out by the Manufacturer prior to Acceptance;
- (e) the status of Modifications, Mandatory Modifications and Changes, including records of Software version numbers;
- (f) records of Integration Testing;
- (g) records of maintenance demonstration tests set out in paragraph 5 of schedule 7 (Testing);
- (h) records of any agreed derogations or concessions;
- (i) work required to be carried out prior to Provisional Acceptance of a Train;
- (j) status of fleet checks applicable to that Train;
- (k) dates of each Train Log Book update; and
- (l) names of individuals who made the Train Log Book updates.

7.2 Each reference sheet relating to testing in a Train Log Book shall include, as a minimum, the following information:

- (a) the date of each test;
- (b) the test procedure number and issue level for the relevant test; and
- (c) the result of that test.

7.3 The Manufacturer shall note in the relevant Train Log Book any Preconditions that have been notified to it by the Purchaser pursuant to clause 15.10 of this Agreement.

8. **VERIFICATION AND VALIDATION PLANS**

- 8.1 The MTAPs shall include a set of verification and validation plans for each of the Technical Cases that describe the means (whether by testing, certification or otherwise) by which the Manufacturer proposes to demonstrate to the Purchaser that a particular requirement (whether statutory, regulatory, contractual or otherwise) has been satisfied ("**Verification and Validation Plans**"). Following Approval of the relevant MTAP, the Manufacturer shall comply with any Verification and Validation Plans included in such MTAP for the duration of the Assurance Period.
- 8.2 The Manufacturer shall produce a Requirements Verification & Validation Matrix and Report for the Trains, each System and each item of Equipment and submit each Requirements Verification & Validation Matrix and Report for Approval by the Purchaser as required by the TAP.

9. **PROGRESSIVE ASSURANCE**

9.1 **Engineering "V" Life Cycle**

- (a) Progressive Assurance shall be undertaken by the Manufacturer as required by the TAP.
- (b) As part of the systems engineering techniques implemented by the Manufacturer pursuant to the TAP, the Manufacturer shall at the end of each Stage undertake an interdisciplinary review of each System, so as to ensure its effective integration and/or interaction with the other Systems and so that evidence is available to confirm to the reasonable satisfaction of the Purchaser the completion of all of the deliverables and any outstanding issues for the relevant Stage.

9.2 **Reliability and Resilience**

- (a) All aspects of the design and manufacture of the Train and its Systems shall be demonstrably undertaken in a way that delivers the required MDBSAF, as described in the Train Technical Specification. Without prejudice to its other obligations in this Agreement, the Manufacturer shall produce a plan (the "**Reliability, Availability & Maintainability Plan**" or "**RAM Plan**") setting out how the Manufacturer will meet its Train reliability obligations and shall include a MDBSAF prediction (which will be no worse than the reliability growth commitment that the Manufacturer submitted to the Purchaser in response to the invitation to negotiate as attached at appendix 4 (Bid Reliability Growth Commitment) to this schedule 6) for each TfL Period from the first TfL Period after the TfL Period in which the fifth Train is scheduled to achieve QPAC/PAC. The Manufacturer shall submit the RAM Plan for Approval by the Purchaser as required by the TAP.
- (b) The Manufacturer shall take into consideration the effect of potential failures of all assets, corrective and preventive maintenance times and redundancies built into the design.
- (c) The Manufacturer's interface management with others shall include RAM performance at interfacing points.
- (d) The Manufacturer shall follow the approach of BS EN 50126:1999 "Railway applications - The specification and demonstration of Reliability, Availability, Maintainability and Safety (RAMS)".
- (e) The RAM Plan shall detail how the Manufacturer will comply with the RAM requirements of BS EN 50126 and to identify the process for demonstrating that the RAM requirements are met.

- (f) This RAM Plan shall describe the following as a minimum:
- (i) organisation of the RAM team for the Works, including the position within the Manufacturer's organisation;
 - (ii) management of RAM-related interfaces between the Systems;
 - (iii) management of RAM-related interfaces with the RCS;
 - (iv) management of RAM-related interfaces with the Network;
 - (v) apportionment of RAM targets to the Systems;
 - (vi) provisions and procedures for providing feedback to and interacting with other disciplines in the Manufacturer's team, e.g. safety engineering, design, maintenance and commissioning;
 - (vii) planned RAM assessments to demonstrate that the system RAM requirements are met by the Manufacturer design;
 - (viii) RAM methods to be used;
 - (ix) management of Subcontractors' RAM requirements;
 - (x) verification and validation of assessments, including data;
 - (xi) validation of RAM requirements during manufacture, installation, commissioning and maintenance;
 - (xii) record keeping of RAM assessments;
 - (xiii) DRACAS/FRACAS procedure;
 - (xiv) high level schedule for deliverables; and
 - (xv) RAM demonstration plan.
- (g) The Manufacturer shall submit a RAM Case as described in the TAP setting out how the Manufacturer has met the Train and System reliability obligations and the MDBSAF targets.
- (h) The RAM Plan shall be submitted to the Purchaser for Approval within three (3) months of the Commencement Date.
- (i) Any further revisions to the RAM Plan shall be submitted to the Purchaser for Approval.

9.3 **DRACAS/FRACAS**

- (a) The Manufacturer shall establish, document and maintain procedures for, and operate, a DRACAS/FRACAS covering its scope of supply under this Agreement.
[REDACTED].
- (b) The Manufacturer shall ensure that DRACAS/FRACAS is used to gather information on the types and causes of faults found in the Trains, Systems, Equipment, documentation or software to enable the Manufacturer to take action to correct the faults to be taken in a controlled and timely manner.

- (c) The Manufacturer shall ensure that DRACAS/FRACAS is established during the AoD Integrated Train (Final Design Phase) (as defined in the TAP) and is then applied until the end of the Train Warranty Period.
 - (d) The Manufacturer shall ensure that it records all actual or suspected errors, non-conformances, failures, defects, incidents and accidents arising in relation to, or in connection with, any Trains, Systems and Equipment and/or any process relating to the design, manufacture, testing, commissioning and supply of any Trains, Systems and Equipment together with details of any remedial actions taken by the Manufacturer and/or any Subcontractor and such information shall be provided to the Purchaser on request.
 - (e) The Manufacturer shall provide all DRACAS/FRACAS reports, covering faults recorded and actions taken to correct faults, to the Purchaser, and such reports shall be jointly agreed at the Manufacturer's cost and risk.
- 9.4 The Manufacturer shall ensure that the RAM Plan describes the process for such DRACAS/FRACAS.

10. ASSURANCE MANAGEMENT

10.1 Configuration Management

The Manufacturer shall establish, implement and maintain a configuration management system that complies with the requirements of ISO 10007:2003 (Quality management systems – Guidelines for configuration management), and shall prepare and submit a Configuration Management Plan to the Purchaser for Approval as required by the TAP.

10.2 Technical Change Control

- (a) During the design life of the Trains, the Manufacturer shall establish and implement a process (the "**Change Control Process**") that is consistent with the Change Procedure and the process for implementing Permitted Design Changes pursuant to clause 10.6 of this Agreement. The Change Control Process shall enable the Manufacturer to manage, in a structured manner, any change to the scope, function, timeframes, cost and/or any technical aspect of the Trains, Systems or any item of Equipment as a result of a Change or otherwise.
- (b) The Manufacturer shall ensure that the Change Control Process includes a process for the categorisation of technical changes which is consistent with the Train Breakdown Structure and the Technical Case Plan.
- (c) Where a document, drawing and/or other information that has been Approved by the Purchaser requires amendment in connection with a Change, a Permitted Design Change or other requirement of this Agreement, the Manufacturer shall make such amendments as it considers necessary and submit the amended drawing, document and/or information to the Purchaser for Approval.

10.3 Defect and Corrective Action Recording

- (a) During the Assurance Period, the Manufacturer shall establish and implement a defect and corrective action recording system that records and enables analysis of all relevant information and data created by the Manufacturer and/or its Subcontractors in performing its obligations under this Agreement.
- (b) The Manufacturer shall ensure that it records all actual or suspected errors, non-conformances, failures, defects, incidents and accidents arising in relation to, or in connection with, any Trains, Systems or Equipment and/or any process relating to the design, manufacture, testing, commissioning and supply of any Train or item of

Equipment together with details of any remedial actions taken by the Manufacturer and/or its Subcontractors and such information shall be provided to the Purchaser on request.

10.4 **Systems Integration and Interface Management**

- (a) The Manufacturer shall take cognisance of the systems engineering requirements related to the integration of the Trains, Systems and Equipment with the RCS and other systems on the Network. During the Assurance Period, the Manufacturer shall establish and implement a systems integration management process, in accordance with the Purchaser Systems Engineering Management Plan (as defined in the TAP), that enables it to demonstrate compatibility of the Trains, Systems, and Equipment with the RCS and all parts of the Network. The Manufacturer shall develop a systems architecture, which details the interfaces of the Train, Systems and Equipment with all existing Network assets and systems and shall develop interface requirements for such interfaces, and shall submit such systems architecture and interface requirements for Approval by the Purchaser in accordance with the TAP. Following Approval by the Purchaser, the Manufacturer shall ensure that all such interface requirements are satisfied for the duration of this Agreement. A high level systems interface diagram is provided in section 2.3 of the TAP, which the Manufacturer may use for development of its systems architecture.
- (b) Upon request, the Manufacturer shall provide information in relation to systems integration and its management process to the Purchaser for the purposes of Progressive Assurance.
- (c) The Manufacturer shall work iteratively with all relevant third parties in order to manage all system interfaces with the Trains.

10.5 **Standards Management**

During the Assurance Period, the Manufacturer shall establish and implement a Standards management process that:

- (a) includes the creation and maintenance of a matrix that lists all Standards that apply to the performance by the Manufacturer of its obligations under this Agreement (a "**Standards Matrix**");
- (b) includes a process for the establishment and subsequent management of recording changes to the Standards using the Standards Matrix to identify the Standards that have changed after a specified date and the version of each Standard being complied with by the Manufacturer at any point in time;
- (c) details the applicable Standards clauses and the evidence that demonstrates compliance; and
- (d) enables evidence of compliance by the Manufacturer with each of the Standards listed in the Standards Matrix to be provided as part of a Technical Case.

10.6 **Requirements management**

- (a) During the Assurance Period, the Manufacturer shall establish and implement a management system that records the Manufacturer's compliance with each of the requirements set out in the Train Technical Requirements and, where appropriate, to generate more detailed requirements to be used in the design of the Trains, Systems and Equipment (the "**Requirements Management System**").
- (b) The Manufacturer shall ensure that the Requirements Management System is consistent with the requirements of clause 10.6 of this Agreement, including the

right of the Purchaser to make Permitted Design Changes to the Train Technical Requirements.

- (c) The Manufacturer shall prepare a Requirements Verification & Validation Matrix and Report for each System and each item of Equipment, and for the Train itself, and submit these as part of the Technical Case evidence at particular Assurance Stages as detailed within the TAP.
- (d) The Manufacturer shall prepare Verification & Validation Reports (as described in the TAP) for each system or Equipment and for the Train itself, and submit these as part of the Technical Case evidence at particular Assurance Stages as detailed within the TAP.

11. **TRAIN DESIGN OBLIGATIONS**

11.1 Without prejudice to any of the Manufacturer's other obligations in this Agreement, the Manufacturer shall design the Trains, Systems and Equipment with all due skill, care, diligence, prudence and foresight to be expected of appropriately qualified and experienced professional designers and engineers with experience in carrying out work of a similar scope, type, nature and complexity to that required under this Agreement. The Manufacturer shall:

- (a) prepare the detailed Train, Systems and Equipment Design in accordance with the requirements of this Agreement;
- (b) ensure that the detailed Train, Systems and Equipment Design will enable the Works to comply with the requirements of the Train Technical Specification and, subject thereto, will meet the requirements of the Manufacturer Train Proposal;
- (c) comply with the checking and safety audit procedures set out in schedule 5 (Contract Management); and
- (d) comply with the Quality Management Plan.

11.2 The Manufacturer shall ensure that the Train, Systems and Equipment Design is:

- (a) planned and managed in accordance with a formal, structured, documented and auditable process;
- (b) undertaken by competent personnel;
- (c) subject to regular planned Train, Systems and Equipment Design reviews;
- (d) checked by the Manufacturer at all stages of the Train, Systems and Equipment Design using persons who were not directly responsible for producing the Train, Systems and Equipment Design; and
- (e) checked by an Independent Assessor at all stages of the Train, Systems and Equipment Design. The Independent Assessor shall be appointed by the Manufacturer and shall be independent of their (and their Subcontractors) organisation and shall have no other involvement or interest in the design, manufacture and commissioning of the Trains, Systems or Equipment.

12. **TRAIN SYSTEM DESIGN ASSURANCE**

Throughout the Design Phase the Manufacturer shall use Progressive Assurance to demonstrate to the reasonable satisfaction of the Purchaser that the proposed design of the Trains, Systems and Equipment satisfies the requirements specified in the Train Technical Requirements.

12.1 Train Design Management Plan

- (a) The Manufacturer shall prepare a Train design management plan (the "**Train Design Management Plan**") which shall, as a minimum, contain:
 - (i) the Train design strategy, which will describe how the Manufacturer will produce an integrated, assured, certified design;
 - (ii) the design organisation the Manufacturer plans to put in place to undertake the Train design;
 - (iii) the Train Breakdown Structure as described in paragraph 12.3;
 - (iv) the Design Submission Programme as described in paragraph 12.4; and
 - (v) the Train design review and verification procedures and the link with each Assurance Stage.
- (b) The Train Design Management Plan shall be submitted to the Purchaser, for Approval, within four (4) weeks from the Commencement Date and any further revisions to the Train Design Management Plan shall be submitted to the Purchaser for Approval.

12.2 Design Phases

- (a) In order to gain sufficient assurance that the design meets the Purchaser's requirements, the Manufacturer shall submit design information to the Purchaser in a two (2) stage process as follows (subject to the more detailed requirements of this schedule 6 and the TAP):
 - (i) a Preliminary Design Phase; and
 - (ii) a Detailed Design Phase.
- (b) The detailed scope of each of the Preliminary Design Phase and the Detailed Design Phase is described below in paragraphs 12.5 and 12.6 respectively.
- (c) The Permitted Design Changes which may be notified by the Purchaser to the Manufacturer in accordance with clause 10.6 of this Agreement are set out in appendix 1 (Permitted Design Change) to this schedule 6.

12.3 Train Breakdown Structure

During the Assurance Period, the Manufacturer shall submit any updates or amendments to the Train Breakdown Structure as may be necessary or desirable, for Approval by the Purchaser. The Manufacturer warrants to the Purchaser on the date of this Agreement, and on each date on which the Purchaser Approves any amendment or update to the Train Breakdown Structure, that:

- (a) the Train Breakdown Structure (as amended as at the date of such warranty) constitutes the complete design of the Train broken down into Systems; and
- (b) the scope of each System has been chosen in order that the design of the Trains may be fully reviewed in discrete manageable packages in the necessary detail required by the Purchaser.

12.4 **Design Submission Programme**

The Manufacturer shall prepare and submit to the Purchaser for Approval at AiP (as defined in the TAP) a design submission programme (the "**Design Submission Programme**") shall include, as a minimum, the following:

- (a) a description of the mechanical, electrical and/or other systems constituting each System; and
- (b) a programme for the preparation and completion of the design of the Train, Systems and Equipment which:
 - (i) is consistent with the Project Programme and the TAP and indicates the proposed dates when the Manufacturer intends to submit the Preliminary Design Submissions and the Detailed Design Submissions to the Purchaser for Approval; and
 - (ii) indicates the proposed duration of the Preliminary Design Phase and the Detailed Design Phase.

12.5 **Preliminary Design Phase**

- (a) During the Preliminary Design Phase, the Manufacturer shall submit the submissions described in this paragraph 12.5(a) ("**Preliminary Design Submissions**") to the Purchaser for Approval in accordance with the Design Submission Programme. The Preliminary Design Submissions shall include, as a minimum:
 - (i) a list of the requirements to be adopted by the Manufacturer in undertaking the design of the Trains, Systems, and Equipment;
 - (ii) a justification that the requirements specified in paragraph (i) are consistent with the Train Technical Requirements and all Applicable Laws and Standards;
 - (iii) a description of the overall concept of the design together with evidence that it satisfies the requirements specified in paragraph (i);
 - (iv) the manner in which the requirements specified in paragraph (i) will be verified;
 - (v) the suite of documents as required in the MDL;
 - (vi) an up-to-date list of the Key Subcontractors and any other important subcontractors or suppliers that will be involved in the design, manufacture, commissioning, testing and supply of the Trains, Systems and the Equipment;
 - (vii) a summary of any new or novel technology to be utilised in the Trains and Systems and evidence that such technology does not materially affect the risk of the Manufacturer being unable to perform its obligations under this Agreement; and
 - (viii) a list of the principal interfaces with the Train and Systems design.
- (b) Following Approval of all Preliminary Design Submissions by the Purchaser, the Purchaser shall notify the Manufacturer in writing that the Preliminary Design Phase has been completed.

12.6 Detailed Design Phase

- (a) During the Detailed Design Phase the Manufacturer shall submit the submissions described in this paragraph 12.6(a) ("**Detailed Design Submissions**") to the Purchaser for Approval in accordance with the Design Submission Programme. The Detailed Design Submissions as a minimum shall include:
 - (i) visual representations, the Mock-Up and any further mock-ups in sufficient detail to allow the detailed review of the design of the Trains, Systems and Equipment by the Purchaser;
 - (ii) evidence that the design of the Trains, Systems and Equipment satisfies the Train Technical Requirements, Applicable Laws and Standards and the other requirements specified in this Agreement;
 - (iii) design assurance documentation to the reasonable satisfaction of the Purchaser and, if part of the design is service-proven, previous service history; and
 - (iv) evidence that the Train, Systems and Equipment Design and the Train Maintenance Plan are compatible with each other.
- (b) Following Approval of all Detailed Design Submissions by the Purchaser, the Purchaser shall notify the Manufacturer in writing that the Detailed Design Phase has been completed.

12.7 Trains and Equipment Design Review Meetings

- (a) The Manufacturer shall provide suitable representatives to attend Train, Systems and Equipment Design review meetings with the Purchaser, at such frequency as the Purchaser may require (but which shall not be more frequently than one meeting per week unless agreed by the Manufacturer, acting reasonably), and which shall be held at the Purchaser's offices unless otherwise agreed. The Manufacturer shall take minutes at each Train, Systems and Equipment Design review meeting and circulate copies of the minutes to the Purchaser for agreement. Once agreed by the Parties, these minutes shall form a full and accurate record of the meeting.
- (b) Where the scope of the Train, Systems and Equipment Design review meeting includes Systems or Equipment supplied by a Key Subcontractor, the Manufacturer shall procure that the relevant Key Subcontractor attends the Train, Systems and Equipment Design review meeting.

APPENDIX 1**Permitted Design Changes**

Permitted Design Changes	Design Freeze Date
Passenger Information System – format, wording and triggering of messages (audio and visual)	
Selective Door Opening System – platform length settings per station	
Traction Power Limit Settings	
Train Management System – wording of alarms, prompts and messages	
Train Management System – prioritisation and routing of alarms and messages	
Saloon HVAC system – setting of temperatures and timing of energy-saving modes	
Passenger loadweighing – format and routing of data outputs	
Interior & Exterior Schedule of Finishes, comprising: Emergency Driving Panel colour Saloon flooring colours and patterns Saloon interior panelling colours and application Inter-car gangway colour Saloon seats trim fabric (colours and patterns only) Saloon fittings including grab poles and rails materials and colours Saloon signage- mandatory and branding; type and location Exterior Livery colours and application Exterior signage- mandatory and branding; type and location.	
Emergency Driving Panel (EDP) equipment layout (where not mandated by Standards)	
Interior design, comprising:	

Permitted Design Changes	Design Freeze Date
Passenger operated controls and communication devices- location and integration into the interior design	
Longitudinal seat detail design principles	
Transverse seat detail design principles	
Tip up seat detail design principles	
Grab pole/ hand rail/ handhold form and detail design principles	
Draught screen form and detail design principles	
Advert card holder design	
Passenger information display –integration into the interior design	
Electronic advertising display –integration into the interior design	
Key/Lock types- passenger/crew areas	
Simulator – simulation environments	
Simulator – parameters for functions and scenarios	
Simulator – simulated faults	
Simulator – training reports content and format	

APPENDIX 2

Train Breakdown Structure

[illegible]

APPENDIX 3

Engineering Safety Management Plan – Contents

Listed below are the required minimum proposed contents of the Engineering Safety Management Plan to be prepared by the Manufacturer. The Manufacturer may implement an alternative structure of headings provided that the requirements of the listed contents are addressed. Where appropriate, the Manufacturer may make reference to existing internal processes for engineering safety management and in such instances copies of such internal processes shall be provided with the Engineering Safety Management Plan.

1. SAFETY POLICY AND STRATEGY

Brief outline of the Manufacturer's own safety policy, strategy and arrangements for achieving engineering safety for the Works.

2. SCOPE OF THE PLAN

2.1 What is covered, and what is not covered, by the Engineering Safety Management Plan, with reference to the scope of the Works. Any constraints or assumptions relating to the scope of the Engineering Safety Management Plan should be described.

2.2 Explanation should be given of how the relationships between engineering safety, RAM, EMC/EMI, human factors, testing and commissioning activities will be managed by the Manufacturer. Reference shall be made to the Manufacturer documentation, plans or strategies for managing these activities.

2.3 The Engineering Safety Management Plan shall include a system software safety plan prepared in accordance with BS EN 50128.

3. ENGINEERING SAFETY ORGANISATION

3.1 A description and organisation chart of the Manufacturer's safety organisation and its interfaces.

4. ENGINEERING SAFETY MANAGEMENT PRINCIPLES

4.1 Explanation of the engineering safety management principles being employed by the Manufacturer (including engineering safety and system safety), which should include, as a minimum:

- (a) the safety management system complying with DLR 'Business Critical Processes';
- (b) the Safety Cases required pursuant to the TAP demonstrate that the implemented railway system solution and its application achieve the criteria for safety;
- (c) a framework supporting thorough and systematic identification and mitigation of risk is implemented;
- (d) a close interaction between engineering and system safety being established, to ensure that safety is an integral part of systems design;
- (e) a safety approval process involving supplier, projects and client being followed to ensure that safety deliverables are of the required specification;
- (f) a safety approval process being supported by provision of evidence to support safety authorities (for example, evidence of safety requirement validation, verification of safety case constraints);

- (g) a close interaction with all relevant stakeholders being established to ensure that safety is an integral part of system implementation;
 - (h) the dependences, constraints and assumptions identified by the Manufacturer will be validated, recorded and managed in the Assumptions and Dependences Register;
 - (i) safety responsibility being defined and communicated to all; and
 - (j) Manufacturer and suppliers undertaking relevant ESM activities as defined in the Engineering Safety Management Plan.
- 4.2 In order to satisfy these principles and the requirements, the Manufacturers ESM approach should include the following key elements:
- (a) establishing procedures for ESM;
 - (b) setting safety objectives and safety requirements for the Trains and the Systems;
 - (c) defining the scope of the proposed changes to the railway system occurring throughout the Project lifecycle;
 - (d) identification of emergent, system generated hazards (causes to the core hazards) through systematic safety analysis;
 - (e) identification of risk assessment techniques such as FTA and FMECA to be applied;
 - (f) assessing safety risks against predefined safety risk criteria and processes for deciding on appropriate action;
 - (g) elicitation of and demonstrating compliance against, the safety requirements. The identified controls and mitigations being detailed within the safety requirements, which present the functional, performance and operational requirements of the system necessary to uphold safety of the system design and its operation;
 - (h) establishing a system hazard record which records all Train and System interface hazards, grouped in the core hazards, and the means by which each hazard is managed and addressed;
 - (i) establishing safety integrity levels for each System;
 - (j) managing any non-compliance with Standards or with the Train Technical Specification through the change control and assurance process;
 - (k) roles and responsibilities;
 - (l) stakeholder engagement;
 - (m) delivery of key safety deliverables. In particular, the production of an Integrated Train Safety Case which is:
 - (i) incremental – reflecting the staged approach to delivery of the requirements. For each following issue of a Safety Case, the underlying safety argument will build upon the safety arguments, safety processes and safety management activities as developed during the previous stages of the project;
 - (ii) hierarchical – in terms of the Integrated Train Safety Case and the System Product Engineering Safety Cases;

- (iii) where possible, supported by certification of conformance of the constituent Systems; and
- (iv) submitted for Approval at each Assurance Stage as required by the TAP.

5. **SAFETY REQUIREMENTS**

- 5.1 A description of how the Systems safety requirements (including safety integrity levels, where appropriate) are to be derived from the Train Technical Specification, Standards and other sources, and how and where compliance will be demonstrated.
- 5.2 The Manufacturer is required to prepare a separate safety requirements specification (the **"Safety Requirements Specification"**) as required by the TAP for Approval by the Purchaser. Alternatively, the Manufacturer may (but only with the prior written agreement of the Purchaser) identify safety requirements as part of the overall system requirements traceability strategy and not prepare a separate Safety Requirements Specification providing all the requirements are met to the Purchaser's satisfaction.

6. **SAFETY ANALYSIS METHODOLOGY**

The tools and techniques to be applied during engineering safety assessment will depend on the complexity of the system(s), the perceived magnitude of the safety risks and whether the design is new/novel or bespoke. This section of the Engineering Safety Management Plan shall describe those safety analysis processes the Manufacturer intends to implement with reference to recognised standards or internal procedures. This may include, but is not limited to:

- (a) hazard management;
- (b) hazard identification (e.g. HAZOP, HAZID);
- (c) interface hazard analysis (e.g. IHA);
- (d) semi-quantitative risk assessment (e.g. risk matrix);
- (e) quantitative risk assessment (e.g. FMECA, FTA, ETA);
- (f) engineering safety auditing (internal and external); and
- (g) approach for demonstrating ALARP.

7. **SAFETY JUSTIFICATION STRATEGY**

Description of the proposed content of safety justifications supporting engineering safety assurance and approvals. To include:

- (a) System Technical Case(s) – in situations where it is necessary to seek pre-approval of new/novel or bespoke design equipment;
- (b) Assurance Stage engineering safety management reports; and
- (c) system engineering safety justification(s) – design and final.

8. **APPROVAL PROCESS**

Description of the internal verification, validation and approvals process for the engineering safety deliverables. Explanation shall be given regarding the requirement for, and proposed involvement of, any independent reviewers.

9. **SAFETY APPROVAL OF MODIFICATIONS**

- 9.1 Explanation of how engineering safety implications of design modifications and value engineering are to be assured and approved throughout the delivery of the Works (i.e. control of design changes).

10. **OPERATION AND MAINTENANCE PERFORMANCE**

- 10.1 Summary of the process for analysing operation and maintenance performance to ensure realised safety is compliant with service performance data and operational requirements.
- 10.2 It is expected that the Manufacturer will run appropriate HAZOPs or similar studies, involving the Purchaser, the Franchisee and others, to ensure operational and maintenance issues are adequately addressed.

11. **CONTROL OF SAFETY INTERFACES**

- 11.1 Identification of, and description of the process for, engineering safety management activities at internal and external interfaces, in particular those interfaces relating to systems integration requirements arising from the operation of Trains with the RCS on the Network.
- 11.2 The Manufacturer will prepare an IHA to confirm the engineering safety implications at internal and external interfaces have been adequately addressed and managed. The IHA will involve the Purchaser and all relevant interfacing contractors and third Parties.
- 11.3 The IHA will take cognisance of the systems engineering requirements related to the integration of the Trains with the RCS and other systems on the Network.

12. **SUBCONTRACTOR SAFETY MANAGEMENT**

- 12.1 Explanation of how the engineering safety management arrangements of Subcontractors and suppliers will be managed to be compatible with the Engineering Safety Management Plan.

13. **ASSUMPTIONS, DEPENDENCIES AND RESTRICTIONS**

- 13.1 The dependences, constraints and assumptions identified by the Manufacturer shall be validated and recorded and managed in the Assumptions and Dependencies Register.

14. **ENGINEERING SAFETY ACTIVITIES AND DELIVERABLES**

- 14.1 A programme of engineering safety activities and deliverables throughout the Assurance Period.

APPENDIX 4

Bid Reliability Growth Commitment

APPENDIX 5

BCP 14 – Assurance of Non Signalling Assets

APPENDIX 6

**Technical Assurance Plan
(1499901-DLR-RSTK-TR600_Z-IE-K-0046)**

SCHEDULE 7

Testing

Part 1 - Testing Requirements

1. **TESTING STRATEGY, TESTING PROGRAMME AND SCHEDULE OF TESTS**
 - 1.1 The Manufacturer shall perform Tests on the Trains, Systems and Equipment in accordance with Applicable Laws and Standards including BS EN 50215:2009 "Railway applications - Testing of rolling stock after completion of construction and before entry into service" in order to demonstrate (to the satisfaction of the Purchaser) that the Trains, Systems and Equipment have been built in accordance with every part of the Train Technical Requirements, the obligations of this Agreement and all Applicable Laws and Standards.
 - 1.2 For the purposes of this schedule 7, the abbreviations "AiP", "AoD", "Aft-MTT", "Aft-GO" and "AoA" shall mean the respective Assurance Stages as described in the TAP. The Manufacturer's testing obligations pursuant to this schedule 7 shall be without prejudice to any of the Manufacturer's obligations pursuant to schedule 6 (Assurance), including the TAP.
 - 1.3 As part of the Technical Case to be submitted by the Manufacturer for Approval at AiP, the Manufacturer shall submit to the Purchaser for Approval:
 - (a) an updated version of the testing strategy (in the form set out in part 2 (Testing Strategy)), which shall, inter alia, identify in those tests which, if the Purchaser exercises an Option to acquire Option Trains, will need to be carried out again in relation to the Option Trains;
 - (b) an updated testing programme (in the form set out in part 4 (Testing Programme)); and
 - (c) an updated schedule of tests (in the form set out in part 3 (Schedule of Tests)),

together, setting out how and by which dates the Manufacturer shall satisfy the requirements of paragraph 1.1 of this part 1 (Testing Requirements), and each in compliance with all other requirements of this part 1 (Testing Requirements).
 - 1.4 As part of its review of the testing strategy, schedule of tests and testing programme submitted by the Manufacturer pursuant to paragraph 1.3 above, the Purchaser may specify any additional tests which it requires in order to be assured that the Train, System and/or Equipment (as the case may be) has satisfied all of the requirements specified in this Agreement. Upon Approval of such draft testing strategy, draft schedule of tests and draft testing programme, they shall be the **"Testing Strategy"**, **"Schedule of Tests"**, and **"Testing Programme"**, respectively, for the purposes of this Agreement.
 - 1.5 The Testing Strategy, the Schedule of Tests and the Testing Programme shall together describe and set out the nature of the tests, specifications, methodology, pass/fail criteria, test location and date for each test against the corresponding part of the Train Technical Specification and shall comprise the following parts:
 - (a) System and Equipment FAT Tests (in accordance with paragraph 2);
 - (b) System and Equipment EMC Tests and Train EMC Tests (in accordance with paragraph 3);
 - (c) Train FAT Tests (in accordance with paragraph 4);

- (d) reliability and maintainability demonstration testing (in accordance with paragraph 5);
 - (e) Train Depot Testing (in accordance with paragraph 6);
 - (f) Network Testing (in accordance with paragraph 7);
 - (g) the Energy Consumption Test (in accordance with paragraph 8); and
 - (h) Equipment Acceptance Tests (in accordance with paragraph 9).
- 1.6 The Manufacturer shall submit a full test plan to the Purchaser in respect of each test described in the Schedule of Tests, and the Testing Programme shall indicate the date when such test plan shall be provided to the Purchaser for Approval as part of the Technical Case with respect to the Train to be submitted at AiP. Testing carried out pursuant to a test plan which has not been Approved shall be at the Manufacturer's risk and the Purchaser shall have the right to request that the Manufacturer repeat such test pursuant to a plan that has been Approved by the Purchaser.
- 1.7 Without prejudice to the generality of paragraph 1.6 above, or to paragraphs 1.9 and 1.10 below, the Manufacturer shall provide the following test plans and test reports to the Purchaser for Approval at the relevant Assurance Stage (as required by schedule 6 (Assurance), including the TAP):
- (a) the Train FAT Test plan, the Train EMC Test plan and the Depot Test plan as part of the Technical Case with respect to the Train to be submitted by the Manufacturer for Approval by the Purchaser at AoD with respect to the Train;
 - (b) the System and Equipment FAT Test plans and the System and Equipment EMC Test plans as part of the Technical Cases with respect to each System and each item of Equipment (respectively) to be submitted by the Manufacturer for Approval by the Purchaser at AoD with respect to the Systems and Equipment;
 - (c) test reports for all Train FAT Tests and System and Equipment FAT Tests, all System and Equipment EMC Tests, all Train EMC Tests, all Depot Tests and all reliability and maintainability tests and demonstrations, and a Mainline Test Track Test plan as part of the Technical Case with respect to the Train to be submitted by the Manufacturer for Approval by the Purchaser at Aft-MTT;
 - (d) test reports for all Mainline Test Track Tests and a Ghost Operations Testing plan as part of the Technical Case with respect to the Train to be submitted by the Manufacturer for Approval by the Purchaser at Aft-GO; and
 - (e) test reports for all Ghost Operations Testing and the Energy Consumption Test as part of the Technical Case with respect to the Train to be submitted by the Manufacturer for Approval by the Purchaser at AoA.
- 1.8 If the Manufacturer wishes to change any tests in the Schedule of Tests or Testing Programme, it shall submit to the Purchaser for Approval the proposed amended test specification with clearly defined pass/fail criteria at least two (2) months prior to the scheduled date of such test.
- 1.9 The Manufacturer shall conduct the Tests described in the Testing Strategy, the Schedule of Tests and the Testing Programme in respect of the Trains, Systems and Equipment and shall promptly and in any event no later than five (5) Working Days following the conduct of a test in respect of a Train, System or item of Equipment, provide the Purchaser with the results of that test, including test record sheets and whether the Train, System or item of Equipment passed or failed the test.

- 1.10 Within five (5) Working Days following the completion of a test the Manufacturer shall provide a report and test certificate to the Purchaser detailing the Tests undertaken and results achieved to demonstrate that the Train, System or Equipment has been built in accordance with the Train Technical Requirements, the obligations set out in this Agreement and all Applicable Laws and Standards. The Manufacturer shall ensure that the test certificate and the associated test report shall be cross-referenced and included in the Train Logbook.
- 1.11 If a test is failed, the Manufacturer shall advise the Purchaser of the proposed date of the re-test.
- 1.12 The Manufacturer shall ensure that any test failures are rectified both on the test Train, test System or test item of Equipment and all necessary Modifications carried out to ensure compliance on all other Trains, Systems and Equipment.
- 1.13 The Manufacturer shall set out in the Testing Strategy how it proposes to re-test those Trains, Systems or Equipment that undergo Modifications that arise during the manufacturing or testing process. The Manufacturer shall make all necessary allowance in the Testing Programme for such retesting.
- 1.14 All test equipment used for testing shall comply with BS EN ISO 10012 "Measurement management systems - Requirements for measurement processes and measuring equipment". Tests undertaken using equipment without valid calibration shall be void.
- 1.15 Without prejudice to clause 14.3 of this Agreement, the Purchaser or its representatives shall be entitled to witness any test and the Manufacturer shall provide a minimum of 20 Working Days prior written notice to the Purchaser of the testing being undertaken.
- 1.16 The Manufacturer shall procure access to the Test Track Facilities for the purposes of carrying out the Train FAT Tests and the reliability and maintainability testing and demonstrations. The Manufacturer shall propose Test Track Facilities which reflect the Network's system architecture as accurately as possible and which must be fit to complete all dynamic tests required by this Agreement, and any such proposed Test Track Facilities shall be subject to Approval by the Purchaser prior to the commencement of testing on the Test Track Facilities.
- 1.17 The Purchaser reserves the right to require (at any time) any additional tests where the Purchaser reasonably considers further evidence is required to demonstrate that the Train has satisfied any of the requirements specified in this Agreement and the Manufacturer shall carry out any such additional tests.

2. **SYSTEM AND EQUIPMENT FAT TESTS**

- 2.1 In the Schedule of Tests, the Manufacturer shall describe the routine tests to be undertaken by the Manufacturer during and after the manufacture of each System and item of Equipment to confirm quality, safety and functionality of such Systems and Equipment (the "**System and Equipment FAT Tests**"). If the Manufacturer has previously carried out equivalent tests on a particular System or item of Equipment, the Manufacturer may submit the test results of such previous tests, if it demonstrates to the satisfaction of the Purchaser that such test results (and the relevant test itself) satisfy the requirements for the relevant System or item of Equipment set out in this Agreement.
- 2.2 The System and Equipment FAT Tests shall be performed by the Manufacturer in accordance with the Testing Strategy, Schedule of Tests and Testing Programme, at the Manufacturer's Premises prior to AoD with respect to the Systems and Equipment.

3. **EMC TESTS**

- 3.1 In the Schedule of Tests, the Manufacturer shall describe the electromagnetic compatibility tests to be undertaken by the Manufacturer during and after the manufacture of:
- (a) each System and item of Equipment, to confirm the electromagnetic compatibility of such Systems and Equipment (the "**System and Equipment EMC Tests**"). If the Manufacturer has previously carried out equivalent tests on a particular System or item of Equipment, the Manufacturer may submit the test results of such previous tests, if it demonstrates to the satisfaction of the Purchaser that such test results (and the relevant test itself) satisfy the requirements for the relevant System or item of Equipment set out in this Agreement; and
 - (b) the Trains, to confirm the electromagnetic compatibility of the Train (the "**Train EMC Tests**").
- 3.2 The Manufacturer shall conduct the System and Equipment EMC Tests and the Train EMC Tests at the Manufacturer's Premises prior to AoD with respect to the Systems and Equipment and AoD with respect to the Train (respectively), in accordance with the Testing Strategy, Schedule of Tests and Testing Programme.

4. **TRAIN FAT TESTS**

- 4.1 In the Schedule of Tests, the Manufacturer shall describe the routine tests to be undertaken by the Manufacturer during and after the manufacture of each Train to demonstrate the quality, safety and functionality of such Train (the "**Train FAT Tests**").
- 4.2 The Manufacturer shall conduct the Train FAT Tests at the Manufacturer's Premises and on the Test Track Facilities in accordance with the Testing Strategy, Schedule of Tests and Testing Programme.
- 4.3 The Manufacturer shall carry out integration testing ("**Integration Testing**") to demonstrate that all Systems are integrated and to prove the compatibility of the Train, Systems and Equipment with:
- (a) the RCS; and
 - (b) the DLR Infrastructure.
- 4.4 Integration Testing shall consist of the following types of Tests:
- (a) interface tests: interface tests shall confirm that the interfaces between Systems have been implemented correctly. The corresponding test plans shall be written to demonstrate successful functionality of all interfacing systems across an interface boundary;
 - (b) safety tests: safety tests shall confirm that the safety-related functions work as required. The corresponding test plans shall be written in order to demonstrate that the function cannot invoke an unsafe situation. The testing plan shall test a scenario which may be potentially unsafe and verify that the system behaviour complies with safety requirements; and
 - (c) performance tests: performance tests shall confirm that the integrated system is able to operate and meet the expected performance requirements and demonstrate the integrated system robustness.
- 4.5 The Manufacturer shall carry out the Train FAT Tests across all modes of operation of the Trains (including system redundancy) as far as possible.

5. **RELIABILITY AND MAINTAINABILITY DEMONSTRATION TESTING**

- 5.1 The Manufacturer shall conduct reliability and maintainability demonstrations at the Manufacturer's Premises and on the Test Track Facilities in accordance with the RAM Plan as defined in schedule 6 (Assurance), the Testing Strategy, Schedule of Tests and Testing Programme.
- 5.2 The Manufacturer shall carry out equipment, component and system degradation testing at the Manufacturer's Premises and on the Test Track Facilities in accordance with the Testing Strategy, Schedule of Tests and Testing Programme, which shall include as a minimum:
- (a) degradation of performance, function or integrity;
 - (b) degradation of visual appearance or sound quality;
 - (c) pneumatic system depletion below minimum requirements;
 - (d) battery capacity below minimum requirements; and
 - (e) wheel tread profile.
- 5.3 The Manufacturer shall conduct endurance running of each Train on the Test Track Facilities as follows:
- (a) the first two (2) Trains shall each complete [REDACTED] (without intervention or remedial action by the Manufacturer's staff);
 - (b) the next three (3) Trains shall each complete [REDACTED] without a Technical Failure occurring; and
 - (c) each subsequent Train shall successfully complete [REDACTED] without a Technical Failure occurring.
- 5.4 Endurance running shall include, as a minimum, the following:
- (a) operation at full performance to replicate the typical RCS motoring-coasting-braking cycles in accordance with the Train Technical Specification;
 - (b) maximum acceleration, service braking with a non-receptive supply and emergency braking to be undertaken at a frequency to be proposed by the Manufacturer and agreed with the Purchaser;
 - (c) opening and closing of all passenger doors, with occasional obstacles; and
 - (d) test all Train-to-track and track-to-Train communications.
- 5.5 The Systems forming part of redundant train systems shall be tested by the Manufacturer during endurance running, including automatic changeover functions where appropriate.

6. **DEPOT TESTING**

- 6.1 In the Schedule of Tests, the Manufacturer shall describe the tests to be undertaken by the Manufacturer in relation to the delivery, re-assembly, static and dynamic testing of the Train at the Depot Testing Facilities, which shall (without limitation) demonstrate the compatibility of the Train with the Depot (the "**Depot Tests**").
- 6.2 The Depot Tests shall include those tests required to provide assurance in respect of individual Trains including post-delivery re-assembly, system integration and reliability

tests and the Manufacturer shall schedule the Depot Tests to comply with the Key Programme Dates.

- 6.3 Following AoD and prior to Aft-MTT, the Manufacturer shall conduct the Depot Tests at the Depot Testing Facilities in accordance with the Testing Strategy, Schedule of Tests and Testing Programme.

7. NETWORK TESTING

- 7.1 In the Schedule of Tests, the Manufacturer shall describe the nature and form of the tests to be undertaken by the Manufacturer:

- (a) on the Mainline Test Track (the "**Mainline Test Track Tests**"); and
- (b) on the Network as a whole (the "**Ghost Operations Testing**"),

which shall (without limitation) demonstrate compliance of the Train with the Train Technical Specification and compatibility of the Train with the Network and performance of the Train on the Network (together, "**Network Testing**").

- 7.2 Following Aft-MTT and satisfactory completion of the Depot Testing and prior to Aft-GO, the Manufacturer shall conduct the Mainline Test Track Tests on the Mainline Test Track in accordance with the Testing Strategy, Schedule of Tests and Testing Programme.

- 7.3 Following Aft-GO and satisfactory completion of the Mainline Test Track Tests and prior to AoA, the Manufacturer shall conduct Ghost Operations Testing on the Network in accordance with the Testing Strategy, Schedule of Tests and Testing Programme.

- 7.4 Network Testing shall include those tests required to provide assurance in respect of individual Trains, system integration and reliability tests and the Manufacturer shall schedule the tests to comply with the Key Programme Dates.

- 7.5 The Manufacturer may request use of the Network and Depot Testing Facilities for the purposes of Train FAT Testing but the Purchaser shall have no obligation to provide such access unless the test requires a demonstration of compatibility with the Network and the Manufacturer has satisfied the Purchaser that such test cannot be carried out on the Test Track Facilities.

- 7.6 The Parties acknowledge and agree that in respect of Network Testing:

- (a) the Manufacturer is responsible for:
 - (i) the provision of suitably competent persons necessary to conduct and supervise a Test and to perform all of the activities described in this paragraph 7.6;
 - (ii) the provision of any equipment, Spares and Special Tools necessary to conduct and/or monitor the tests to be performed by the Manufacturer and to undertake the activities under this paragraph 7.6;
 - (iii) the maintenance of the Trains prior to and after the conduct of a test and the repair and/or rectification of any Faults and/or damage;
 - (iv) obtaining any Relevant Approvals required to carry out the testing in accordance with any Applicable Laws and Standards;
 - (v) giving at least the minimum amount of notice to the Purchaser, as required by the Purchaser's rules governing access to the Network in force from time to time, of the start of any tests required on the running lines prior to

- approval to operate in traffic hours, including stabling requirements and paths to test locations;
- (vi) making submissions, in accordance with the Purchaser's rules governing access to the Network in force from time to time, to the Purchaser for the provision of suitable stabling, the necessary paths to and from the testing location, and suitable testing paths in each case for the relevant Trains;
- (vii) providing all necessary information to obtain a Safety Certificate to support Network Testing;
- (viii) producing, in conjunction with the Purchaser, a method statement covering all aspects of the proposed tests;
- (ix) paying all costs incurred by the Purchaser associated with the proposed testing except as referred to in paragraph 7.6(b) below;
- (x) ensuring that all of the Manufacturer's and Subcontractor's staff participating in tests attend and pass the Purchaser's medical examination and safety training; and
- (xi) ensuring that medical examinations and safety Training Courses, which are required for all Network Testing, are completed and passed at least thirty (30) Working Days before access is required;
- (b) provided that the Manufacturer complies with its safety obligations under this Agreement and has made the Trains available for the Network Testing within the timeframes agreed with the Purchaser, the Purchaser is responsible for:
 - (i) securing the paths and access rights for carrying out Network Testing as agreed in the Schedule of Tests;
 - (ii) providing necessary operators for the duration of each such test as agreed in the Schedule of Tests;
 - (iii) the provision of suitable secure stabling for the relevant Trains and the necessary paths to and from the testing location as agreed in the Schedule of Tests;
 - (iv) providing Training for the Manufacturer's personnel to undertake Network Testing;
 - (v) providing free-of-charge the traction power for all Network Testing;
 - (vi) providing access to equipment at the Depot for the purposes of maintainability demonstration testing where an interface with existing Purchaser equipment is required to demonstrate compliance;
 - (vii) providing access to existing trains for the purposes of Train recovery validation; and
 - (viii) providing the Training Courses referred to in paragraph 7.6(a)(xi), free of charge; and
- (c) save as where otherwise provided under this Agreement, any delay howsoever caused or arising in agreeing the Network Testing, obtaining a test path, conducting a test in accordance with the Testing Programme and/or any other event contemplated by this paragraph 7.6 shall not:

- (i) constitute a Change under the Change Procedure; or
- (ii) entitle the Manufacturer to an extension of time to the Contractual Acceptance Date for any Train or item of Equipment or otherwise entitle the Manufacturer to any relief from any of its obligations under this Agreement including any adjustment to the Key Programme Dates; or
- (iii) in any way entitle the Manufacturer to be reimbursed for any costs and expenses incurred or otherwise compensated in any form or manner.

8. **ENERGY CONSUMPTION TEST**

- 8.1 The Schedule of Tests shall set out a detailed specification of the tests to be carried out by the Manufacturer to calculate the energy consumption of a Train, thereby allowing measurement of the difference between (i) the ECT WLC for such Train; and (ii) the ECT Bid (the "**Energy Consumption Test**").
- 8.2 The Manufacturer shall conduct the Energy Consumption Test described in the Testing Strategy and Schedule of Tests in accordance with the Testing Programme.

9. **EQUIPMENT ACCEPTANCE TESTS**

- 9.1 The Schedule of Tests shall set out detailed specifications of the tests to be carried out by the Manufacturer to demonstrate compliance of each item of Equipment with the requirements of this Agreement (the "**Equipment Acceptance Tests**").
- 9.2 The Manufacturer shall conduct each of the Equipment Acceptance Tests described in the Testing Strategy and Schedule of Tests in accordance with the Testing Programme.

10. **DISPUTES**

Without prejudice to the requirement to comply with the Approval procedures, if the Parties do not agree any matter referred to in this schedule 7, then either Party may refer the matter as an Expert Dispute for resolution under the Dispute Resolution Procedure.

Part 2 - Testing Strategy

Part 3 - Schedule of Tests

Part 4 - Testing Programme

SCHEDULE 8**Spares and Special Tools****Part A****Capital Spares**

Item	Component	Base	Scenario 1	Scenarios 2 & 3
1	Car Body			
1.1				
1.2				
1.3				
1.4				
3	Bogie			
3.1				
3.2				
3.3				
3.4				
3.5				
3.6				
3.7				
4	Propulsion System			
4.1				
4.2				
4.3				
4.4				
4.5				
4.6				
4.7				

4.8				
4.9				
5	Battery			
5.1				
6	HVAC			
6.1				
7	Doors			
7.1				
7.2				
10	Braking System			
10.1				
10.2				
10.3				
10.4				
10.5				
11	Electronic systems			
11.1				
11.2				
11.3				
11.4				
11.5				
11.6				
11.7				
11.8				
11.9				
11.10				

11.11	[REDACTED] [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
11.12	[REDACTED] [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
11.13	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
11.14	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
11.15	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
11.16	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
11.17	[REDACTED] [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Part B

Warranty Spares, Purchaser Fault Spares and Maintenance Spares

1. Warranty Spares

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

2. Purchaser Fault Spares

1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9
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90	90	90	90	90
91	91	91	91	91
92	92	92	92	92
93	93	93	93	93
94	94	94	94	94
95	95	95	95	95
96	96	96	96	96
97	97	97	97	97
98	98	98	98	98
99	99	99	99	99
100	100	100	100	100

3. Maintenance Spares

[illegible]

[illegible]

Part C

Special Tools

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18
19	20	21
22	23	24
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40	41	42
43	44	45
46	47	48
49	50	51
52	53	54
55	56	57
58	59	60
61	62	63
64	65	66
67	68	69
70	71	72
73	74	75
76	77	78
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82	83	84
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94	95	96
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100	101	102

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████	██	█

Part D

Pro Forma Bill of Materials

Item Code	Item Type *	Parent Item	Category *	Zone Code *	Safety Criticality Rated Y/N*	Description	UOM	Price (£)	MOQ	EOQ	Lead Time (Working Days)	Warranty Period	Drawing Ref	Specification Ref	Component Overhaul Instruction Ref	OEM	OEM Part Number	OEM Drawing Ref	OEM Specification Ref	Serialised Part	Storage Instructions	Repairs	Design Life	ACS/Overhaul Component? Y/N	Relevant Sample

Bill of Materials

1. NOTES FOR THE COMPLETION OF THE BILL OF MATERIALS

- 1.1 The Bill of Materials (BoM) is to be provided in Microsoft Excel Format
- 1.2 The Bill of Materials is to be completed in full. Columns are free text with content to be completed by the Manufacturer. Columns with an * are to be completed using the options detailed below. Options are defined in paragraph 1.3 below.

1.3 Definitions

- (a) **"Item Code"** – Manufacturers part code for the Item. For Repair Services the Part Number is to be prefixed REP

- (b) **"Item Type"**

Example Options:

- (i) Component
- (ii) Assembly
- (iii) Sub Assembly
- (iv) Consumable
- (v) Repair Service
- (vi) Tool
- (vii) Tool Calibration Status

- (c) **"Parent Item"** – The Master Item to which a sub assembly or component relates.

- (d) **"Category"** – Train System to which the Item Described is incorporated.

Example Options:

- (i) Braking Systems
- (ii) Traction/Propulsion
- (iii) Doors
- (iv) Carbody
- (v) Bogie/Suspension
- (vi) Couplings
- (vii) Underframe
- (viii) Auxiliaries
- (ix) Heating & Ventilation
- (x) Air Supply
- (xi) Electrical Distribution

- (xii) Emergency Equipment
- (xiii) Fault Recording Equipment
- (xiv) Communications
- (xv) Paint
- (xvi) Shoeegear
- (xvii) FSA Equipment
- (e) **"Zone Code"** – Must be completed to four (4) digits as a minimum and 6 digits where appropriate.
- (f) **"Manufacturer's Location Code"** – if required, produced by the Manufacturer
- (g) **"Safety Criticality Rating"** – as described in the Train Technical Specification
- (h) **"Description"** – Worded description of item. May also detail specification and/or drawing reference
- (i) **"UOM"** – Unit of Measure
- (j) **"Price"** – To be priced in GBP inclusive of delivery, Tooling Charges and duty excluding VAT
- (k) **"MOQ"** – Minimum order quantity
- (l) **"EOQ"** – Economic order quantity
- (m) **"Lead Time"** – Agreed period of time from issue of Spares Purchase Order or Repair Purchase Order to delivery of the goods/services to the Customer's specified delivery location.
- (n) **"Warranty Period"** – Minimum period two (2) years. Period commences upon delivery of an Item to the Customer.
- (o) **"Drawing Ref"** - Any drawings related to the Item.
- (p) **"Specification Ref"** - Any specification documents related to the Item.
- (q) **"Component Overhaul Instructions (COI) Ref"** – Reference to the related COI for the Item.
- (r) **"OEM"** – Original Equipment Manufacturer of the Item
- (s) **"OEM Part Number"** - Original Equipment Manufacturer Part Number
- (t) **"OEM Drawing Ref"** - Original Equipment Drawing Reference
- (u) **"OEM Specification Ref"** – Original Equipment Manufacturer Drawing Reference
- (v) **"Serialised Part"** – Identify if the Part is serialised
- (w) **"Storage Instructions"** – Any specific instructions relating to storage
- (x) **"Repairs"** - Service Provider's Standard Labour Rate for Repairs
- (y) **"Design Life"** – as defined in clause 20.1

- (z) **"ACS/Overhaul Component? Y/N"** – Indicate whether or not this Part satisfies the definition of an ACS/Overhaul Component
- (aa) **"Relevant Sample"** – For ACS Services, the sample size of each ACS/Overhaul Component on which the Service Provider will carry out an Asset Condition Survey sufficient to give confidence to the Customer that (i) the sample is representative of the Fleet and (ii) the confirmation regarding Early Deterioration (or otherwise) in accordance with paragraph 8.4 of part B of schedule 1 (The Services) of the FSA is valid, and which in any event shall not be less than ten (10) per cent of the total number of such ACS/Overhaul Component provided

SCHEDULE 9

Part A

Maintenance Facilities

1. **INITIAL PURCHASER DEPOT WORKS**
 - 1.1 The Purchaser shall complete or procure the completion of the Initial Purchaser Depot Works in accordance with the Key Programme Dates.
 - 1.2 The Initial Purchaser Depot Works shall comprise:
 - (a) a maintenance facility building including at least one road (such road having the capability to lift a Train); and
 - (b) an 'ATO' test track capable of speeds of 35kph and 45kph on the curves and 50kph on the straight.
2. **FINAL PURCHASER DEPOT WORKS**
 - 2.1 The Purchaser shall complete or procure the completion of the Final Purchaser Depot Works in accordance with the Key Programme Dates.
 - 2.2 The Final Purchaser Depot Works shall comprise a maintenance facility building approximately [REDACTED] wide and capable of accommodating an [REDACTED] between coupling plates Train, including at least three (3) roads (and at least one such road having the capability to lift a Train).
 - 2.3 The internal fit-out of the Final Purchaser Depot Works shall meet the requirements of the Internal Depot Fit-Out Minimum Specification.

Part B

Manufacturer Depot Equipment

Part C

Internal Depot Fit-Out Minimum Specification

1. BECKTON DEPOT

The Internal Depot Fit-Out Minimum Specification for the Depot is as follows:

1.1 Depot specifications:

- (a) the location of the Depot is Beckton depot, Armada Way, London, E6 7FB;
- (b) there will be a lifting road in the maintenance facility building (the "**MFB**") which will be available for use by the Manufacturer in the period from the commencement of the testing and commissioning programme until the end of the Train Warranty Period;
- (c) the MFB will contain three (3) light maintenance pitted roads ("**LMPRs**") and one lifting road ("**LR**") with train lifting jacks in place. The three (3) LMPRs will be in a 'swimming pool' of a depth of 1.5m, with a centre pit running the length of each road. The LR will be at ground/track level;
- (d) the length of the tracks in the MFB will include, at each end, a minimum of five (5) metres in addition to the length of a fully stabled Train;
- (e) the distance between two (2) consecutive tracks, and between one track and an adjacent wall, will be sufficient to allow a forklift truck to reverse clear of a Train and perform a 90 degree turn;
- (f) there will be a shared access roof gantry between two (2) of the LMPRs;
- (g) a stores area will be available for use by the Manufacturer in the period from the commencement of the testing and commissioning programme until the end of the Train Warranty Period (the "**Manufacturer Stores Area**");
- (h) overhead lifting facilities will be provided by a runway lifting beam and powered hoist working along the full length of the shed and having a suitable lifting capacity to cater for the weight of roof mounted equipment;
- (i) an ATO test track will be provided, running along the northern perimeter of the site, which will be approximately 700m from end to end;
- (j) the following amenities shall be provided for the Manufacturer's staff:
 - (i) two (2) office spaces with a minimum footprint of 25m² each, provided with three (3) desks each;
 - (ii) access to a meeting/training room with a minimum footprint of 45m²; and
 - (iii) staff amenities and welfare area appropriate for 15 members of staff, with lockers, shower rooms and toilets, first aid room, kitchenette and mess room; and
- (k) the following facilities shall be provided at the pit road:
 - (i) single phase and three phase power supply;
 - (ii) max ten (10) bar compressed air line connections;

- (iii) water supply at 50m intervals;
- (iv) drainage;
- (v) 750v train shed shore supply; and
- (vi) pit lighting.

1.2 Manufacturer responsibilities:

- (a) the requirements for the Manufacturer Stores Area will be proposed by the Manufacturer during the Preliminary Design Phase for Approval by the Purchaser;
- (b) the Internal Depot Fit-Out Minimum Specification shall not include traffic management and temporary works required for the safe delivery and unloading of Trains (which shall be the responsibility of the Manufacturer);
- (c) the Manufacturer shall produce all necessary supporting documentation to enable the Manufacturer to comply with its obligations in relation to depot working under this agreement in accordance with all Applicable Laws and Standards, and submit such documentation to the Purchaser for Approval during the Preliminary Design Phase. The Purchaser shall consult the Manufacturer during the Design Phase, and the Manufacturer shall promptly provide such input into the final design of the MFB as the Purchaser may reasonably request, prior to delivery of the first Train, such that the Manufacturer can establish a safe method of working and produce the necessary method statements, risk assessments and any other supporting documentation required for all works to be undertaken by the Manufacturer at the Depot; and
- (d) the Manufacturer shall not be required to carry out stabling or movement of Trains at the Depot.

1.3 Depot restrictions:

- (a) no excessive noise is permitted at the Depot between the hours of 6.00 p.m. and 6.00 a.m.; and
- (b) Trains can only be delivered to the Depot during daylight hours.

SCHEDULE 10**Milestones and Security**

Part A	Advance Payment Bond
Appendix 1	Form of Advance Payment Bond
Part A2	Fleet Acceptance Bond
Appendix 1	Form of Fleet Acceptance Bond
Appendix 2	Fleet Acceptance Bond Required Amounts
Part B	Milestones
Appendix 1	Schedule of Milestones
Appendix 2	Total Contract Price
Appendix 3	Option 1 Re-Profiled Schedule of Milestones
Appendix 4	Option 1 Contract Price Table
Appendix 5	Option 2 Re-Profiled Schedule of Milestones
Appendix 6	Option 2 Contract Price Table
Appendix 7	Purchaser Milestone Payment Certificate
Appendix 8	Form of Re-Profiling Notice
Part C	Options for supply of further Trains and Equipment

Part A - Advance Payment Bond

1. ADVANCE PAYMENT BOND

1.1 Initial Advance Payment Bond

The Manufacturer shall, at its own cost, procure the issue of one or more Advance Payment Bonds from one or more Advance Payment Bond Providers in favour of the Purchaser for initial amounts equal to all Currency Elements of the first Milestone Payment (the "**Initial APB Bond Amounts**").

1.2 Initial Advance Payment Bond Provider

Any Advance Payment Bonds procured pursuant to paragraph 1.1 must:

- (a) be issued by a financial institution which is acceptable to the Purchaser (acting in its absolute discretion) and which either:
 - (i) has a long-term credit rating of [REDACTED] from Standard and Poor's Rating Services or the equivalent rating from any other agency of equivalent international reputation which rates the Advance Payment Bond Provider; or
 - (ii) at the Purchaser's absolute discretion, has a long-term credit rating of less than "A+" from Standard and Poor's Rating Services or equivalent rating from any other agency of equivalent international reputation which rates the Advance Payment Bond Provider;
- (b) have an expiry date which is no less than [REDACTED] from the date of issue of the Advance Payment Bond.

1.3 Calling the Advance Payment Bonds

The Purchaser shall be entitled to make a demand under any Advance Payment Bond(s):

- (a) in the event of any breach by the Manufacturer of the terms of this Agreement, in respect of any amounts due to the Purchaser (or to which it is entitled) as a result of such breach;
- (b) where this Agreement is terminated due to the occurrence of a Manufacturer Event of Default, for amounts in aggregate of the Required APB Bond Amounts, which amounts shall be paid into interest bearing accounts with a clearing bank of first class standing in London and held on trust for the Purchaser and the Manufacturer for application in or towards amounts due to the Purchaser following termination for a Manufacturer Event of Default as provided for in this Agreement;
- (c) where this Agreement terminates other than as contemplated by paragraph 1.3(b) (save where it terminates due to a Purchaser Event of Default), in respect of any amounts which the Manufacturer is liable to pay to the Purchaser (whether by way of indemnity or otherwise) and has failed to pay to the Purchaser; or
- (d) where the Manufacturer is liable to pay to the Purchaser (whether by way of indemnity or otherwise), and has failed to pay to the Purchaser, any amounts due and payable pursuant to this Agreement (other than as provided for in paragraphs 1.3(b) and 1.3(c)), in respect of such amounts,

and in each case the Purchaser shall be entitled to make such demand in respect of such amounts in the equivalent amount(s) of Pounds Sterling, Euros and/or Canadian Dollars (in which the relevant Advance Payment Bond(s) are issued) in the Purchaser's absolute

discretion, regardless of the currency or currencies in respect of which the Manufacturer is liable to pay to the Purchaser.

- 1.4 Without prejudice to its rights under paragraph 1.3, the Purchaser shall be entitled to make a demand under an Advance Payment Bond if the circumstances described in paragraph 3 (Defect in an Advance Payment Bond) arise in relation to that Advance Payment Bond.

1.5 Increases in the Required APB Bond Amount

Subject to paragraph 1.7, the Purchaser shall only be obliged to pay to the Manufacturer each Milestone Payment in accordance with this schedule 10 if:

- (a) in relation to the first Milestone Payment, the Manufacturer has provided one or more Advance Payment Bonds for the Initial APB Bond Amounts as specified in paragraph 1.1;
- (b) in relation to all subsequent Milestone Payments, the Manufacturer has provided and continues to provide one or (subject to paragraph 2 (Limit on Advance Payment Bonds)) more Advance Payment Bonds for (in aggregate) all Currency Elements of the Required APB Bond Amounts at such time which are in full force and effect on the date of the relevant Milestone Payment; and
- (c) in relation to any Milestone Payment that falls due before Acceptance of the first Train (other than the first Milestone Payment):
 - (i) in advance of the date of payment of such Milestone Payment, the Manufacturer has increased the APB Bond Amounts under the existing Advance Payment Bonds in aggregate by (and/or, subject to paragraph 2, procured the issue of one or more additional Advance Payment Bonds with APB Bond Amounts of) all Currency Elements of the relevant amounts specified against the relevant Milestone Payment in column (4) in the Schedule of Milestones set out in appendix 1 (Schedule of Milestones) to part B (Milestones) of this schedule 10; and
 - (ii) the Purchaser has received a certificate in the form set out in appendix 1 to the relevant Advance Payment Bond(s) as evidence that the aggregate of each Currency Element of the APB Bond Amounts under the Advance Payment Bonds have been increased by the relevant amounts of all Currency Elements specified against the relevant Milestone Payment in column (4) in the Schedule of Milestones set out in appendix 1 to part B of this schedule 10,

and the Required APB Amounts shall be increased accordingly.

1.6 Decreases in the Required APB Bond Amount

Subject to paragraph 1.7(c), upon Provisional Acceptance or Qualified Provisional Acceptance of each Train comprising the Base Order, each Currency Element of the Required APB Bond Amounts will be reduced by an amount equal to:

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where:

- A is an amount which is the aggregate of the Required APB Bond Amounts increases with respect to such Currency Element which are specified in column (4) in the Schedule of Milestones set out in appendix 1 (Schedule of Milestones) to part B

(Milestones) of this schedule 10, being [REDACTED] or CAD [REDACTED] as applicable to such Currency Element (with respect to such Currency Element, the **"Maximum IO Required APB Amounts"**); and

B is the number of Trains comprising the Base Order, being 43,

and the Purchaser shall issue a certificate in the form set out in appendix 2 to the relevant Advance Payment Bond(s) reflecting such reduction. If more than one Advance Payment Bond is in issue at any time that a reduction in the Required APB Bond Amounts occurs pursuant to this paragraph 1.6, the applicable reduction shall be applied pro rata as between the relevant Currency Element of APB Bond Amounts under such Advance Payment Bonds, unless the Parties agree otherwise. If the Manufacturer wishes such a reduction to be applied otherwise than pro rata as between the Advance Payment Bonds in issue at the relevant time, it shall notify the Purchaser of its alternative proposal at least ten (10) Working Days before the applicable reduction is to occur.

1.7 **Exercise of Options or other Changes involving advance payments**

(a) Following delivery of a Change Confirmation Notice in respect of an Option Train Change, the Manufacturer shall, as soon as practicable and in any event before any payment is due to be made by the Purchaser in relation to that Option:

- (i) subject to paragraph 2 (Limit on Advance Payment Bonds), deliver to the Purchaser one or more additional Advance Payment Bonds that comply with paragraphs 1.2(a) to (b) for the value of all Currency Elements of any initial payments to be made by the Purchaser in relation to that Option Train Change; or
- (ii) procure the extension of any then current Advance Payment Bonds by the amounts of all Currency Elements of any initial payments to be made by the Purchaser in relation to that Option Train Change; or
- (iii) put in place one or more new Advance Payment Bonds that comply with paragraphs 1.2(a) to (b) for the value of all Currency Elements of any initial payments to be made by the Purchaser in relation to that Option if no Advance Payment Bond is in place at that point,

such that the amounts of all Currency Elements of the initial payments due in relation to the relevant Option Train Change shall be added incrementally to the aggregate value of the Currency Elements of the then existing Advance Payment Bonds, and each Currency Element of the Required APB Amounts shall be increased accordingly. The provisions of paragraphs 3 (Defect in an Advance Payment Bond) and 4 (Replacement of an Advance Payment Bond Provider) shall apply in relation to all such Advance Payment Bonds.

(b) Following delivery of a Change Confirmation Notice in respect of an Option Train Change, the Purchaser shall only be obliged to pay to the Manufacturer each payment in the relevant Schedule of Payments (each an **"Option Milestone Payment"**) if:

- (i) in relation to the initial Option Milestone Payment, the Manufacturer has provided increased APB Bond Amounts in accordance with paragraph 1.7(a) above;
- (ii) in relation to all subsequent Option Milestone Payments, the Manufacturer has provided and continues to provide one or more Advance Payment Bonds for (in aggregate) all Currency Elements of the Required APB Bond Amounts at such time which are in full force and effect on the date of the relevant Option Milestone Payment; and

(iii) in relation to any Option Milestone Payment that falls due before Acceptance of the first Option Train (other than the first Option Milestone Payment):

- (A) in advance of the date of payment of such Option Milestone Payment, the Manufacturer has increased the APB Bond Amounts under the existing Advance Payment Bonds in aggregate by and/or subject to paragraph 2 (Limit on Advance Payment Bonds), procured the issue of one or more additional Advance Payment Bonds with APB Bond Amounts of) all Currency Elements of the amount of that payment; and
- (B) the Purchaser has received a certificate in the form set out in appendix 1 to the relevant Advance Payment Bond(s) as evidence that the aggregate of each Currency Element of the APB Bond Amount(s) under the Advance Payment Bonds has been increased by all Currency Elements of the required amount,

and the Required APB Amounts shall be increased accordingly.

(c) Subject to paragraphs 1.7(d) and 1.8, following delivery of a Change Confirmation Notice in respect of an Option Train Change, the provisions of paragraph 1.6 shall apply upon the Provisional Acceptance or Qualified Provisional Acceptance of each Train (whether comprising the Base Order or the Option Train Change) on the basis that:

- (i) the words "each Train comprising the Base Order" shall be replaced with "each Train comprising the Base Order or the Option Train Change"; and
- (ii) the formula in paragraph 1.6 shall be replaced with the following formula:



where:

IOA is the Maximum IO Required APB Amounts (as set out in paragraph 1.6);

OOA is an amount which is the aggregate of the amounts by which the relevant Currency Element of the Required APB Amounts is to be increased in relation to the Option Train Change (including the initial increase in accordance with paragraph 1.7(a));

RAR is the aggregate amount of any reductions in the relevant Currency Element of the Required APB Amounts that have occurred before the date of the relevant Change Confirmation Notice in accordance with paragraph 1.6;

B is the aggregate number of Trains comprising the Base Order and the Option Train Change that have not yet been Accepted as at the date of the relevant Change Confirmation Notice; and

C is the number of Trains being Accepted at the relevant time.

(d) The provisions of this paragraph 1.7 shall apply in relation to each successive Option Train Change (if any) in the same manner, save that for the purposes of paragraph 1.7(c) any previous Option Train Changes shall be deemed to form part of the Base Order (such that (A) the IOA in the formula shall include the OOA for

such previous Option Train Changes, (B) the B in the formula shall include the number of Trains comprising such previous Option Train Changes).

- 1.8 The provisions of paragraph 1.7 shall apply in relation to any Purchaser Change or Compensation Event that is the subject of a Change Confirmation Notice (or a Claim Confirmation Notice) and in respect of which the agreed Schedule of Payments requires the Purchaser to make payments in advance of Acceptance and delivery of the items that are the subject of the relevant Change, on the basis that all references to the "Option Train Change" are references to the relevant Purchaser Change (or Compensation Event). This paragraph 1.8 shall have effect even where the relevant Purchaser Change (or Compensation Event) does not include the delivery or Acceptance of additional Trains.

2. **LIMIT ON ADVANCE PAYMENT BONDS**

- 2.1 The Manufacturer may issue in favour of the Purchaser a maximum of the aggregate of:

- (a) [REDACTED] with respect to the Base Order; and
- (b) following the exercise of each individual Option by the Purchaser pursuant to clause 6.6 of this Agreement, [REDACTED] with respect to each such Option,

at any time.

- 2.2 Where the Purchaser is entitled to make a demand pursuant to paragraph 1.3, such demand shall be made under any or all of the issued Advance Payment Bonds (and for any Currency Element or Currency Elements of the APB Bond Amounts), in each case at the Purchaser's absolute discretion.

3. **DEFECT IN AN ADVANCE PAYMENT BOND**

3.1 **Maintenance of Advance Payment Bonds**

Subject only to the provisions of this part A, the Manufacturer shall maintain the continuing validity and effectiveness of each Advance Payment Bond until the date on which the Required APB Bond Amounts under the relevant Advance Payment Bond have been reduced to zero in accordance with this schedule 10 (the "**APB Step-Down Date**"). The Manufacturer shall provide at least 30 Working Days' advance notice of the expiry of any Advance Payment Bond before the APB Step-Down Date. The Manufacturer shall promptly notify the Purchaser upon becoming aware of the occurrence of a Bond Event or an APB Provider Downgrade.

3.2 **Bond Event or APB Provider Downgrade**

Without prejudice to paragraph 3.4, where either a Bond Event or an APB Provider Downgrade occurs, in circumstances where the financial market conditions are generally adverse, the Manufacturer may request and the Purchaser will, acting reasonably, consider approval (but will also be entitled to withhold approval in its absolute discretion) of an Advance Payment Bond Provider with a credit rating of less than the rating required by paragraph 1.2 of part A to schedule 10. The Manufacturer shall either:

- (a) deliver to the Purchaser one or more Advance Payment Bonds for aggregate APB Bond Amounts in each Currency Element at the date of replacement equal to the amounts of all Currency Elements of the APB Bond Amounts under the then current affected Advance Payment Bond (or, as the case may be, equal to the amounts of all Currency Elements of the APB Bond Amounts at the time of termination of the affected Advance Payment Bond if such Advance Payment Bond has expired or terminated) which complies with the requirements of this Agreement in accordance with the procedure set out in paragraph 4.2; or

- (b) procure that alternative cash collateral or other security acceptable to the Purchaser in amounts equal to all Currency Elements of the APB Bond Amounts from time to time under the affected Advance Payment Bond is made available to the Purchaser on such terms and conditions as the Purchaser shall, in its absolute discretion, consider appropriate,

and, if the Manufacturer fails to deliver such replacement or extended Advance Payment Bond or replacement security by no later than:

- (i) [REDACTED] following the occurrence of the Bond Event or APB Provider Downgrade; or
- (ii) if earlier, the appropriate time limit in accordance with paragraph 4.2,

the Purchaser shall be entitled to make demand under that Advance Payment Bond for the total APB Bond Amounts under that Advance Payment Bond at that time, and the provisions of paragraphs 3.5 and 3.6 shall apply to any amounts that are received from the relevant Advance Payment Bond Provider as a result of such demand.

3.3 **Expiry of an Advance Payment Bond**

Where an Advance Payment Bond will expire before the APB Step-Down Date, the Manufacturer shall either:

- (a) extend the term of the affected Advance Payment Bond (or replace it with another Advance Payment Bond with APB Bond Amounts equal to all Currency Elements of the APB Bond Amounts under the affected Advance Payment Bond at the time of expiry, in accordance with the procedure set out in paragraph 4.2), in each case with a validity period of not less [REDACTED]; or
- (b) procure that alternative cash collateral or other security acceptable to the Purchaser in amounts equal to all Currency Elements of the APB Bond Amounts from time to time under the affected Advance Payment Bond is made available to the Purchaser on such terms and conditions as the Purchaser shall, in its absolute discretion, consider appropriate,

and, if the Manufacturer fails to deliver such replacement or extended Advance Payment Bond or replacement security by no later [REDACTED] prior to the expiry of the then current Advance Payment Bond, the Purchaser shall be entitled to make demand under the affected Advance Payment Bond for the total amounts of that Advance Payment Bond at that time (on terms that such demand shall be deemed to be withdrawn if the validity period of that Advance Payment Bond is extended for at least 12 months), and the provisions of paragraphs 3.5 and 3.6 shall apply to any amounts that are received from the relevant Advance Payment Bond Provider as a result of such demand.

3.4 **Insolvency Event of an Advance Payment Bond Provider**

If there is an Insolvency Event in relation to any Advance Payment Bond Provider then, notwithstanding the other provisions of this part A, including the Manufacturer's obligation to replace the Advance Payment Bond, the Purchaser shall immediately be entitled to make demand under that Advance Payment Bond for the total amounts of that Advance Payment Bond at that time, and the provisions of paragraphs 3.5 and 3.6 shall apply to any amounts that are received from the Advance Payment Bond Provider as a result of such demand.

3.5 **Treatment of Bond proceeds**

Any amount that the Purchaser receives from an Advance Payment Bond Provider as a result of a demand made in accordance with this paragraph 3 shall be paid into an interest bearing account with a clearing bank of first class standing in London and held on trust for the Purchaser and the Manufacturer for application in or towards amounts (regardless of the currency of such amounts) in respect of which the Purchaser would have been entitled to make any demand under the Advance Payment Bond. Any interest accruing in such account and any balance remaining at the APB Step-Down Date or earlier termination of this Agreement or such other date as the Purchaser shall determine following application by the Purchaser in accordance with this paragraph 3 shall, subject to the Purchaser's rights of set-off in clause 55 (Set Off), belong to the Manufacturer. If the Manufacturer subsequently delivers a replacement or extended Advance Payment Bond complying with the provisions of this Agreement, the balance standing to the credit of the account (including any amount in respect of interest accrued) shall belong to the Manufacturer and the Purchaser shall promptly take such steps as are reasonably requested by the Manufacturer to ensure release of such balance to the Manufacturer.

3.6 Manufacturer Event of Default

The receipt of any amounts by the Purchaser from an Advance Payment Bond Provider as a result of a demand made in accordance with this paragraph 3 (Defect in an Advance Payment Bond) shall be treated as alternative cash collateral acceptable to the Purchaser in pro tanto satisfaction of the Manufacturer's obligation to provide Advance Payment Bond(s) in accordance with this part A, and if the circumstances described in paragraphs 3.2, 3.3 or 3.4, arise and the Purchaser elects to make a demand under the affected Advance Payment Bond in accordance with the terms of the relevant provision, no Manufacturer Event of Default under clause 31.1(m) or 31.1(n) shall arise unless and until the relevant Advance Payment Bond Provider notifies the Purchaser that it will not satisfy the demand in full (and the Manufacturer has not taken the applicable action under paragraphs 3.2(a) or (b) or paragraphs 3.3(a) or (b) by such time).

4. REPLACEMENT OF AN ADVANCE PAYMENT BOND

4.1 Manufacturer Substitution of Advance Payment Bond

Following the provision of any Advance Payment Bond, the Manufacturer may request that the Purchaser accept a replacement Advance Payment Bond in substitution for such Advance Payment Bond and the provisions of paragraph 4.2 shall apply. The Purchaser shall not refuse such request if the replacement Advance Payment Bond complies with all the requirements of this Agreement. If a replacement Advance Payment Bond is procured pursuant to this paragraph 4.1, the Purchaser shall return the existing Advance Payment Bond to the Manufacturer once it has received the substitute Advance Payment Bond.

4.2 Substitute of Advance Payment Bond Provider

Where a replacement Advance Payment Bond is to be provided pursuant to this part A of schedule 10, the procedure in this paragraph 4.2 shall apply.

- (a) The substitute Advance Payment Bond Provider must either:
 - (i) have a long-term credit rating of [REDACTED] from Standard and Poor's Rating Services or the equivalent rating from any other agency of equivalent international reputation which rates the Advance Payment Bond Provider; or
 - (ii) at the Purchaser's absolute discretion, have a long-term credit rating of less than "A+" from Standard and Poor's Rating Services or equivalent rating from any other agency of equivalent international reputation which rates the Advance Payment Bond Provider.

- (b) Within ten (10) Working Days of the APB Provider Downgrade, Bond Event or the Purchaser's receipt of notice of expiry pursuant to paragraph 3.1, the Manufacturer will provide the Purchaser with a list of potential Advance Payment Bond Providers.
- (c) If the Purchaser consents (at its absolute discretion) to any such potential Advance Payment Bond Provider(s) the Manufacturer will procure an Advance Payment Bond from such institution:
 - (i) if the replacement is required as a result of an APB Provider Downgrade or Bond Event, within five (5) Working Days of such consent; or
 - (ii) if the replacement is required as a result of the impending expiry of the Advance Payment Bond, within ten (10) Working Days of such consent.
- (d) If the Purchaser does not consent to any of the potential Advance Payment Bond Providers it shall within five (5) Working Days of receipt of the list from the Manufacturer pursuant to paragraph 4.2(b) provide the Manufacturer with an alternative list of potential Advance Payment Bond Providers.
- (e) The Manufacturer shall use all reasonable endeavours to obtain an Advance Payment Bond from the list of potential Advance Payment Bond Providers notified pursuant to paragraph 4.2(d) and the Manufacturer shall within ten (10) Working Days of receipt of the list of the Purchaser's potential Advance Payment Bond Providers either procure an Advance Payment Bond from such an Advance Payment Bond Provider or provide the Purchaser with details of the process the Manufacturer went through to ascertain whether it could procure an Advance Payment Bond from such institutions.
- (f) If the Purchaser does not either:
 - (i) consent to a potential Advance Payment Bond Provider suggested by the Manufacturer pursuant to paragraph 4.2(b) within five (5) Working Days of receipt of such list; or
 - (ii) provide an alternative list pursuant to paragraph 4.2(d), within five (5) Working Days of receipt of the list from the Manufacturer pursuant to paragraph 4.2(b),

the Purchaser will be deemed to have accepted that an Advance Payment Bond provided by any of the potential Advance Payment Bond Providers suggested by the Manufacturer pursuant to paragraph 4.2(b) is acceptable and the Manufacturer must provide an Advance Payment Bond from any such potential Advance Payment Bond Providers within ten (10) Working Days of the Purchaser receiving the list provided by the Manufacturer pursuant to paragraph 4.2(b).

4.3 **Purchaser Right to Change the Advance Payment Bond Providers**

- (a) At any time, the Purchaser may request that the Manufacturer replaces any Advance Payment Bond with an Advance Payment Bond from any of the alternative financial institutions provided on a list given by the Purchaser to the Manufacturer (the "**Alternative Suppliers**").
- (b) The Manufacturer shall use all reasonable endeavours to obtain an Advance Payment Bond from the Alternative Suppliers and shall within ten (10) Working Days of receipt of the list of Alternative Suppliers:
 - (i) confirm which (if any) of the Alternative Suppliers will provide an Advance Payment Bond which complies with this Agreement;

- (ii) notify the Purchaser of the incremental cost of provision of an Advance Payment Bond which complies with this Agreement provided that the Manufacturer shall use all reasonable endeavours to mitigate any such incremental cost and shall provide evidence of such incremental cost on an open book basis; and
 - (iii) for any of the Alternative Suppliers that will not provide such an Advance Payment Bond, details of the process the Manufacturer went through to ascertain if such a bond was available.
- (c) The Purchaser will, within ten (10) Working Days of receipt of the information pursuant to paragraph 4.3(b), confirm which of the Manufacturer's proposals are acceptable.
- (d) If the Purchaser confirms any of the Manufacturer's proposals are acceptable the Manufacturer shall procure an Advance Payment Bond from the approved Alternative Suppliers within ten (10) Working Days of such confirmation.
- (e) If the Purchaser does not provide a confirmation pursuant to paragraph 4.3(c) above the existing Advance Payment Bond will remain in place.
- (f) If an Advance Payment Bond is procured pursuant to this paragraph 4.3:
 - (i) the Purchaser shall return the existing Advance Payment Bond to the Manufacturer once it has received the new Advance Payment Bond; and
 - (ii) the Milestone Payments shall be adjusted to take account of any increase in the cost of the provision of the new Advance Payment Bond as evidenced in accordance with paragraph 4.3(b)(ii).

APPENDIX 1 TO PART A

Form of Advance Payment Bond

To: Docklands Light Railway Limited of 55 Broadway, London, United Kingdom, SW1H 0BD
(the "**Purchaser**")

Copy: [x] Limited of [x] (the "**Manufacturer**")

ADVANCE PAYMENT BOND No [x]

4. We have been informed that our customer, the Manufacturer, and you, the Purchaser, have entered into a contract dated on or around the date hereof for the design, build, test, commission and supply of rolling stock and related equipment and certain other services (the "Manufacture and Supply Agreement" or "MSA").
5. An advance payment amounting to [£[x], CAD[x] and €[x]] [**Delete as applicable.**] and subsequent Milestone Payments will be made to the Manufacturer against this Advance Payment Bond in your favour, in accordance with the terms of the MSA.
6. In consideration of the aforesaid, we, [x], hereby irrevocably undertake to pay to you any amount you may claim from us upon receipt of your first demand in writing (Demand) but not exceeding £[x], CAD [x] and EUR [x], which amounts may be varied from time to time in accordance with the terms of this Advance Payment Bond by delivery of certificates in the form specified in Appendices 1 and 2 (the APB Bond Amounts) and, for the avoidance of doubt, the giving of a certificate in the form specified in appendix 1 by us to you shall be at our absolute discretion,

provided that:

- (a) our liability under this Advance Payment Bond is limited to an amount or amounts in aggregate not exceeding the APB Bond Amounts from time to time;
 - (b) any claim hereunder shall be accompanied by your statement that the amount claimed is due by reason of (i) a breach by the Manufacturer of the terms of the MSA, (ii) the termination of the MSA due to the occurrence of a Manufacturer Event of Default, or (iii) non-payment by the Manufacturer of sums due to the Purchaser under the terms of the MSA, or (iv) a Bond Event (except an Insolvency Event) has occurred in relation to this Advance Payment Bond or an APB Provider Downgrade has occurred to us and the Manufacturer having failed to put in place a replacement Advance Payment Bond in accordance with the MSA,
 - (c) the APB Bond Amounts will decrease by an amount set out on the certificate of decrease on each occasion that a certificate in the form set out in appendix 2 is delivered to us by you; and
 - (d) our liability under this Advance Payment Bond in respect of any claim is limited to an amount not exceeding the APB Bond Amounts at the date of such claim less any and all amounts previously claimed and paid under this Advance Payment Bond.
7. This Advance Payment Bond shall be valid for Demands received in accordance with this Advance Payment Bond until the date (the Expiry Date) which is the earlier to occur of:
 - (a) the date that you deliver to us an original certificate in the form set out in Appendix 2 which reduces the APB Bond Amounts to zero; and
 - (b) [x],

whereupon you shall return this Advance Payment Bond to us. After the Expiry Date, subject to any Demand that remains outstanding as of the Expiry Date, our undertaking will become automatically null and void if no claim has been received by us on or before that date, whether or not this Advance Payment Bond is returned to us.

8. There shall be no limit to the number of Demands that may be made hereunder.
9. We covenant, warrant and represent that we are duly authorised to enter into, deliver and perform this Advance Payment Bond and that it constitutes a valid, binding and enforceable obligation on us in accordance with its terms.
10. We shall make payment to you immediately upon service of your Demand:
 - (a) without regard to any information or instructions which we may then have received or may thereafter receive from any other source and we shall not be entitled to inquire into or require proof of the facts stated in the Demand, the respective rights and/or obligations and/or liabilities of the Purchaser and the Manufacturer under the MSA, the authenticity of any written Demand made by the Purchaser or the authority of the persons signing any written Demand by the Purchaser which, as between ourselves and you, shall be conclusive; and
 - (b) notwithstanding any dispute between the Manufacturer and you; it being the intention of the parties hereto that the event upon which payment must be made hereunder is the service of your Demand without any rights on our part to raise any objections, irrespective of the validity of the effectiveness of the MSA and the obligations arising thereunder and irrespective of the underlying facts or their significance under the MSA.
11. All sums payable under this Advance Payment Bond shall be paid in [Pounds Sterling][, Canadian Dollars][, or Euros] ***Delete as applicable.*** to such bank account as may be specified in your Demand in immediately available funds, free of any restriction or condition and free and clear of and without any deduction or withholding whether for or on account of tax, by way of set-off, or otherwise, except to the extent required by law. If we are required by law to make any deduction or withholding, the amount payable by us hereunder shall be increased to such amount as shall ensure that you receive a net amount equal to the amount which would have been received in absence of such deduction or withholding.
12. Our obligations hereunder shall be direct, primary, irrevocable obligations and shall not be discharged, prejudiced or adversely affected by any of the following:
 - (a) any time, waiver, release, indulgence or forbearance which the Purchaser or its agents or representatives may grant to the Manufacturer or that the Manufacturer may grant to the Purchaser;
 - (b) any amendment or modification to the MSA;
 - (c) any invalidity, illegality or unenforceability in or of the terms of any agreement or other commitment to which the Manufacturer is or may become a Party, including (without limitation) any invalidity in the MSA, or the avoidance, termination or other revocation of or loss of rights under the MSA;
 - (d) any disability, incapacity, change in ownership or change in status of the Manufacturer;
 - (e) an Insolvency Event in relation to, or a change in the constitution of, the Manufacturer;
 - (f) any breach of the MSA by any Party thereto; or

- (g) by any other matter or thing which in the absence of this provision would or might have that effect.
13. No failure or delay by the Purchaser in exercising any right or remedy shall operate as a waiver, nor shall any single or partial exercise or waiver of any right or remedy preclude its further exercise or the exercise of any other right or remedy.
14. Our rights and obligations under the Advance Payment Bond may not be assigned or transferred save with your prior written consent.
15. This Advance Payment Bond may be assigned or charged by you to any person to whom you are entitled to assign the MSA in accordance with the MSA, subject to the condition that the beneficiary is not included in any list of legal persons, entities or bodies listed on a United Nations, Her Majesty's Treasury, European Union, Hong Kong or United States of America sanctions list.
16. This Advance Payment Bond may not be amended, varied or supplemented in any manner whatsoever without the prior written consent of the Purchaser and us, other than in accordance with its express terms.
17. This Advance Payment Bond is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758 (the "Rules") provided that:
- (a) in the case of any conflict between the Rules and the provisions of this Advance Payment Bond, the provisions of this Advance Payment Bond shall take precedence; and
 - (b) Article 15 of the Rules shall be varied to enable the Purchaser to claim under this Advance Payment Bond in all circumstances set out in proviso (b) to paragraph 3 above.
18. Words and phrases defined in the MSA shall have the same meanings in this Advance Payment Bond unless inconsistent with the context.
19. Each of the provisions of this Advance Payment Bond is severable and distinct from the others, and if at any time any such provisions is or becomes ineffective, inoperable, invalid or unenforceable it shall be severed and deemed to be deleted from this Advance Payment Bond, and in such event the remaining provisions of this Advance Payment Bond shall continue to have full force and effect.
20. This Advance Payment Bond and any non-contractual obligations arising out of it shall be governed and construed in accordance with the laws of England and Wales and the English Courts shall have exclusive jurisdiction in relation to any claim, dispute or difference concerning this Advance Payment Bond and any matter arising from it.

Executed as a Deed this [x] day of [x] 201[x]

APPENDIX 1 TO THE FORM OF ADVANCE PAYMENT BOND

Certificate of Increase in APB Bond Amounts

To: Docklands Light Railway Limited

Date: [x]

Advance Payment Bond No. [x] issued in favour of Docklands Light Railway Limited (the "Advance Payment Bond")

Dear Sirs,

We refer to the Advance Payment Bond. Terms defined in the Advance Payment Bond have the same meaning in this Certificate.

We have been requested by our customer, [***Insert Manufacturer's name***], to increase the APB Bond Amounts under the Advance Payment Bond.

We notify you that with immediate effect, the APB Bond Amounts for the purposes of the Advance Payment Bond are increased from [£[x] to £[x]][, CAD[x] to CAD[x]][and €[x] to €[x]] [***Delete as applicable.***].

Yours faithfully

Authorised Signatory

APPENDIX 2 TO THE FORM OF ADVANCE PAYMENT BOND

Certificate of Decrease in APB Bond Amounts on PAC/QPAC

To: [Advance Payment Bond Provider]

Date: [x]

Advance Payment Bond No. [x] issued in favour of Docklands Light Railway Limited (the "Advance Payment Bond")

Dear Sirs,

We refer to the Advance Payment Bond. Terms defined in the Advance Payment Bond have the same meaning in this Certificate.

We notify you that Train number [x] achieved Provisional Acceptance or Qualified Provisional Acceptance, as the case may be, on [date].

Accordingly, the APB Bond Amounts will be reduced from [£[x] to £[x]][, CAD[x] to CAD[x]][and €[x] to €[x]] [**Delete as applicable.**] with immediate effect.

Yours faithfully

Executed as a Deed for and on behalf of Docklands Light Railway Limited in the presence of:

Signature of authorised signatory..... Date.....

Name of authorised signatory.....

Part A2 – Fleet Acceptance Bond

1. FLEET ACCEPTANCE BOND

1.1 Initial Fleet Acceptance Bond

Prior to Final Acceptance of the first Train under this Agreement, the Manufacturer shall, at its own cost, procure the issue of a Fleet Acceptance Bond from a Fleet Acceptance Bond Provider in favour of the Purchaser for the Fleet Acceptance Bond Required Amount required on or prior to Final Acceptance of the first Train.

1.2 Initial Fleet Acceptance Bond Provider

The Fleet Acceptance Bond procured pursuant to paragraph 1.1 must:

- (a) be issued by a financial institution which is acceptable to the Purchaser (acting in its absolute discretion) and which either:
 - (i) has a long-term credit rating of [REDACTED] from Standard and Poor's Rating Services or the equivalent rating from any other agency of equivalent international reputation which rates the Fleet Acceptance Bond Provider; or
 - (ii) at the Purchaser's absolute discretion, has a long-term credit rating of less than "A+" from Standard and Poor's Rating Services or equivalent rating from any other agency of equivalent international reputation which rates the Fleet Acceptance Bond Provider;
- (b) have an expiry date which is no less than [REDACTED] from the date of issue of the Fleet Acceptance Bond.

1.3 Calling the Fleet Acceptance Bond

The Purchaser shall be entitled to make a demand upon the full amount of any Fleet Acceptance Bond:

- (a) in the event that Fleet Acceptance is not achieved by the Contractual Fleet Acceptance Date; or
- (b) where this Agreement is terminated prior to Fleet Acceptance,

and in each case the Purchaser shall be entitled to apply any relevant proceeds of such demand as it thinks fit.

1.4 Without prejudice to its rights under paragraph 1.3, the Purchaser shall be entitled to make a demand under a Fleet Acceptance Bond if the circumstances described in paragraph 3 (Defect in a Fleet Acceptance Bond) arise in relation to that Fleet Acceptance Bond.

1.5 Increases in the Fleet Acceptance Bond Required Amount

The Purchaser shall only be obliged to pay to the Manufacturer the Milestone Payment which corresponds to Final Acceptance of each Train in accordance with this schedule 10 if:

- (a) in relation to the first Train to achieve Final Acceptance, the Manufacturer has on or before the date of such Milestone Payment provided the Fleet Acceptance Bond in accordance with paragraph 1.1 in an amount at least equal to the Fleet Acceptance Bond Required Amount with respect to Final Acceptance of the first Train; and

- (b) in relation to each subsequent Train which achieves Final Acceptance, on or before the date of such Milestone Payment the Fleet Acceptance Bond is in force in an amount at least equal to the Fleet Acceptance Bond Required Amount with respect to Final Acceptance of such Train.

1.6 **Decreases in the Required APB Bond Amount**

Upon Fleet Acceptance the Fleet Acceptance Bond Required Amount will be reduced to zero and the Purchaser shall issue a certificate in the form set out in appendix 2 to the Fleet Acceptance Bond reflecting such reduction.

2. **LIMIT ON FLEET ACCEPTANCE BONDS**

The Manufacturer may issue in favour of the Purchaser a maximum of one Fleet Acceptance Bond at any time.

3. **DEFECT IN A FLEET ACCEPTANCE BOND**

3.1 **Maintenance of Fleet Acceptance Bonds**

Subject only to the provisions of this part A2, the Manufacturer shall maintain the continuing validity and effectiveness of each Fleet Acceptance Bond until the date on which the Fleet Acceptance Bond Required Amount under the relevant Fleet Acceptance Bond has been reduced to zero in accordance with this schedule 10 (the "**FAB Step-Down Date**"). The Manufacturer shall provide at least 30 Working Days' advance notice of the expiry of any Fleet Acceptance Bond before the FAB Step-Down Date. The Manufacturer shall promptly notify the Purchaser upon becoming aware of the occurrence of a Fleet Acceptance Bond Event or a Fleet Acceptance Bond Provider Downgrade.

3.2 **Fleet Acceptance Bond Event or Fleet Acceptance Bond Provider Downgrade**

Without prejudice to paragraph 3.4, where either a Fleet Acceptance Bond Event or Fleet Acceptance Bond Provider Downgrade occurs, in circumstances where the financial market conditions are generally adverse, the Manufacturer may request and the Purchaser will, acting reasonably, consider approval (but will also be entitled to withhold approval in its absolute discretion) of a Fleet Acceptance Bond Provider with a credit rating of less than the rating required by paragraph 1.2 of part A2 to schedule 10. The Manufacturer shall either:

- (a) deliver to the Purchaser another Fleet Acceptance Bond for the Fleet Acceptance Bond Required Amount at the date of replacement (or, as the case may be, equal to the Fleet Acceptance Bond Required Amount at the time of termination of the affected Fleet Acceptance Bond if such Fleet Acceptance Bond has expired or terminated) which complies with the requirements of this Agreement in accordance with the procedure set out in paragraph 4.2; or
- (b) procure that alternative cash collateral or other security acceptable to the Purchaser in an amount equal to the Fleet Acceptance Bond Required Amount from time to time is made available to the Purchaser on such terms and conditions as the Purchaser shall, in its absolute discretion, consider appropriate,

and, if the Manufacturer fails to deliver such replacement or extended Fleet Acceptance Bond or replacement security by no later than:

- (i) 30 Working Days following the occurrence of the Fleet Acceptance Bond Event or Fleet Acceptance Bond Provider Downgrade; or
- (ii) if earlier, the appropriate time limit in accordance with paragraph 4.2,

the Purchaser shall be entitled to make demand under that Fleet Acceptance Bond for the full amount under that Fleet Acceptance Bond at that time, and the provisions of paragraph 3.5 shall apply to any amounts that are received from the relevant Fleet Acceptance Bond Provider as a result of such demand.

3.3 **Expiry of a Fleet Acceptance Bond**

Where a Fleet Acceptance Bond will expire before the FAB Step-Down Date, the Manufacturer shall either:

- (a) extend the term of the affected Fleet Acceptance Bond (or replace it with another Fleet Acceptance Bond for an amount equal to the Fleet Acceptance Bond Required Amount on that date, in accordance with the procedure set out in paragraph 4.2), in each case with a validity period of not less than 12 months; or
- (b) procure that alternative cash collateral or other security acceptable to the Purchaser in an amount equal to the Fleet Acceptance Bond Required Amount from time to time is made available to the Purchaser on such terms and conditions as the Purchaser shall, in its absolute discretion, consider appropriate,

and, if the Manufacturer fails to deliver such replacement or extended Fleet Acceptance Bond or replacement security by no later than ten (10) Working Days prior to the expiry of the then current Fleet Acceptance Bond, the Purchaser shall be entitled to make demand under the affected Fleet Acceptance Bond for the total amount of that Fleet Acceptance Bond at that time (on terms that such demand shall be deemed to be withdrawn if the validity period of that Fleet Acceptance Bond is extended for at least 12 months), and the provisions of paragraph 3.5 shall apply to any amounts that are received from the relevant Fleet Acceptance Bond Provider as a result of such demand.

3.4 **Insolvency Event of a Fleet Acceptance Bond Provider**

If there is an Insolvency Event in relation to any Fleet Acceptance Bond Provider then, notwithstanding the other provisions of this part A2, including the Manufacturer's obligation to replace the Fleet Acceptance Bond, the Purchaser shall immediately be entitled to make demand under that Fleet Acceptance Bond for the total amount of that Fleet Acceptance Bond at that time, and the provisions of paragraph 3.5 shall apply to any amounts that are received from the Fleet Acceptance Bond Provider as a result of such demand.

3.5 **Treatment of Bond proceeds**

Any amount that the Purchaser receives from a Fleet Acceptance Bond Provider as a result of a demand made in accordance with this paragraph 3 shall be paid into an interest bearing account with a clearing bank of first class standing in London and held on trust for the Purchaser and the Manufacturer for application in or towards amounts in respect of which the Purchaser would have been entitled to make any demand under the Fleet Acceptance Bond. Any interest accruing in such account and any balance remaining at the FAB Step-Down Date or earlier termination of this Agreement or such other date as the Purchaser shall determine following application by the Purchaser in accordance with this paragraph 3 shall, subject to the Purchaser's rights of set-off in clause 55 (Set Off), belong to the Manufacturer. If the Manufacturer subsequently delivers a replacement or extended Fleet Acceptance Bond complying with the provisions of this Agreement, the balance standing to the credit of the account (including any amount in respect of interest accrued) shall belong to the Manufacturer and the Purchaser shall promptly take such steps as are reasonably requested by the Manufacturer to ensure release of such balance to the Manufacturer.

4. **REPLACEMENT OF A FLEET ACCEPTANCE BOND**

4.1 **Manufacturer Substitution of Fleet Acceptance Bond**

Following the provision of any Fleet Acceptance Bond, the Manufacturer may request that the Purchaser accept a replacement Fleet Acceptance Bond in substitution for such Fleet Acceptance Bond and the provisions of paragraph 4.2 shall apply. The Purchaser shall not refuse such request if the replacement Fleet Acceptance Bond complies with all the requirements of this Agreement. If a replacement Fleet Acceptance Bond is procured pursuant to this paragraph 4.1, the Purchaser shall return the existing Fleet Acceptance Bond to the Manufacturer once it has received the substitute Fleet Acceptance Bond.

4.2 **Substitute of Fleet Acceptance Bond Provider**

Where a replacement Fleet Acceptance Bond is to be provided pursuant to this part A2 of schedule 10, the procedure in this paragraph 4.2 shall apply.

- (a) The substitute Fleet Acceptance Bond Provider must either:
 - (i) have a long-term credit rating of [REDACTED] from Standard and Poor's Rating Services or the equivalent rating from any other agency of equivalent international reputation which rates the Fleet Acceptance Bond Provider; or
 - (ii) at the Purchaser's absolute discretion, have a long-term credit rating of less than "A+" from Standard and Poor's Rating Services or equivalent rating from any other agency of equivalent international reputation which rates the Fleet Acceptance Bond Provider.
- (b) Within ten (10) Working Days of the Fleet Acceptance Bond Provider Downgrade, Fleet Acceptance Bond Event or the Purchaser's receipt of notice of expiry pursuant to paragraph 3.1, the Manufacturer will provide the Purchaser with a list of potential Fleet Acceptance Bond Providers.
- (c) If the Purchaser consents (at its absolute discretion) to any such potential Fleet Acceptance Bond Provider(s) the Manufacturer will procure a Fleet Acceptance Bond from such institution:
 - (i) if the replacement is required as a result of a Fleet Acceptance Bond Provider Downgrade or Fleet Acceptance Bond Event, within five (5) Working Days of such consent; or
 - (ii) if the replacement is required as a result of the impending expiry of the Fleet Acceptance Bond, within ten (10) Working Days of such consent.
- (d) If the Purchaser does not consent to any of the potential Fleet Acceptance Bond Providers it shall within five (5) Working Days of receipt of the list from the Manufacturer pursuant to paragraph 4.2(b) provide the Manufacturer with an alternative list of potential Fleet Acceptance Bond Providers.
- (e) The Manufacturer shall use all reasonable endeavours to obtain a Fleet Acceptance Bond from the list of potential Fleet Acceptance Bond Providers notified pursuant to paragraph 4.2(d) and the Manufacturer shall within ten (10) Working Days of receipt of the list of the Purchaser's potential Fleet Acceptance Bond Providers either procure a Fleet Acceptance Bond from such a Fleet Acceptance Bond Provider or provide the Purchaser with details of the process the Manufacturer went through to ascertain whether it could procure a Fleet Acceptance Bond from such institutions.
- (f) If the Purchaser does not either:

- (i) consent to a potential Fleet Acceptance Bond Provider suggested by the Manufacturer pursuant to paragraph 4.2(b) within five (5) Working Days of receipt of such list; or
- (ii) provide an alternative list pursuant to paragraph 4.2(d), within five (5) Working Days of receipt of the list from the Manufacturer pursuant to paragraph 4.2(b),

the Purchaser will be deemed to have accepted that a Fleet Acceptance Bond provided by any of the potential Fleet Acceptance Bond Providers suggested by the Manufacturer pursuant to paragraph 4.2(b) is acceptable and the Manufacturer must provide a Fleet Acceptance Bond from any such potential Fleet Acceptance Bond Providers within ten (10) Working Days of the Purchaser receiving the list provided by the Manufacturer pursuant to paragraph 4.2(b).

4.3 **Purchaser Right to Change the Fleet Acceptance Bond Providers**

- (a) At any time, the Purchaser may request that the Manufacturer replaces any Fleet Acceptance Bond with a Fleet Acceptance Bond from any of the alternative financial institutions provided on a list given by the Purchaser to the Manufacturer (the **"FAB Alternative Suppliers"**).
- (b) The Manufacturer shall use all reasonable endeavours to obtain a Fleet Acceptance Bond from the FAB Alternative Suppliers and shall within ten (10) Working Days of receipt of the list of FAB Alternative Suppliers:
 - (i) confirm which (if any) of the FAB Alternative Suppliers will provide a Fleet Acceptance Bond which complies with this Agreement;
 - (ii) notify the Purchaser of the incremental cost of provision of a Fleet Acceptance Bond which complies with this Agreement provided that the Manufacturer shall use all reasonable endeavours to mitigate any such incremental cost and shall provide evidence of such incremental cost on an open book basis; and
 - (iii) for any of the FAB Alternative Suppliers that will not provide such a Fleet Acceptance Bond, details of the process the Manufacturer went through to ascertain if such a bond was available.
- (c) The Purchaser will, within ten (10) Working Days of receipt of the information pursuant to paragraph 4.3(b), confirm which of the Manufacturer's proposals are acceptable.
- (d) If the Purchaser confirms any of the Manufacturer's proposals are acceptable the Manufacturer shall procure a Fleet Acceptance Bond from the approved FAB Alternative Suppliers within ten (10) Working Days of such confirmation.
- (e) If the Purchaser does not provide a confirmation pursuant to paragraph 4.3(c) above the existing Fleet Acceptance Bond will remain in place.
- (f) If a Fleet Acceptance Bond is procured pursuant to this paragraph 4.3:
 - (i) the Purchaser shall return the existing Fleet Acceptance Bond to the Manufacturer once it has received the new Fleet Acceptance Bond; and
 - (ii) within 30 Working Days of the Purchaser's receipt of such new Fleet Acceptance Bond, the Purchaser shall pay to the Manufacturer the amount of any increase in the cost of the provision of the new Fleet Acceptance Bond as evidenced in accordance with paragraph 4.3(b)(ii).

APPENDIX 1 TO PART A2

Form of Fleet Acceptance Bond

To: Docklands Light Railway Limited of 55 Broadway, London, United Kingdom, SW1H 0BD (the "**Purchaser**")

Copy: **CONSTRUCCIONES Y AUXILIAR DE FERROCARRILES S.A.** (Registered Number 239, on sheet number SS-329, Folio 144, Volume 983 of the Companies Register of the province of Guipúzcoa, Spain) a company incorporated under the laws of Spain whose registered office is at Jose Miguel Iturrioz 26, 20200 Beasain, Spain (the "**Manufacturer**")

Bond No [x] ("**Bond**")

1. We have been informed that our customer, the Manufacturer, and you, the Purchaser, have entered into a contract dated on or around the date hereof for the design, build, test, commission and supply of rolling stock and related equipment and certain other services (the "**Manufacture and Supply Agreement**" or "**MSA**").
2. Payments will be made to the Manufacturer against this Bond in your favour, in accordance with the terms of the MSA.
3. In consideration of the aforesaid, we, [x], hereby irrevocably undertake to pay to you any amount you may claim from us upon receipt of your first demand in writing ("**Demand**") but not exceeding £[**Initial Fleet Acceptance Bond Amount**], which amount may be varied from time to time in accordance with the terms of this Bond by delivery of certificates in the form specified in Appendices 1 and 2 (the "**Bond Amount**") and, for the avoidance of doubt, the giving of a certificate in the form specified in appendix 1 by us to you shall be at our absolute discretion,

provided that:

- (a) our liability under this Bond is limited to an amount or amounts in aggregate not exceeding the Bond Amount from time to time;
 - (b) any claim hereunder shall be accompanied by your statement that the amount claimed is due by reason of:
 - (i) Fleet Acceptance not being achieved by the Contractual Fleet Acceptance Date; or
 - (ii) the Manufacturer failing to procure a replacement Fleet Acceptance Bond when required in accordance with the MSA,
 - (c) the Bond Amount will decrease by an amount set out on the certificate of decrease on each occasion that a certificate in the form set out in appendix 2 is delivered to us by you; and
 - (d) our liability under this Bond in respect of any claim is limited to an amount not exceeding the Bond Amount at the date of such claim less any and all amounts previously claimed and paid under this Bond.
4. This Bond shall be valid for Demands received in accordance with this Bond until the date (the "**Expiry Date**") which is the earlier to occur of:
 - (a) the date that you deliver to us an original certificate in the form set out in Appendix 2 which reduces the Bond Amount to zero; and
 - (b) [x],

whereupon you shall return this Bond to the Manufacturer. After the Expiry Date, subject to any Demand that remains outstanding as of the Expiry Date, our undertaking will become automatically null and void if no claim has been received by us on or before that date, whether or not this Bond is returned to us.

5. There shall be no limit to the number of Demands that may be made hereunder.
6. We covenant, warrant and represent that we are duly authorised to enter into, deliver and perform this Bond and that it constitutes a valid, binding and enforceable obligation on us in accordance with its terms.
7. We shall make payment to you immediately upon service of your Demand:
 - (a) without regard to any information or instructions which we may then have received or may thereafter receive from any other source and we shall not be entitled to inquire into or require proof of the facts stated in the Demand, the respective rights and/or obligations and/or liabilities of the Purchaser and the Manufacturer under the MSA, the authenticity of any written Demand made by the Purchaser or the authority of the persons signing any written Demand by the Purchaser which, as between ourselves and you, shall be conclusive; and
 - (b) notwithstanding any dispute between the Manufacturer and you; it being the intention of the parties hereto that the event upon which payment must be made hereunder is the service of your Demand without any rights on our part to raise any objections, irrespective of the validity of the effectiveness of the MSA and the obligations arising thereunder and irrespective of the underlying facts or their significance under the MSA.
8. All sums payable under this Bond shall be paid in Pounds Sterling to such bank account as may be specified in your Demand in immediately available funds, free of any restriction or condition and free and clear of and without any deduction or withholding whether for or on account of tax, by way of set-off, or otherwise, except to the extent required by law. If we are required by law to make any deduction or withholding, the amount payable by us hereunder shall be increased to such amount as shall ensure that you receive a net amount equal to the amount which would have been received in absence of such deduction or withholding.
9. Our obligations hereunder shall be direct, primary, irrevocable obligations and shall not be discharged, prejudiced or adversely affected by any of the following:
 - (a) any time, waiver, release, indulgence or forbearance which the Purchaser or its agents or representatives may grant to the Manufacturer or that the Manufacturer may grant to the Purchaser;
 - (b) any amendment or modification to the MSA;
 - (c) any invalidity, illegality or unenforceability in or of the terms of any agreement or other commitment to which the Manufacturer is or may become a Party, including (without limitation) any invalidity in the MSA, or the avoidance, termination or other revocation of or loss of rights under the MSA;
 - (d) any disability, incapacity, change in ownership or change in status of the Manufacturer;
 - (e) an Insolvency Event in relation to, or a change in the constitution of, the Manufacturer;
 - (f) any breach of the MSA by any Party thereto; or

- (g) by any other matter or thing which in the absence of this provision would or might have that effect.
10. No failure or delay by the Purchaser in exercising any right or remedy shall operate as a waiver, nor shall any single or partial exercise or waiver of any right or remedy preclude its further exercise or the exercise of any other right or remedy.
11. Our rights and obligations under the Bond may not be assigned or transferred save with your prior written consent.
12. This Bond may be assigned or charged by you to any person to whom you are entitled to assign the MSA in accordance with the MSA.
13. This Bond may not be amended, varied or supplemented in any manner whatsoever without the prior written consent of the Purchaser and us, other than in accordance with its express terms.
14. This Bond is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758 (the "Rules") provided that:
- (a) in the case of any conflict between the Rules and the provisions of this Bond, the provisions of this Bond shall take precedence; and
- (b) Article 15 of the Rules shall be varied to enable the Purchaser to claim under this Bond in all circumstances set out in proviso (b) to paragraph 3 above.
15. Words and phrases defined in the MSA shall have the same meanings in this Bond unless inconsistent with the context.
16. Each of the provisions of this Bond is severable and distinct from the others, and if at any time any such provisions is or becomes ineffective, inoperable, invalid or unenforceable it shall be severed and deemed to be deleted from this Bond, and in such event the remaining provisions of this Bond shall continue to have full force and effect.
17. This Bond and any non-contractual obligations arising out of it shall be governed and construed in accordance with the laws of England and Wales and the English Courts shall have exclusive jurisdiction in relation to any claim, dispute or difference concerning this Bond and any matter arising from it.
18. [We agree that [x] whose address is [x] is appointed as our agent for service of process in relation to any proceedings before the English court in connection with this Deed.]¹

Executed as a Deed this [x] day of [x] 201[x]

¹ Note to CAF: Required if the Bond provider is a non-UK entity.

APPENDIX 1 TO THE FORM OF FLEET ACCEPTANCE BOND

Certificate of Increase in Bond Amount

To: Docklands Light Railway Limited

Date: [x]

Bond No. [x] issued in favour of Docklands Light Railway Limited (the "Bond")

Dear Sirs,

We refer to the Bond. Terms defined in the Bond have the same meaning in this Certificate.

We have been requested by our customer, [***Insert Manufacturer's name***], to increase the Bond Amount under the Bond.

We notify you that with immediate effect, the Bond Amount for the purposes of the Bond is increased from £[x] to £[x].

Yours faithfully

Authorised Signatory

APPENDIX 2 TO THE FORM OF FLEET ACCEPTANCE BOND

Certificate of Decrease in Bond Amount on Fleet Acceptance

To: [Bond Provider]

Date: [x]

Bond No. [x] issued in favour of Docklands Light Railway Limited (the "Bond")

Dear Sirs,

We refer to the Bond. Terms defined in the Bond have the same meaning in this Certificate.

We hereby notify you of the achievement of Fleet Acceptance.

Accordingly, the Bond Amount will be reduced by £[x] to £[x] with immediate effect.

Yours faithfully

Executed as a Deed for and on behalf of Docklands Light Railway Limited in the presence of:

Signature of authorised signatory..... Date.....

Name of authorised signatory.....

APPENDIX 2 TO PART A2

Fleet Acceptance Bond Required Amounts

[illegible]

Part B - Milestones**1. TOTAL CONTRACT PRICE**

The Parties acknowledge and agree that the Total Contract Price is the aggregate of the amounts in each Currency Element set out in the final row of column (2) of the table in appendix 2 (Total Contract Price) to this part B.

2. SCHEDULE OF MILESTONES

2.1 In order to achieve each Milestone in column (1) of the Schedule of Milestones, the Manufacturer must satisfy all of the requirements in column (2) of the Schedule of Milestones corresponding to such Milestone.

2.2 The Schedule of Milestones sets out (in column (3)) the amount of the Milestone Payment due to the Manufacturer in respect of each Milestone, for which amount the Manufacturer may, subject to paragraph 4 (Issue of the Purchaser Milestone Payment Certificate), apply for payment in accordance with this part B.

2.3 Notwithstanding any other provision in this Agreement, the Manufacturer shall not be entitled to any Milestone Payment if and to the extent that a previous Milestone has not been achieved, irrespective of whether the Purchaser accepts that a subsequent Milestone has in fact been achieved (and in determining whether a milestone has in fact been achieved (and in determining whether a milestone is "previous" or "subsequent", reference shall be made to the relevant scheduled date for achievement identified in column (5) of the Schedule of Milestones).

3. NOTICE OF ACHIEVEMENT OF MILESTONES

3.1 On the first day of each TfL Period the Manufacturer shall following completion of each Milestone in the previous TfL period in accordance with paragraph 2.1 give to the Purchaser written notice to that effect together with reasonable evidence of such Milestone having been achieved ("**Notice of Milestone Achievement**").

3.2 Unless the Purchaser otherwise agrees in writing, the Manufacturer shall not be entitled to submit a Notice of Milestone Achievement in respect of a Milestone prior to the scheduled date for achievement of such Milestone identified in column (5) of the Schedule of Milestones, irrespective of whether the Manufacturer in fact achieves that particular Milestone earlier than the applicable scheduled date for achievement.

4. ISSUE OF THE PURCHASER MILESTONE PAYMENT CERTIFICATE

4.1 As soon as reasonably practicable, and in any event no later than 20 Working Days after the Purchaser's receipt of a Notice of Milestone Achievement under paragraph 3 (Notice of Achievement of Milestones) above, the Purchaser shall either:

- (a) issue to the Manufacturer a "**Purchaser Milestone Payment Certificate**" in the form set out in appendix 7 of this part B of schedule 10, certifying any amount proposed to be withheld or deducted from the amounts due, the ground or grounds for such withholding or deduction and the amount of withholding or deduction attributable to each ground; or
- (b) issue to the Manufacturer a notice that the Purchaser does not accept any liability to make the relevant Milestone Payment, including the grounds for such notification, whether pursuant to paragraph 2.3 or paragraph 3.2 of this part B or for any other reason permitted under this Agreement.

4.2 If the Purchaser issues a notice pursuant to paragraph 4.1(b), the Manufacturer shall be entitled to re-submit the relevant Notice of Milestone Achievement (with appropriate

amendments as necessary) to the Purchaser once the grounds for the issue of that notice have been resolved, and this paragraph 4 and paragraphs 5 (Issue of Manufacturer's Invoice) to 8 (Payment Conditions) of this part B shall apply to such re-submitted Notice of Milestone Achievement as if it had been submitted pursuant to paragraph 3.

5. **ISSUE OF MANUFACTURER'S INVOICE**

- 5.1 At any time after the issue of a Purchaser Milestone Payment Certificate pursuant to paragraph 4.1(a), the Manufacturer shall be entitled to deliver to the Purchaser a **"Milestone Payment Invoice"** in the amount set out in the Purchaser Milestone Payment Certificate.
- 5.2 If the Purchaser has not issued either a Purchaser Milestone Payment Certificate or a notice pursuant to paragraph 4.1(b) by the expiry of the 20 Working Day period referred to in paragraph 4 (Issue of the Purchaser Milestone Payment Certificate), the Purchaser shall be deemed to agree to pay the full amount of the relevant Milestone Payment as set out in column (3) of the Schedule of Milestones and the Manufacturer shall be entitled to issue a Milestone Payment Invoice in respect of such amount.

6. **EFFECT OF MILESTONE PAYMENT CERTIFICATE**

- 6.1 The issue of a Purchaser Milestone Payment Certificate shall not be deemed to be evidence that any other certificate has been or should be issued nor shall the issue of a Purchaser Milestone Payment Certificate affect the requirements for the issue or revocation of any other certificate. The issue of a Purchaser Milestone Payment Certificate shall not be taken to mean that the relevant obligations have been completed in accordance with the terms of the Agreement or otherwise to the satisfaction of the Purchaser.
- 6.2 A failure by the Purchaser to issue a Purchaser Milestone Payment Certificate following the Purchaser's receipt of a Notice of Milestone Achievement, as described in paragraph 5.2, shall not be deemed to be a waiver or release of any rights to make a withholding or deduction that have arisen in accordance with the terms of this Agreement and shall not affect the Purchaser's right to apply such a withholding or deduction from any subsequent Milestone Payment.

7. **THE FINAL DATE FOR PAYMENT**

The final date for payment of a Milestone Payment shall be the latest of:

- (a) 25 Working Days from the date of receipt by the Purchaser of the Manufacturer's Notice of Milestone Achievement in respect of the relevant Milestone pursuant to paragraph 3 (Notice of Achievement of Milestones);
- (b) five (5) Working Days after the date of receipt by the Purchaser of the relevant Milestone Payment Invoice pursuant to paragraph 5 (Issue of Manufacturer's Invoice); and
- (c) in respect of any Milestone Payment that falls due before Acceptance of the first Train, five (5) Working Days after the date on which the conditions under paragraph 1.5 of part A (Advance Payment Bond) of this schedule 10 are satisfied.

8. **PAYMENT CONDITIONS**

Any payments to be made by the Purchaser to the Manufacturer pursuant to this schedule 10 shall be made in accordance with the terms of clause 26 (Payments and VAT).

APPENDIX 1 TO PART B**Schedule of Milestones**

(1) Milestone	(2) Actions required to have been achieved by the Manufacturer to meet the Milestone	(3) Milestone Payment			(4) Required APB Bond Amount under Advance Payment Bond			(5) Scheduled Date for Achievement
█ █ █	█ █ █ █ █ █ █	█	█	█	█	█	█	█
█	█	█	█	█	█	█	█	█
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Schedule 10 – Milestones and Security

(1) Milestone	(2) Actions required to have been achieved by the Manufacturer to meet the Milestone	(3) Milestone Payment			(4) Required APB Bond Amount under Advance Payment Bond			(5) Scheduled Date for Achievement
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Schedule 10 – Milestones and Security

(1) Milestone	(2) Actions required to have been achieved by the Manufacturer to meet the Milestone	(3) Milestone Payment			(4) Required APB Bond Amount under Advance Payment Bond			(5) Scheduled Date for Achievement
█ █ █	█ █ █	█ █ █ █ █	█ █ █	█ █ █	█ █ █	█ █ █	█ █ █	█ █ █
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Schedule 10 – Milestones and Security

[illegible]

Schedule 10 – Milestones and Security

[illegible]

Schedule 10 – Milestones and Security

[illegible]

Schedule 10 – Milestones and Security

[illegible]

APPENDIX 2 TO PART B

Total Contract Price

Column (1)	Column (2)		
Item	Contract Price		
	1	2	3
1	1	1	1
2		1	
3	1		
4		1	
5	1		
6		1	
7		1	
8		1	
9		1	
10		1	
11		1	
12	1		
13	1	1	
14	1	1	
15	1	1	

APPENDIX 3 TO PART B

Option 1 Re-Profiled Schedule of Milestones

[illegible]

Schedule 10 – Milestones and Security

(1) Milestone	(2) Actions required to have been achieved by the Manufacturer to meet the Milestone	(3) Milestone Payment			(4) Required APB Bond Advance Payment Bond			(5) Scheduled Date for Achievement
					</			

Schedule 10 – Milestones and Security

[illegible]

Schedule 10 – Milestones and Security

[illegible]

Schedule 10 – Milestones and Security

[illegible]

Schedule 10 – Milestones and Security

[illegible]

Schedule 10 – Milestones and Security

[illegible]

APPENDIX 4 TO PART B

Option 1 Contract Price Table

Column (1)	Column (2)		
Item	Contract Price		
	1	2	3
1	1	1	1
2		1	
3	1		
4		1	
5	1		
6		1	
7		1	
8		1	
9		1	
10		1	
11		1	
12		1	
13	1		
14		1	
15		1	
16		1	
17		1	
18		1	
19		1	
20		1	
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26		1	
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31		1	
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85		1	
86		1	
87		1	
88		1	
89		1	
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91		1	
92		1	
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94		1	
95		1	
96		1	
97		1	
98		1	
99		1	
100		1	

APPENDIX 5 TO PART B

Option 2 Re-Profiled Schedule of Milestones

[illegible]

Schedule 10 – Milestones and Security

[illegible]

Schedule 10 – Milestones and Security

[illegible]

Schedule 10 – Milestones and Security

[illegible]

Schedule 10 – Milestones and Security

[illegible]

Schedule 10 – Milestones and Security

[illegible]

Schedule 10 – Milestones and Security

[illegible]

APPENDIX 6 TO PART B**Option 2 Contract Price Table**

Column (1)	Column (2)		
Item	Contract Price		
43 Trains @ £[x] per Train			
Simulator			
Warranty Spares			
Purchaser Fault Spares			
Maintenance Spares			
Capital Spares			
Special Tools			
Manufacturer Depot Equipment			
Mock-up			
Portable Saloon Door Training Rig			
Technical Documents			
Automatic Train Scanning System			
Provision of facilities at Manufacturer's Premises/Subcontractor's works in accordance with clause 9.5			
Provision of Test Track Facilities in accordance with paragraph 1.16 of schedule 7 (Testing and Inspection)			
Total Contract Price			

APPENDIX 7 TO PART B**Purchaser Milestone Payment Certificate****[To be issued on the Purchaser's headed notepaper]**

To: Construcciones y Auxiliar de Ferrocarriles S.A.

[Address]

Date: [x]

For the attention of: [x]

Manufacturer and Supply Agreement dated [x] and made between Construcciones y Auxiliar de Ferrocarriles S.A. (the "Manufacturer") and Docklands Light Railway Limited (the "MSA")

Words and expressions defined in the MSA shall have the same meanings when used in this certificate and the provisions of the MSA (including clause 63 (Governing Law and Jurisdiction)) shall, as applicable, apply to this certificate.

This certificate constitutes a Purchaser Milestone Payment Certificate under the MSA and I, [the Purchaser Contract Manager] on behalf of the Purchaser hereby confirm to the Manufacturer that, as at the date of this certificate the Manufacturer has achieved Milestone **[insert Milestone number]**, as set out in appendix 1 (Schedule of Milestones) to part B (Milestones) of schedule 10 of the MSA.

[The Purchaser proposes to withhold or deduct the following sums due to it from the Manufacturer from the amount of the Milestone Payment as set out in appendix 1 to part B of schedule 10 (Milestones and Security) of the MSA:]²

Ground for application of withholding or deduction	Amount of withholding or deduction
Liquidated damages agreed or determined to be payable pursuant to clause 16.9	£[x]
Premium paid by Purchaser for insurances pursuant to paragraph 13 of schedule 13 (Insurance)	£[x]
Other amounts to be withheld or deducted pursuant to clause 55 (Set-off)	£[x]

The Purchaser agrees to the Manufacturer issuing a Milestone Payment Invoice in relation of Milestone **[insert Milestone number]** in the amount of £**[Milestone Payment set out in column (3) of the Schedule of Milestones (less the total amount of withholdings or deductions (if any))]**.

The issue of this Purchaser Milestone Payment Certificate shall not be taken to mean that the relevant obligations of the Manufacturer have been completed in accordance with the terms of the MSA or otherwise to the satisfaction of the Purchaser.

² This paragraph and following table only to be included if the Purchaser proposes to apply any withholding or deduction to the relevant Milestone Payment in accordance with the terms of this Agreement.

Signed by **DOCKLANDS LIGHT**)
RAILWAY LIMITED)
for and on behalf of [*insert name in*)
bold and upper case]:)

Position: Purchaser Contract Manager

APPENDIX 8 TO PART B

Form of Re-Profiling Notice

[To be issued on the Purchaser's headed notepaper]

To: Construcciones y Auxiliar de Ferrocarriles S.A.

[Address]

Date: [x]

For the attention of: [x]

[Option 1 Re-Profiling Notice][Option 2 Re-Profiling Notice]

Manufacturer and Supply Agreement dated [x] and made between Construcciones y Auxiliar de Ferrocarriles S.A. (the "Manufacturer") and Docklands Light Railway Limited (the "MSA")

Words and expressions defined in the MSA shall have the same meanings when used in this notice and the provisions of the MSA (including clause 63 (Governing Law and Jurisdiction)) shall, as applicable, apply to this notice.

This notice constitutes an [Option 1 Re-Profiling Notice][Option 2 Re-Profiling Notice] pursuant to clause [25.2][25.3] of the MSA and I, [the Purchaser Contract Manager] on behalf of the Purchaser hereby confirm to the Manufacturer that the [Option 1 Re-Profiling Date][Option 2 Re-Profiling Date] shall be [●], being no earlier than five (5) Working Days from the date of this [Option 1 Re-Profiling Notice][Option 2 Re-Profiling Notice].

Signed by **DOCKLANDS LIGHT**)
RAILWAY LIMITED)
for and on behalf of [*insert name in*)
bold and upper case]:)

Position: Purchaser Contract Manager

Part C - Options for supply of further Trains and Equipment**1. OPTION PRICE FOR OPTION ORDERS****TABLE 1 – OPTION PRICES**

Column 1		Column 2			Column 3		
Option							
Remobilisation Cost							
Option Trains (per Train)							
Option Spares							
	Capital Spares						
	Warranty Spares						
	Maintenance Spares						
Option Spares							
	Capital Spares						
	Warranty Spares						
	Maintenance Spares						
Discount							

The remobilisation costs shown in Column (3) of Table 1 shall only be payable in relation to the first Option Train Change in respect of which the Option Notice is delivered after

The prices for Option Spares as set out in Table 1 above are on the basis of Options exercised by the Purchaser which require Option Trains, respectively. If any other number of Option Trains is ordered pursuant to an Option Notice, the Purchaser and

the Manufacturer shall agree (each acting reasonably) the price of the Option Spares in relation to such Option, having regard to the prices stated with respect to Options requiring [REDACTED] Option Trains, as specified in Table 1.

Where the Purchaser delivers an Option Notice under clause 6.6(a), the Option Price for such Option shall be determined in accordance with Table 1 above, and if the Option Notice is delivered after [REDACTED], then the Option Price for such Option shall be the amount determined in accordance with Table 1 above, multiplied by the Option Indexation Adjustment as at the date of the Option Notice.

1.1 **[Not used.]**

1.2 **Indexation**

The Option Indexation Adjustment shall be calculated in accordance with the following formula.



"OIA" means the Option Indexation Adjustment expressed as a decimal fraction;

"RPIX_y" means the value of RPIX published in the month preceding the month in which the Option Notice is delivered;

"RPIX_x" means the value of RPIX published in April 2017;

"AWE_y" means the value of AWE published in the month preceding the month in which the Option Notice is delivered;

"AWE_x" means the value of AWE published in April 2017;

"PPI_y" means the value of PPI published in the month preceding the month in which the Option Notice is delivered;

"PPI_x" means the value of PPI published in April 2017;

"a" means the applicable proportion for RPIX expressed as a decimal fraction in relation to the Option Train, Option Train or Option Spare as set out in Table 3;

"b" means the applicable proportion for AWE expressed as a decimal fraction in relation to the Option Train or Option Spare as set out in Table 3;

"c" means the applicable proportion for PPI expressed as a decimal fraction in relation to the Option Train or Option Spare as set out in Table 3; and

"d" means the applicable proportion for Unindexed costs expressed as a decimal fraction in relation to the Option Train or Option Spare as set out in Table 3.

1.3 **Changes to the Indices**

If any of the indices referred to in paragraph 1.2 ceases to be published, then such other appropriate index that may be published in place thereof shall apply or, in the absence of an appropriate replacement index, such index shall apply as the Parties may agree.

1.4 Base Date of Indices

If any of the indices specified in paragraph 1.2 is superseded by an index with a base date which is later than the base date of the indices specified above, the superseding index shall be used or an index with a later base date, as the case may require.

1.5 Provisional Indices

Where an index is published as "provisional" and is subsequently amended:

- (a) the calculation of any applicable adjustment may be undertaken using the published provision index and invoices may be rendered accordingly;
- (b) any published amendment to the provisional index shall result in recalculation of any application adjustment; and
- (c) such recalculation shall be retrospective for the relevant period, and

the Party disadvantaged by the amendment to the provisional index shall be entitled to recover the difference in the value of any invoice calculated on the basis of an amended provisional index.

TABLE 3 - INDEXATION

SCHEDULE 11

Subcontracts

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SCHEDULE 12
Change Procedure

Part A	General
Part B	Purchaser Changes
Part C	Manufacturer Changes
Part D	Compensation Changes
Part E	Option Train Changes
Appendix 1:	Schedule of Costs
Appendix 2:	Calculation of Change in Costs
Appendix 3:	Manufacturer's Mark-up

Part A - General

1. **SCOPE**

Any amendment to the terms of this Agreement, including to the rights and/or obligations of the Manufacturer or the Purchaser under this Agreement shall, save expressly provided to the contrary in this Agreement, be made in accordance with the procedure set out in this schedule 12.

2. **DUTIES**

2.1 In exercising any of their rights and performing any of their obligations under this schedule 12, the Parties shall use reasonable endeavours to act in such a manner as to simplify and minimise the administrative time and costs incurred in dealing with any Change proposal, and in any event the Manufacturer shall use all reasonable endeavours to minimise and mitigate the costs of any Change.

2.2 Each Party agrees to act reasonably and not to require the other Party to undertake unnecessary and onerous work in relation to a Change proposal.

3. **CHANGES TO FSA**

If one Party informs the other Party that it considers that a Change proposed in relation to this Agreement is either related to a Change proposed in relation to the FSA or that, if implemented, would require the making of a Change under the FSA, as applicable, then:

- (a) the proposals under this Agreement and under the FSA (as applicable) shall be considered concurrently; and
- (b) a Change Confirmation Notice or a Claim Confirmation Notice (as the case may be) shall not be issued in relation to one of the related Changes alone.

Part B - Purchaser Changes

1. PURCHASER CHANGE NOTICE

- 1.1 The Purchaser shall be entitled at any time during the duration of this Agreement to propose a Change ("**Purchaser Change**").
- 1.2 If the Purchaser wishes to propose a Purchaser Change, it shall serve a notice ("**Purchaser Change Notice**") on the Manufacturer. The Purchaser Change Notice shall only be valid if it is signed by the Purchaser Contract Manager and shall set out details of the proposed Purchaser Change in sufficient detail to enable the Manufacturer to provide the Initial Change Appraisal in accordance with paragraph 2 (Initial Change Appraisal).
- 1.3 If the Purchaser considers, in its absolute discretion, that a Change needs to be implemented immediately (an "**Emergency Change**") then the Purchaser shall indicate in the Purchaser Change Notice or at any time during the process set out in this part B that the Purchaser Change is an Emergency Change and the Manufacturer shall commence the implementation of such Purchaser Change forthwith notwithstanding that the full process in this part B has not been followed. The provisions set out in the remainder of this part B shall apply to such Emergency Change save that, where the context requires, such provisions shall be read having regard to the fact that the Manufacturer has already commenced the implementation of the Purchaser Change.
- 1.4 In relation to an Emergency Change, the Purchaser shall:
 - (a) during the implementation of any Emergency Change and prior to the full Purchaser Change process having been duly completed (in accordance with this part B), pay to the Manufacturer following the end of each TfL Period an amount to cover any reasonable interim incremental costs, fees and expenses reasonably and properly incurred during that TfL Period as a direct result of the implementation of the Emergency Change ("**Emergency Change Interim Payments**"). Any Emergency Change Interim Payments will be reconciled in the Schedule of Payments in accordance with paragraph 7.5 of this part B; and
 - (b) if (where the Purchaser is not precluded under this Agreement from doing so) the Purchaser withdraws the relevant Purchaser Change Notice (or if it is deemed withdrawn), pay the reasonable costs properly incurred by the Manufacturer in respect of the Emergency Change prior to such withdrawal (to the extent not already covered by the Emergency Change Interim Payments).

2. INITIAL CHANGE APPRAISAL

- 2.1 As soon as practicable and in any event within 20 Working Days after receipt of a Purchaser Change Notice (or such longer period as is agreed by the Purchaser acting reasonably), the Manufacturer shall deliver to the Purchaser a written report (an "**Initial Change Appraisal**") which shall set out:
 - (a) whether, in the reasonable opinion of the Manufacturer, including an explanation of the Manufacturer's reasons for such an opinion, the proposed Purchaser Change would:
 - (i) be technically unfeasible or impossible; or
 - (ii) be illegal or put it in breach of its Safety Obligations where such illegality or breach could not be remedied by the Manufacturer making other changes to the Trains or Works in order to accommodate such Purchaser Change,

in each case in a manner that cannot be compensated or relieved by this schedule 12;

- (b) the Manufacturer's initial assessment of any impact of the proposed Purchaser Change on any of the dates or activities referred to in the relevant Key Programme Dates, the Contractual Provisional Acceptance Dates, the Contractual Final Acceptance Dates and the Contractual Fleet Acceptance Date;
- (c) the Manufacturer's initial assessment of the scope of any changes to the Works, the Trains or the Equipment or any additional works required to implement the proposed Purchaser Change, including:
 - (i) any investigatory or detailed design work which would have to be carried out in advance of preparing or finalising a Change Appraisal in respect of the proposed Purchaser Change; and
 - (ii) any changes to the Works or additional works which, in order to achieve the proposed Purchaser Change or to avoid or minimise any abortive works, would have to be commenced in advance of preparing or finalising a Change Appraisal in respect of the proposed Purchaser Change;
- (d) the Manufacturer's initial assessment of any impact of the proposed Purchaser Change on the RSMM;
- (e) the Manufacturer's estimate, acting in good faith, of all Change in Costs under this Agreement that are associated with the proposed Purchaser Change, identifying separately each Change of Cost with such estimate;
- (f) without prejudice to paragraph 3 (Changes to FSA) of part A (General) of this schedule 12, the Manufacturer's initial assessment of the impact of the proposed Purchaser Change on the FSA;
- (g) the Manufacturer's initial assessment of the impact of the proposed Purchaser Changes on the number of Warranty Spares, Purchaser Fault Spares and/or Maintenance Spares that are required to be provided pursuant to this Agreement;
- (h) the Manufacturer's initial assessment of any amendments that need to be made to the Bill of Materials;
- (i) the Manufacturer's initial assessment of any amendments that need to be made to the Technical Documents; and
- (j) the Manufacturer's reasonable estimate of the cost and time required to prepare a Change Appraisal in respect of the proposed Purchaser Change in accordance with paragraph 4 (Change Appraisal),

taking into account, in the case of an Initial Change Appraisal issued in response to an Option Notice, the matters set out in part E (Option Train Changes).

2.2 The Manufacturer's estimate referred to in paragraph 2.1(e) shall include:

- (a) a Fixed Price Quotation; and
- (b) the Manufacturer's proposed Schedule of Payments (to cover the Fixed Price Quotation).

3. **PROCEDURE FOLLOWING SUBMISSION OF AN INITIAL CHANGE APPRAISAL**

- 3.1 If the Initial Change Appraisal states that, in the Manufacturer's opinion, the proposed Purchaser Change falls within one or more of the restrictions set out in paragraph 2.1(a), then the Manufacturer shall be entitled to object to the implementation of the proposed Purchaser Change, save that the Manufacturer shall not be entitled to object to an Option Train Change on any of the grounds in paragraph 2.1(a) if the Manufacturer can be compensated by this schedule 12.
- 3.2 If the Purchaser disagrees with the Manufacturer's opinion, then the Parties shall seek to resolve the matter(s) in dispute and, if agreement has not been reached within ten (10) Working Days of receipt of the Initial Change Appraisal, the Purchaser may refer the matter for resolution under the Dispute Resolution Procedure. If the Purchaser has not referred the matter to the Dispute Resolution Procedure within 20 Working Days of receipt of the Initial Change Appraisal, the Purchaser Change Notice shall be deemed to be withdrawn.
- 3.3 Provided that the Purchaser Change Notice has not been withdrawn by the Purchaser (or deemed to have been withdrawn in accordance with paragraph 3.2), then within 20 Working Days after receipt of the Initial Change Appraisal (or a determination in favour of the Purchaser following a reference to the Dispute Resolution Procedure under paragraph 3.2), the Purchaser shall issue a Change Appraisal Instruction instructing the Manufacturer to prepare a Change Appraisal in respect of the proposed Purchaser Change.
- 3.4 If the Purchaser has not issued a Change Appraisal Instruction within such 20 Working Day period, the Purchaser Change Notice shall be deemed to have been withdrawn.
- 3.5 A Change Appraisal Instruction provided by the Purchaser under paragraph 3.4 shall:
- (a) state any requirement which the Purchaser has with regard to the form of procurement;
 - (b) include any additional information in respect of the proposed Purchaser Change which the Purchaser requires the Manufacturer to consider when preparing the Change Appraisal; and
 - (c) specify any reporting format, break down of quotations or any other matters specifically required to be included in the Change Appraisal.
- 3.6 At the same time as issuing a Change Appraisal Instruction under paragraph 3.3, the Purchaser may issue a Change Confirmation Notice instructing the Manufacturer to proceed with any preliminary works or advance works identified in the Initial Change Appraisal in accordance with paragraph 2.1(c)(i) and/or (ii). The cost of any such works shall be included in the quotation included in the Change Appraisal and agreed in accordance with paragraph 6 (Implementation of Purchaser Change). In the event of any Dispute in respect of the extent of such surveys or works, either Party may refer the matter for resolution under the Dispute Resolution Procedure.

4. **CHANGE APPRAISAL**

- 4.1 Following the issue of a Change Appraisal Instruction, the Manufacturer shall deliver a written report (a "**Change Appraisal**") to the Purchaser within 20 Working Days.
- 4.2 The Change Appraisal shall set out:
- (a) the Manufacturer's detailed assessment of the matters referred to in paragraphs 2.1(b) to 2.1(j) and any other impact of the proposed Purchaser Change on the provision of the Works;

- (b) whether relief from compliance with obligations is required, including the obligations of the Manufacturer to achieve the Provisional Acceptance of a Train by no later than the Train Longstop Date;
- (c) any amendments required to this Agreement (including any amendments to the Train Technical Requirements), or to the FSA as a result of the proposed Purchaser Change;
- (d) any Relevant Approvals which are required in order to implement the proposed Purchaser Change, any assistance which the Manufacturer anticipates it will require from the Purchaser in order to obtain such Relevant Approvals, and whether the proposed Purchaser Change will invalidate any Relevant Approval or make the obtaining of any Relevant Approval more onerous for the Manufacturer;
- (e) the proposed method of certification of any design, construction or operational aspects of the Works required by the proposed Purchaser Change if not covered by the procedures specified in this Agreement;
- (f) assurance deliverables to meet the requirements of schedule 6 (Assurance);
- (g) a Fixed Price Quotation, which will include a breakdown of such quotation identifying separately (without double counting):
 - (i) each Change in Costs; and
 - (ii) any impact on the Milestone Payments;
- (h) the Manufacturer's proposed Schedule of Payments to take account of the aggregate cost (or saving) of implementing the proposed Purchaser Change and/or any adjustment to the Milestone Payments;
- (i) amendments that need to be made to the quantity and rate of consumption of Warranty Spares, Purchaser Fault Spares and/or Maintenance Spares;
- (j) amendments that need to be made to the RSMM;
- (k) amendments that need to be made to the Bill of Materials;
- (l) amendments that need to be made to the Technical Documents; and
- (m) the Manufacturer's proposed amendments to the Advance Payment Bond and/or Guarantee (if a Guarantee is in place at that time), or, where the Guarantee is in place at that time but is not being amended, a confirmation that the Guarantee will be reaffirmed,

taking into account, in the case of a Change Appraisal issued in relation to an Option Notice, the matters set out in part E (Option Train Changes).

- 4.3 The Manufacturer shall ensure in respect of any Change Appraisal that the Change in Costs is calculated in accordance with appendix 2 (Calculation of Change in Costs) of this schedule 12.

5. **PROCEDURE FOLLOWING SUBMISSION OF A CHANGE APPRAISAL**

- 5.1 The Purchaser may request that the Manufacturer provide any further evidence or information in respect of the matters referred to at paragraphs 4.2 and 4.3 and notify the Manufacturer whether it wishes to amend the proposed Purchaser Change providing full details of any proposed amendment in which case the Manufacturer shall submit an

amended Change Appraisal within 20 Working Days of such notification or such longer period as is agreed between the Parties.

- 5.2 All evidence and information provided by the Manufacturer or its Subcontractors and their subcontractors of any tier in response to a request under paragraph 5.1 shall be provided on an open book basis on the basis of the principles set out in schedule 15 (Open Book Accounting) and the Purchaser shall be entitled, subject to providing reasonable notice, to enter the offices of the Manufacturer and/or its Key Subcontractors for the purposes of auditing, inspecting and copying documentation (using facilities at the Manufacturer's or its Key Subcontractors' offices at no charge to the Purchaser) relating to any costings, claims of expenditure or losses incurred or likely to be incurred, estimates and quotations relevant to the proposed Purchaser Change.
- 5.3 Subject to paragraph 5.4, if the Parties cannot agree on the contents of the Change Appraisal (other than any element which forms part of the Manufacturer Cost Proposal for which the provisions of paragraph 6 (Implementation of Purchaser Change) shall apply), then either Party may refer the Dispute for resolution under the Dispute Resolution Procedure.
- 5.4 As soon as practicable, and in any event within 40 Working Days after, the contents of the Change Appraisal (other than any outstanding issues in relation to the Manufacturer Cost Proposal as referred to in paragraph 6 (Implementation of Purchaser Change)) have been agreed in accordance with paragraph 5.1 or determined in accordance with paragraph 5.3, the Purchaser shall either:
 - (a) issue a Change Confirmation Notice, instructing the Manufacturer to proceed with the implementation of the Purchaser Change or a part of the Purchaser Change in accordance with paragraph 6 (Implementation of Purchaser Change); or
 - (b) withdraw the Purchaser Change Notice.

If the Purchaser has not issued a Change Confirmation Notice within such 40 Working Day period, then the Purchaser Change Notice shall be deemed to have been withdrawn.

6. **IMPLEMENTATION OF PURCHASER CHANGE**

- 6.1 A Change Confirmation Notice issued by the Purchaser pursuant to paragraph 3.6 or paragraph 5.4(a) shall state:
 - (a) whether the Purchaser accepts:
 - (i) the Fixed Price Quotation;
 - (ii) the Manufacturer's proposed Schedule of Payments and/or adjustments to the Milestone Payments proposed in accordance with paragraph 4.2(h); and
 - (iii) any other proposal relating to the costs of or savings arising from the implementation of the Purchaser Change including costs that can be calculated using the Schedule of Costs,

each as included in the Initial Change Appraisal or the Change Appraisal, as the case may be (the "**Manufacturer Cost Proposal**").
- 6.2 A Change Confirmation Notice issued by the Purchaser pursuant to paragraphs 3.6 or 5.4(a) shall attach a copy of or otherwise reference, as applicable:
 - (a) the Initial Change Appraisal;

- (b) the instructions issued in accordance with paragraph 3.6;
 - (c) the Change Appraisal which shall be in agreed form other than in respect of any issues relating to the Manufacturer Cost Proposal or which remain to be agreed or determined under this paragraph 6;
 - (d) the RSMM, updated in order to reflect the Purchaser Change;
 - (e) an updated schedule 8 (Spares and Special Tools) to reflect the updated number of Warranty Spares, Purchaser Fault Spares and/or Maintenance Spares;
 - (f) the Bill of Materials, updated and delivered to the Purchaser in accordance with clause 10.7; and
 - (g) the Technical Documents, updated and delivered to the Purchaser in accordance with paragraph 1 of schedule 28 (Technical Information).
- 6.3 A Change Confirmation Notice shall have the effect of varying the relevant Train Technical Requirements or any other term of this Agreement to the extent provided in the agreed Initial Change Appraisal, the agreed instructions issued in accordance with paragraph 3.6 or the agreed Change Appraisal, as applicable, with effect from the date of receipt by the Manufacturer of the Change Confirmation Notice or such other date specified in the Change Confirmation Notice. As soon as practicable after such date the Manufacturer shall implement the Purchaser Change or part of the Purchaser Change and shall be bound by this Agreement in so doing as if the Purchaser Change or relevant part of the Purchaser Change formed part of the relevant Train Technical Requirements or other terms of this Agreement.
- 6.4 The Manufacturer Cost Proposal accepted in accordance with paragraph 6.1(a) shall be binding on both Parties in full and final settlement of all costs incurred by the Manufacturer and any impact (whether arising directly or indirectly as a result of the Purchaser Change) on the relevant Milestone Payments and any other sum to be calculated pursuant to schedule 10 (Milestones and Security) notwithstanding that the actual costs or impact may be greater or less than the Manufacturer Cost Proposal accepted, agreed or determined as the case may be.
- 6.5 In implementing any Purchaser Change, the Manufacturer shall comply with, as applicable:
- (a) the certification and assurance procedures for Trains and Equipment set out in this Agreement; or
 - (b) the method of certification and assurance specified in the agreed Change Appraisal in accordance with paragraph 4.2(e).
- 6.6 The Manufacturer shall maintain and make available any records relating to a Purchaser Change in accordance with this Agreement.
- 6.7 The Manufacturer shall:
- (a) where required, within ten (10) Working Days of the Change Confirmation Notice provide an amended and/or restated Advance Payment Bond and/or Guarantee; and
 - (b) in relation to any Change where an amended Guarantee is not required, and provided that a Guarantee is in place at that time, provide a restated Guarantee.

7. PAYMENTS BY THE PURCHASER

- 7.1 Any Schedule of Payments proposed by the Manufacturer in accordance with paragraph 2.2(b) or 4.2(h) shall:
- (a) set out any amendments to the relevant Milestone Payments;
 - (b) set out the timing of the payments to be made by the Purchaser in respect of the net cost (if any) for implementing the proposed Purchaser Change (as quoted or estimated pursuant to paragraphs 2.1(e) and 2.2(a), or paragraphs 4.2(f) and 4.2(h), as applicable); and
 - (c) in respect of the payments referred to in paragraphs 7.1(a) and 7.1(b) identify those payments which relate to the carrying out of, or specific progress towards, an element within the Purchaser Change and, in respect of each such payment, specify the evidence which the Manufacturer will provide in order to confirm that the part of the Purchaser Change corresponding to each occasion when payment is due has been duly carried out.
- 7.2 Where the Manufacturer Cost Proposal (accepted in accordance with paragraph 6.1(a)) requires the Purchaser to make one or more payments to the Manufacturer by reference to a Schedule of Payments (other than amendments to the relevant Milestone Payments), the Purchaser shall make any such payment within 30 Working Days of receipt by the Purchaser of an invoice (complete in all material respects) in accordance with the agreed Schedule of Payments accompanied by relevant evidence (where applicable) that the relevant part of the Purchaser Change has been carried out.
- 7.3 Where the Manufacturer Cost Proposal (accepted in accordance with paragraph 6.1(a)) includes amendments to the relevant Milestone Payments, the payments will be made in accordance with the provisions of schedule 10 (Milestones and Security).
- 7.4 If payment is not made in accordance with paragraph 7.2 or 7.3, the Purchaser shall pay to the Manufacturer interest at the Default Rate on the amount unpaid from the date 30 Working Days after receipt of the relevant invoice until settlement of such payment.
- 7.5 Once a Change Confirmation Notice has been issued by the Purchaser in relation to an Emergency Change (if any), the Parties shall ensure that the Schedule of Payments provides for a reconciliation of any discrepancy between the Emergency Change Interim Payments made by the Purchaser pursuant to paragraph 1.4 and the actual incremental costs, fees and expenses reasonably and properly incurred by the Manufacturer (and accounted for) in relation to the implementation of the Emergency Change during the period from the relevant Purchaser Change Notice issued pursuant to paragraph 1.2 and prior to the Purchaser's Change Confirmation Notice.

Part C - Manufacturer Changes

1. MANUFACTURER CHANGE NOTICE

- 1.1 If the Manufacturer wishes to introduce a change to any of the relevant Train Technical Requirements ("**Manufacturer Change**"), it must serve a notice in writing on the Purchaser ("**Manufacturer Change Notice**") which shall:
- (a) set out the proposed Manufacturer Change in sufficient detail to enable the Purchaser to evaluate it in full including providing information equivalent to that provided in respect of a Purchaser Change pursuant to paragraph 2 (Initial Change Appraisal) or paragraph 4 (Change Appraisal) of part B (Purchaser Changes) of this schedule 12;
 - (b) specify the Manufacturer's reasons for proposing the proposed Manufacturer Change;
 - (c) request the Purchaser to consult with the Manufacturer with a view to deciding whether to agree to the Manufacturer Change and, if so, what consequential changes the Purchaser requires as a result;
 - (d) indicate any implications of the proposed Manufacturer Change (including impact on reliability, design life, operating concept and interfaces); and
 - (e) indicate if there are any dates by which a decision by the Purchaser is critical.

2. EVALUATION OF MANUFACTURER CHANGE

- 2.1 The Purchaser shall evaluate the proposed Manufacturer Change in good faith, taking into account all relevant issues, including whether:
- (a) the Purchaser will be required to make a change in the relevant Milestone Payments or to make any other payment;
 - (b) the change affects the quality of the Works or the likelihood of successful delivery of the Works;
 - (c) the change will alter the relationship of the Purchaser with third parties;
 - (d) the financial strength of the Manufacturer is sufficient to perform the proposed Manufacturer Change, taking into account the Advance Payment Bond and Guarantee;
 - (e) the impact on the design life of the Trains; and
 - (f) the change materially affects the risks or costs to which the Purchaser is exposed.
- 2.2 The Purchaser cannot reject a Manufacturer Change which is required in order to conform to a Change in Law. The costs of introducing a Manufacturer Change and other effects resulting from a Qualifying Change in Law (including any resulting variation in any Milestone Payments) shall be dealt with in accordance with clause 29 (Change in Law) and, to the extent not so dealt with, shall be borne by the Manufacturer.

3. PROCEDURE FOLLOWING SUBMISSION OF A MANUFACTURER CHANGE NOTICE

- 3.1 As soon as practicable after receiving the Manufacturer Change Notice, if requested by either Party, the Parties shall meet and discuss the matters referred to in such notice.

During their discussions the Purchaser may propose modifications or (acting in its absolute discretion) accept or reject the Manufacturer Change Notice.

3.2 If the Purchaser accepts the Manufacturer Change Notice (with or without modification), the Parties shall, as soon as practicable after the Purchaser's acceptance:

(a) agree and enter into any documents to amend this Agreement, the FSA or any other relevant document which are necessary to give effect to the Manufacturer Change; and

(b) implement the Manufacturer Change.

3.3 If the Purchaser rejects the Manufacturer Change Notice, it shall not be obliged to give its reasons for such a rejection.

4. **PAYMENT ADJUSTMENT**

4.1 Unless the Purchaser's acceptance specifically agrees to an increase in the relevant Milestone Payments or other payments under this Agreement, there shall be no increase in such payments as a result of a Manufacturer Change.

4.2 If the Manufacturer Change causes or will cause the Manufacturer's costs or those of a Subcontractor to decrease, the Milestone Payments or other payments shall be reduced accordingly.

4.3 Following agreement to any adjustment to the relevant Milestone Payments pursuant to this part C, the relevant Schedule of Milestones shall be updated.

Part D - Compensation Changes

1. COMPENSATION CLAIM

1.1 As soon as practicable and in any event within 15 Working Days after the Manufacturer is aware that a Compensation Event has caused or is likely to cause any of the consequences referred to in clause 17.7 (Occurrence of a Compensation Event), the Manufacturer shall give to the Purchaser a notice of its claim (an **"Initial Claim Appraisal"**), which shall set out the opinion of the Manufacturer on:

- (a) the Manufacturer's initial assessment of any impact of the proposed Compensation Event on any of the dates or activities referred to in the relevant Project Programme and/or Key Programme Dates, the Contractual Provisional Acceptance Dates, the Contractual Final Acceptance Dates and the Contractual Fleet Acceptance Date;
- (b) the Manufacturer's initial assessment of the scope of any changes to the Works, the Trains or the Equipment;
- (c) without prejudice to paragraph 3 (Changes to FSA) of part A (General) of this schedule 12, the Manufacturer's initial assessment of the impact of the proposed Compensation Event on the FSA; and
- (d) the Manufacturer's estimate, acting in good faith, of all Change in Costs under this Agreement that are associated with the proposed Compensation Event, identifying separately each Change in Cost with such estimate.

1.2 The Manufacturer's estimate referred to in paragraph 1.1(d) of this part D shall include:

- (a) in respect of any capital works arising from the Compensation Event, a Fixed Price Quotation determined by reference to the Schedule of Costs;
- (b) details of those effects of the Compensation Event which are not covered by the Fixed Price Quotation provided under sub-paragraph 1.2(a) and for which the cost can be determined by reference to the Schedule of Costs; and
- (c) the Manufacturer's proposed Schedule of Payments (which may, if appropriate, consist of a single lump sum payment) to take account of the Change in Costs of the Compensation Event.

1.3 In the event that the information is provided after the timescales referred to in paragraph 1.1 then the Manufacturer shall not be entitled to compensation and/or relief from its obligations under this Agreement to the extent that the amount of such compensation and/or required relief has been increased as a result of such delay in providing such information.

1.4 The Manufacturer shall, without prejudice to its obligations in this Agreement and in accordance with the standard expected of a competent contractor involved in designing and manufacturing rolling stock acting in accordance with Good Industry Practice, use its reasonable endeavours to mitigate any adverse effects of a Compensation Event.

2. PROCEDURE FOR SUBMISSION OF AN INITIAL CLAIM APPRAISAL

2.1 Within 15 Working Days after receipt of the Initial Claim Appraisal, the Purchaser may issue a Claim Confirmation Notice in accordance with paragraph 5 (Agreement of Claim) of this part D or issue an instruction for the Manufacturer to provide a Claim Appraisal in respect of the Compensation Event (a **"Claim Appraisal Instruction"**).

- 2.2 A Claim Appraisal Instruction provided by the Purchaser under paragraph 2.1 shall:
- (a) state whether the Purchaser requires the Manufacturer to submit to it a Fixed Price Quotation in respect of the effects of the Compensation Event or any part of the Compensation Event;
 - (b) include any additional information in respect of a Compensation Event which the Purchaser requires the Manufacturer to consider when making the Claim Appraisal; and
 - (c) specify any reporting format, breakdown of quotations or any other matters specifically required to be included in the Claim Appraisal.

3. **CLAIM APPRAISAL**

- 3.1 Following the issue of a Claim Appraisal Instruction the Manufacturer shall deliver a written report (a "**Claim Appraisal**") to the Purchaser within 15 Working Days.

- 3.2 The Claim Appraisal shall set out:

- (a) the Manufacturer's detailed assessment of the matters referred to in paragraphs 1.1(a) to (d) of this part D and any other impact of the Compensation Event on the provision of the Trains or the Equipment;
- (b) whether relief from compliance with obligations is required including the obligations of the Manufacturer to achieve the relevant Provisional Acceptance of a Train by no later than the Train Longstop Date, and the proposed postponement of such date by such time as shall be reasonable in the circumstances;
- (c) any amendments required to this Agreement (including any amendments to the Train Technical Requirements), the FSA or any other relevant document as a result of the Compensation Event;
- (d) where the Claim Appraisal Instruction specifies that a Fixed Price Quotation must be provided, the amount of such Fixed Price Quotation and a breakdown of such quotation identifying separately (without double counting):
 - (i) each Change in Costs; and
 - (ii) any impact on the relevant Milestone Payments; and
 - (iii) any amount included in such estimate to take account of contingencies and risks associated with paragraphs (i) and (ii) above;
- (e) insofar as not covered by a Fixed Price Quotation provided under paragraph 3.2(d):
 - (i) an estimate of each of the items set out in paragraphs 3.2(d)(i) and (ii); and
 - (ii) details of any of the amounts referred to in paragraph (i) above which can be determined by reference to the Schedule of Costs; and
- (f) the Manufacturer's proposed Schedule of Payments to take account of the aggregate cost (or savings) of the Compensation Event and/or any adjustment to the relevant Milestone Payments.

- 3.3 The Manufacturer shall ensure in respect of any Claim Appraisal that:

- (a) the Change in Costs are calculated in accordance with appendix 2 (Calculation of Change in Costs) of this schedule 12;

- (b) that any Fixed Price Quotation or change to the relevant Milestone Payments reflects prevailing market rates applicable to the circumstance of the quotation; and
- (c) that it has used its best endeavours to oblige its Subcontractors and their subcontractors of any tier to minimise any increase in cost and maximise any reduction in costs.

4. PROCEDURE FOLLOWING SUBMISSION OF CLAIM APPRAISAL

- 4.1 As soon as practicable after the Purchaser receives the Claim Appraisal, the Parties shall discuss and endeavour to agree, acting reasonably, the matters set out in the Claim Appraisal. During such discussions, the Purchaser may request that the Manufacturer provide any further evidence or information in respect of the matters referred to in paragraph 3.3.
- 4.2 All evidence and information provided by the Manufacturer or its Subcontractors and their subcontractors of any tier in response to requests under paragraph 4.1 shall be provided on an open book basis on the basis of the principles set out in schedule 15 (Open Book Accounting), and the Purchaser shall be entitled, subject to providing reasonable notice, to enter the offices of the Manufacturer for the purpose of auditing, inspecting and copying documentation (using facilities at the Manufacturer's office at no charge to the Purchaser) relating to any costs, claims of expenditure or losses incurred or likely to be incurred, estimates and quotations relevant to the Compensation Event.
- 4.3 If the Parties cannot agree on the contents of the Claim Appraisal (other than any element which forms part of the Manufacturer Compensation Proposal for which the provisions of paragraph 5 (Agreement of Claim) shall apply), then either Party may refer the Dispute for resolution under the Dispute Resolution Procedure and such compensation shall be determined on the basis of what would be reasonable for such a Compensation Event.
- 4.4 As soon as practicable, and in any event within 20 Working Days after the contents of the Claim Appraisal (other than any outstanding element relating to the Manufacturer Compensation Proposal as referred to in paragraph 5 (Agreement of Claim)) have been agreed in accordance with paragraph 4.1 or determined in accordance with paragraph 4.3, the Purchaser shall issue a Claim Confirmation Notice setting out the matters which have been agreed or determined.

5. AGREEMENT OF CLAIM

- 5.1 A Claim Confirmation Notice issued by the Purchaser pursuant to paragraph 2.1 or 4.4 shall state:
 - (a) whether the Purchaser accepts:
 - (i) in the case of a Claim Confirmation Notice issued under paragraph 2.1:
 - (A) the Fixed Price Quotation; and
 - (B) the Manufacturer's proposed Schedule of Payments (which may, if applicable consist of a single lump sum payment),
 - each as included in the Initial Claim Appraisal (where applicable, as amended in accordance with paragraph 4 (Procedure Following Submission of a Claim Appraisal)); or
 - (ii) in the case of a Claim Confirmation Notice issued under paragraph 4.4:

- (A) the Fixed Price Quotation;
- (B) the Manufacturer's proposed Schedule of Payments and/or adjustments to the relevant Milestone Payments proposed in accordance with paragraph 3.2(f); and
- (C) any other proposal relating to the costs of or savings arising from the Compensation Event,

each as included in the Claim Appraisal,

(in each case, the "**Manufacturer Compensation Proposal**"); and

- (b) if the Purchaser states in accordance with paragraph 5.1(a) that it does not accept the Manufacturer Compensation Proposal, the reasons for not so doing.

5.2 A Claim Confirmation Notice issued by the Purchaser pursuant to paragraph 2.1 or 4.4 of this part D shall attach a copy of or otherwise reference the relevant parts of the Initial Claim Appraisal or the Claim Appraisal, as applicable, and shall be in agreed form other than in respect of any issues relating to the Manufacturer Compensation Proposal which remain to be agreed or determined under this paragraph 5.

5.3 Subject to paragraph 5.6, a Claim Confirmation Notice shall have the effect of varying the relevant Train Technical Requirements or postponing the relevant longstop dates in the relevant Key Programme Dates or any other term of this Agreement to the extent provided in the agreed Initial Claim Appraisal or the agreed Claim Appraisal, as applicable, with effect from the date of receipt by the Manufacturer of the Claim Confirmation Notice or such other date specified in the Claim Confirmation Notice.

5.4 If the Purchaser states in the Claim Confirmation Notice that it does not agree with the Manufacturer Compensation Proposal, then:

- (a) the Parties shall endeavour to reach agreement in respect of the cost (or saving) of the Compensation Event; and
- (b) the Purchaser may request any additional information of the type referred to in paragraph 4.1 and in providing such information the provisions of paragraph 4.2 shall apply mutatis mutandis.

If the Parties fail to reach agreement within 20 Working Days of the issue of the Claim Confirmation Notice, then either Party may refer the matter for resolution under the Dispute Resolution Procedure.

5.5 The Manufacturer Compensation Proposal accepted in accordance with paragraph 5.1(a) or agreed or determined in accordance with paragraph 5.4 shall be binding on both Parties in full and final settlement of all costs incurred by the Manufacturer and any impact (whether arising directly or indirectly as a result of the Compensation Event) on the relevant Milestone Payments and any other sum to be calculated pursuant to schedule 10 (Milestones and Security) notwithstanding that the actual costs or impact may be greater or less than the Manufacturer Compensation Proposal accepted, agreed or determined as the case may be.

5.6 The Manufacturer shall maintain and make available any records relating to a Compensation Event in accordance with this Agreement.

6. PAYMENTS BY THE PURCHASER

- 6.1 Any Schedule of Payments proposed by the Manufacturer in accordance with paragraphs 1.2(c) or 3.2(f) of this part D shall:
- (a) set out any amendments to the relevant Schedule of Milestones;
 - (b) set out the timing of the payments to be made by the Purchaser in respect of the net cost (if any) for dealing with the Compensation Event (as quoted or estimated pursuant to paragraphs 1.1(d) and 1.2(a), or paragraphs 3.2(e) and 3.2(f), as applicable); and
 - (c) in respect of the payments referred to in paragraphs 6.1(a) and 6.1(b), identify those payments which relate to the carrying out of, or specific progress towards, dealing with any element of the Compensation Event and, in respect of each such payment, specify the evidence which the Manufacturer will provide in order to confirm that the relevant part of the Compensation Event corresponding to each occasion when payment is due has been duly dealt with.
- 6.2 Where the Manufacturer Compensation Proposal (accepted in accordance with paragraph 5.1(a) or agreed or determined in accordance with paragraph 5.4) requires the Purchaser to make one or more payments to the Manufacturer by reference to a Schedule of Payments (other than amendments to the relevant Schedule of Milestones), the Purchaser shall make any such payment within 30 Working Days of receipt by the Purchaser of an invoice (complete in all material respects) in accordance with the agreed Schedule of Payments accompanied by the relevant evidence (where applicable) that the relevant part of the Compensation Event has been dealt with.
- 6.3 Where the Manufacturer Compensation Proposal (accepted in accordance with paragraph 5.1(a) or agreed or determined in accordance with paragraph 5.4)) includes amendments to the Schedule of Milestones, the payments will be made in accordance with the provisions of schedule 10 (Milestones and Security).
- 6.4 If payment is not made in accordance with paragraph 6.2 or 6.3, the Purchaser shall pay to the Manufacturer interest at the Default Rate on the amount unpaid from the date 30 Working Days after receipt of the relevant invoice until payment.

Part E - Option Train Changes**1. REQUIRED TERMS**

If the Purchaser delivers an Option Notice, the Manufacturer shall, without prejudice to the generality of its obligations under this Agreement, unless the Purchaser agrees otherwise, prepare its Initial Change Appraisal and Change Appraisal in response to that Option Notice on the basis of the following principles:

- (a) the Change in Costs in relation to the proposed Option Train Change shall be consistent with the Option Prices;
- (b) the Manufacturer will comply with its obligations under paragraph 1.7 of part A (Advance Payment Bond) of schedule 10 (Milestones and Security);
- (c) the Schedule of Payments in relation to the proposed Option Train Change [REDACTED] of the applicable Option Price before Acceptance of the relevant Train or Equipment;
- (d) the first of the relevant Trains is to be delivered to the Purchaser for Acceptance no later than 78 weeks after the end of the week in which the relevant Change Confirmation Notice is issued by the Purchaser;
- (e) for the avoidance of doubt, clause 7.15(i) shall apply; and
- (f) the programmed dates for the delivery of such Trains for Acceptance shall be such that, taking into account the cumulative effect of deliveries of Trains comprising the Base Order and the Option Trains, the delivery rate of Trains will not at any time exceed four (4) Trains per TFL Period.

APPENDIX 1

Schedule of Costs

To the extent that an Initial Change Appraisal or a Change Appraisal agreed in accordance with part B (Purchaser Changes) or part D (Compensation Changes) of this schedule 12 states that any costs are to be agreed by reference to the Schedule of Costs, then such costs shall be determined as follows:

1. **STAFF COSTS**

1.1 **Professional and other monthly paid staff**

The cost of professional and other monthly paid staff of the Manufacturer or its Subcontractors working directly on the design or manufacture of any Works required by a Purchaser Change shall be recoverable on a time basis as follows:

$(\text{Basic Annual Salary} / 1600) \times \text{Actual Hours Worked} \times \text{On-Cost Multiplier A}$

Where:

Basic Annual Salary means the annual salary excluding overtime and bonuses during the period covered by the account. Where the annual salary is changed during the period covered by the account, the total worked should be apportioned and applied to the relevant salary level;

Actual Hours Worked means actual hours worked including overtime hours; and

On-Cost Multiplier A is the factor required to recover the appropriate part of the annual salary and on-costs. The multiplier to be used for this paragraph 1.1 is [REDACTED]. The on-costs deemed to be covered by On-Cost Multiplier A include (i) the costs of general management and accountancy, support staff, secretarial and administration staff and the like, (ii) the costs of normal office overheads and profit, and (iii) all contributions and payments made by the employer for staff pension and life assurance schemes and for National Insurance, and any tax, charge, levy, impost or payment of any kind which the employer is obliged by law to make on behalf of or in respect of the relevant employee.

1.2 **Agency or sub-consultant staff (based in the offices of the Manufacturer or its Subcontractors)**

The cost of agency or sub-consultant staff working directly on the design or manufacture of any Works required by a Purchaser Change who are not direct employees of any of the Manufacturer or its Subcontractors but are based in the offices of the Manufacturer or its Subcontractors shall be recoverable on a time basis as follows:

$\text{Hourly Cost} \times \text{Actual Hours Worked} \times \text{On-Cost Multiplier B}$

Where:

Hourly Cost means the hourly cost paid to an agency or sub-consultant in respect of named individual professionals;

Actual Hours Worked means actual hours worked; and

On-Cost Multiplier B is the factor required to recover the appropriate part of the Manufacturer's and Key Subcontractor's on-costs. The multiplier to be used for this paragraph 1.2 is [REDACTED]. The on-costs deemed to be covered by On-Cost Multiplier B include (i) the costs of general management and accountancy, support staff, secretarial

and administration staff and the like; and (ii) the costs of normal office overheads and profit.

1.3 **Agency or sub-consultant staff (based in their own offices)**

The cost of agency or sub-consultant staff working directly on the design or manufacture of any Works required by a Purchaser Change who are not direct employees of any of the Manufacturer or its Key Subcontractors and are based in their own offices shall be recoverable on a time basis as follows:

Hourly Cost x Actual Hours Worked x On-Cost Multiplier C

Where:

Hourly Cost means the hourly cost paid to an agency or sub-consultant in respect of named individual professionals;

Actual Hours Worked means actual hours worked including overtime hours; and

On-Cost Multiplier C is the factor required to recover the appropriate part of the Manufacturer's and the Key Subcontractor's on-costs. The multiplier to be used for this paragraph 1.3 is [REDACTED]. The on-costs deemed to be covered by On-Cost Multiplier C include (i) the costs of general management and accountancy, support staff, secretarial and administration staff and the like; and (ii) profit.

1.4 **Miscellaneous**

- (a) Time spent in travelling for the purposes of the Purchaser Change to be performed under this Schedule of Costs shall be chargeable, excluding travel between home and normal work place.
- (b) Time spent by staff engaged in general accountancy, secretarial or administration duties (unless otherwise agreed) shall not be chargeable.
- (c) In addition to the fee described in paragraphs 1.1, 1.2 and 1.3 above, the Manufacturer shall be reimbursed by the Purchaser for all approved costs and expenses properly incurred by it in connection with the Purchaser Change to be performed under this Schedule of Costs and certified by the Manufacturer in respect of:
 - (i) an appropriate portion of travel and subsistence expenses paid to employees, agency staff or sub-consultant staff as the case may be;
 - (ii) the cost of printing and reproduction of all documents, drawings, maps and records and the like authorised by the Purchaser;
 - (iii) the cost of providing, where required by the Purchaser, auditors' certificates of costs; and
 - (iv) the cost of any other expenses authorised by the Purchaser, excluding normal office overheads such as rent, rates, heating, lighting, telephone and postal charges.
- (d) For the purposes of this Schedule of Costs, approved means approved in writing by the Purchaser before the cost, remuneration or expenditure in question is incurred or committed.

APPENDIX 2

Calculation of Change in Costs

1. PRINCIPLES

1.1 The Manufacturer shall ensure that the Change in Costs is calculated on the following principles:

- (a) the costs shall reflect prevailing market rates applicable to the circumstances of the quotation and on an open book basis on the basis of the principles set out in schedule 15 (Open Book Accounting);
- (b) the Manufacturer shall use its best endeavours to oblige its Subcontractors and their subcontractors of any tier to minimise any increase in costs and maximise any reduction in costs;
- (c) the Manufacturer shall demonstrate how any expenditure to be incurred or avoided is being measured in a cost effective manner including showing that when such expenditure is incurred foreseeable Changes in Law at that time have been taken into account;
- (d) the Manufacturer shall ensure that the Changes in Costs take account of any reduction in expenditure incurred to replace or maintain assets which was originally anticipated but would be avoided as a result of implementing the Change or Relevant Event;
- (e) the Manufacturer shall demonstrate that where Key Subcontractors have sourced parts or materials from within their respective group undertaking (as such term is defined in section 1161 of the Companies Act 2006) that no mark-up has been added to such parts or material.

2. MARK-UP

The only mark-up which may be added to the costs calculated above is as set out in appendix 3 (Manufacturer's Mark-up) to this schedule 12.

3. COMPENSATION EVENTS

Where the Relevant Event is a Compensation Event, only Direct Losses shall be taken into account in the calculation of Changes in Costs.

APPENDIX 3

Manufacturer's Mark-up

1. The following percentage uplifts shall be applied to quotations and estimates (or parts of the same) of the direct costs and savings resulting from implementation of proposals for any Purchaser Change as calculated in accordance with appendix 2 (Calculation of Change in Costs) to this schedule 12.
2. Each percentage shall be deemed to include all of the Manufacturer's additional or reduced overheads including the costs of management, administration, legal accountancy, head office overheads and charges, supervision, insurance, accommodation, provision of small tools, standard items of plant, protective clothing, general contingency, general manufacturing and/or risk and profit resulting from the Purchaser Change.
3. For the avoidance of doubt, the percentages obtained from this appendix 3 are not applicable to any quotation, estimate or price obtained by reference to the Schedule of Costs included in appendix 1 (Schedule of Costs) to this schedule 12.

Purchaser Change quotation or estimate	Net increase or decrease in direct costs per cent
Increase or decrease in the cost of implementing the Works	■

Example calculation:

If the Manufacturer's mark-up is ■ and the net increase in direct costs resulting from a Purchaser Change are ■, the total amount payable in respect of the Purchaser Change, including the Manufacturer's mark-up, shall be:

■

SCHEDULE 13

Insurance

Part A	Manufacturer Obligations
Part B	Insurance required from the Commencement Date in respect of the Works
Part C	Insurance required for the Train Warranty Period
Part D	Broker's Letter of Undertaking
Part E	Endorsements

Part A - Manufacturer Obligations

1. REQUIRED MANUFACTURER INSURANCES

- 1.1 The Manufacturer shall take out and maintain in full force and effect and at its own cost, the following policies and contracts of insurance (the "**Required Insurances**"):
- (a) all risks property insurance for an amount not less than the full replacement cost any one occurrence with no aggregate limit against any loss or damage (however and wherever it arises including in transit during testing) to each item of the Insured Property described in (i) paragraph 2.1 of part B (Insurance required from the Commencement Date in respect of the Works) and (ii) paragraph 2.1 of part C (Insurance required for the Train Warranty Period);
 - (b) public and product liability insurance in respect of the Manufacturer's liability for death or injury to any person (other than employees of the Manufacturer) and loss or damage to any property (excluding, in relation to paragraph 3 of part B but not paragraph 3 of part C, the Trains and Equipment) in an amount of not less than [REDACTED] (or such other sum as may be required by the Office of Rail and Road or its successor for operators of railway assets) in respect of each and every occurrence or series of occurrences consequent upon one event or original cause, and subject to at least one reinstatement for an annual period; and
 - (c) the professional indemnity insurance referred to in paragraph 4 of part C (Insurance required for the Train Warranty Period).
- 1.2 From the date of this Agreement until the expiry of all warranties provided by the Manufacturer pursuant to clause 20 (Warranties), the Manufacturer shall procure any other insurance as is required by any Applicable Laws and Standards including insurance to be effected against legal liability for injury to its employees and to other persons under a contract of service or apprenticeship to them (and shall procure that each Subcontractor shall maintain such insurance in respect of its own employees).

2. REQUIREMENTS FOR ALL RISKS PROPERTY INSURANCES

The all risks property damage Required Insurances described in paragraph 1.1(a) shall:

- (a) be in the name of the Manufacturer and will name each of the Purchaser, the Franchisee, the Concessionaire, the Owner (where it is not the Purchaser and has been notified to the Manufacturer pursuant to clause 45.1) and any Financiers and their respective assigns as additional insureds for their respective rights and interests;
- (b) include a waiver of subrogation in favour of the Owner (where it is not the Purchaser and has been notified to the Manufacturer pursuant to clause 45.1), the Purchaser and any Financiers, except where the action arises from wilful misconduct or gross negligence by the insured party by whom the action could otherwise be taken; and
- (c) comply with the provisions of paragraph 2 (Contractors' "All Risks" Insurance) of part B (Insurance required from the Commencement Date in respect of the Works) and paragraph 2 (Property Damage Insurance) of part C (Insurance Required for the Train Warranty Period) of this schedule 13 for the part B and part C insurances respectively.

3. REQUIREMENTS FOR THIRD PARTY LIABILITY INSURANCES

The liability insurances specified in paragraph 1.1(b) shall:

- (a) be in the name of the Manufacturer and include the Purchaser, the Franchisee, the Concessionaire, the Owner (where it is not the Purchaser and has been notified to the Manufacturer pursuant to clause 45.1), and any Financier and their respective successors and assigns as additional insureds for their respective rights, liabilities and interests (for the purposes of this paragraph 3, the "**Required Additional Insureds**");
- (b) include a provision whereby the insurers agree to indemnify in terms of such insurances the Purchaser, the Owner (where it is not the Purchaser and has been notified to the Manufacturer pursuant to clause 45.1), and any Financier against legal liability in respect of which the Manufacturer is liable to indemnify such person under the terms of this Agreement;
- (c) include a waiver of subrogation in favour of the Owner (where it is not the Purchaser and has been notified to the Manufacturer pursuant to clause 45.1), the Purchaser and any Financiers, except where the action arises from wilful misconduct or gross negligence by the insured party by whom the action could otherwise be taken;
- (d) contain a provision entitling any other Insured to initiate a claim under the relevant insurance in the event of refusal or failure by the Manufacturer to do so; and
- (e) comply with the provisions of with paragraph 3 (Third Party Public and Products Liability Insurance) of part B (Insurance Required from the Commencement Date in respect of the Works) and paragraph 3 (Third Party Public and Products Liability Insurance) of part C (Insurance Required for the Train Warranty Period) of this schedule 13 for the part B and part C insurances respectively.

4. **INSURANCE TO BE IN JOINT NAMES AND FOR SEVERAL INTEREST**

The Manufacturer shall ensure that each policy or contract of the Required Insurances (except for the PI Insurance) shall:

- (a) severally insure each of the Insureds named in paragraph 1 of part B (Insurance Required from the Commencement Date in respect of the Works) and paragraph 1 of part C (Insurance Required for the Train Warranty Period) and, subject to the prior consent of the Purchaser, others nominated by the Manufacturer;
- (b) contain a multiple-insured clause providing that the insured under the policy are insured on a composite basis applying to each insured as if, save only for limits of liability and/or amount, they were separately and individually insured; and
- (c) contain a non-vitiating clause whereby the vitiating act of one insured party shall not prejudice the right to indemnity of any other insured which has an insurable interest and has not committed any vitiating act,

in the case of paragraphs (b) and (c), in the form of Endorsement 2 in part E (Endorsements) of this schedule 13, or such other terms as may be expressly approved by the Purchaser in accordance with paragraph 6.2.

5. **RIGHTS OF SUBROGATION**

The parties shall procure that all Required Insurances under which the Purchaser, the Owner (where it is not the Purchaser and has been notified to the Manufacturer pursuant to clause 45.1) or Financiers in connection with the Project, are not named as an insured contain a term to the effect that the insurers have agreed to waive all rights of subrogation against such persons, in the form of Endorsement 2 in part E (Endorsements)

of this schedule 13, or such other terms as may be expressly approved by the Purchaser in accordance with paragraph 6.2.

6. TERMS OF POLICIES AND INSURERS

6.1 Each policy of Required Insurance shall:

- (a) provide cover denominated in Sterling;
- (b) be in accordance with normal industry practice of persons engaged in the design, manufacture, testing, certification and commissioning of similar rolling stock, associated equipment and special tools in similar circumstances;
- (c) unless otherwise approved by the Purchaser in its absolute discretion, be placed and maintained with insurers with a Standard & Poor's Corporation long-term credit rating of at least ■ (or an equivalent rating from another rating agency of equal repute) including replacing any insurer whose credit rating falls below such rating with an insurer that does meet such rating; and
- (d) be in such form and substance, consistent with the obligations of the Manufacturer under this Agreement as may be approved in writing from time to time by the Purchaser (such approval not to be unreasonably withheld or delayed).

6.2 No later than 15 Working Days prior to effecting any such policy or contract of insurance, the Manufacturer shall submit to the Purchaser and the Owner (where it is not the Purchaser and has been notified to the Manufacturer pursuant to clause 45.1) for its approval:

- (a) the identity of the proposed insurer(s); and
- (b) the principal terms, conditions and warranties of the proposed insurance (including extensions, exclusions and levels of deductibles) or any revision to such insurance.

7. CANCELLATION OR LIMITATION OF COVER

All Required Insurances shall contain an endorsement whereby the Purchaser and the Owner (where it is not the Purchaser and has been notified to the Manufacturer pursuant to clause 45.1) receives from the insurer in writing:

- (a) not less than 30 days' notice of cancellation or non-renewal for any reason;
- (b) not less than 30 days' notice of any reduction in limit or restriction in coverage or any increase in deductibles, whether at the instance of the insurer or the insured (which, in the case of any such reduction, restriction or increase required by the insured shall not be implemented without the agreement of the Purchaser (not to be unreasonably withheld));
- (c) advice of any default in payment of any premium payable under the policy; and
- (d) advice of any act or omission, including but not limited to known breaches of warranty, or of any event of which the insurer has knowledge and which might invalidate or render a policy void or voidable at the insurer's discretion,

in the form of Endorsement 1 in part E (Endorsements) of this schedule 13, or such other terms as may be expressly approved by the Purchaser in accordance with paragraph 6.2.

8. **LOSS PAYEE PROVISIONS**

8.1 All Required Insurances shall provide that claim proceeds, whether interim or final shall be paid to the Purchaser, or, at the Purchaser's discretion, to other parties and where such other party is the Manufacturer, the proceeds being released to the Manufacturer against its undertaking to reinstate such loss or damage with such supporting information as the Purchaser may reasonably require:

- (a) in respect of loss or damage to the Trains or the Equipment (prior to Acceptance of the relevant Train or item of Equipment, or prior to delivery of the relevant item of Further Equipment with a Certificate of Conformance), to be applied in reinstatement of the insured asset in question;
- (b) in respect of loss of or damage to property, to be retained by the Purchaser; and
- (c) in respect of insurances against liabilities to third parties, to be applied to the aggrieved party or, where that liability has been met by an insured party pursuant to an indemnity or express contractual obligation under this Agreement, shall be paid to the indemnifier or the person liable for such obligations.

8.2 All policies for the Required Insurances shall be endorsed so as to be paid without deduction or set-off, whether in respect of unpaid premiums or otherwise.

9. **LAW AND JURISDICTION**

All policies maintained or procured pursuant to this schedule 13 shall be subject to English law and the exclusive jurisdiction of the English courts.

10. **PAYMENT OF PREMIUMS**

The Manufacturer shall procure the due and punctual payment of all premiums payable in respect of each policy or contract of insurance taken out in accordance with paragraph 1 (Required Manufacturer Insurances).

11. **MANUFACTURER TO SUPPLY INSURANCE POLICIES**

Promptly following any request from the Purchaser, the Manufacturer shall provide to the Purchaser for inspection a copy of the certificates of insurance and a broker's letter of undertaking evidencing in a sufficient degree of detail, and to the Purchaser's reasonable satisfaction, the level and scope of insurance cover maintained in compliance with paragraph 1 (Required Manufacturer Insurances), together with evidence satisfactory to the Purchaser that all premiums payable in respect of such insurances have been paid in full and that such insurances are in full force and effect.

12. **COMPLIANCE WITH REQUIREMENTS**

The Parties shall (and the Manufacturer shall procure that its Subcontractors shall) comply with all reasonable requirements of the insurers and shall not do or cause to be done anything which might render void or voidable any policy of insurance effected in accordance with paragraph 1 (Required Manufacturer Insurances) or as a result of which payment of insurance proceeds may be withheld in whole or in part.

13. **PURCHASER'S RIGHT TO INSURE**

13.1 If and to the extent that any of the Required Insurances are not taken out and maintained as contemplated by this schedule 13, the Purchaser may, without prejudice to any other rights under this Agreement, itself arrange the relevant policies or contracts of insurance. The Manufacturer shall indemnify the Purchaser against all premiums and other Losses

payable by the Purchaser in exercising its rights under this paragraph 13.1, together with Default Interest from the date on which premiums are paid or other costs incurred until the date of payment by the Manufacturer to the Purchaser.

- 13.2 If the Purchaser procures an insurance policy or policies pursuant to this paragraph 13, the Purchaser shall be entitled to deduct the amount due from the Manufacturer to the Purchaser under paragraph 13.1 from the next Milestone Payment payable to the Manufacturer, in accordance with part B (Milestones) of schedule 10 (Milestones and Security).

14. **NOTIFICATION OF CLAIMS**

The Manufacturer shall give to the Purchaser prompt notification of any incident which may reasonably be expected to result in a claim in excess of [REDACTED] (Indexed), and any incident which may reasonably be expected to result in claims arising from that incident exceeding in aggregate [REDACTED] (Indexed) in any 12-month period in each case under any of the insurances referred to in paragraph 1 (Required Manufacturer Insurances) accompanied by full details of the said incident.

15. **LOSS MITIGATION**

The Manufacturer is responsible for ensuring that, in the event of an incident, all reasonable steps are taken to mitigate further loss. This will include any necessary emergency repairs to property damaged in order to mitigate further damage or for reasons of safety. These repairs must be reasonable in relation to the loss or damage that has been suffered.

16. **UNAVAILABILITY OF INSURANCE**

- 16.1 Nothing in this Agreement shall oblige the Manufacturer to take out insurance in respect of a risk which is Uninsurable save where the predominant cause of the risk being Uninsurable is any actions, breaches, omissions or defaults of the Manufacturer or a Subcontractor.

- 16.2 If a risk usually covered by the insurance taken out pursuant to this schedule 13 or by statutory insurance, in each case required under this Agreement, becomes Uninsurable then:

- (a) the Manufacturer shall notify the Purchaser and the Franchisee of any risk becoming Uninsurable within five (5) Working Days of becoming aware of the same and in any event at least five (5) Working Days before expiry or cancellation of any existing insurance in respect of that risk;
- (b) if both Parties agree, or it is determined in accordance with the Dispute Resolution Procedure, that the risk is Uninsurable and that:
 - (i) the risk being Uninsurable is not caused by the actions, breaches, omissions or defaults of the Manufacturer or a Subcontractor; and
 - (ii) the Manufacturer has demonstrated to the Purchaser that the Manufacturer and a prudent board of directors of a company operating the same or substantially similar businesses in the United Kingdom to that operated by the Manufacturer would in similar circumstances (in the absence of the type of relief envisaged by this paragraph) be acting reasonably and in the best interests of the company if they resolved to cease to operate such businesses as a result of that risk becoming Uninsurable, taking into account amongst other things (and without limitation) the likelihood of the Uninsurable risk occurring (if it has not already occurred), the financial

consequences for such company if such Uninsurable risk did occur (or has occurred) and other mitigants against such consequences which may be available to such company,

then the Parties shall meet to discuss the means by which the risk should be managed or shared (including considering the issue of self-insurance by either Party).

16.3 For the purposes of this schedule 13 **"Uninsurable"** means, in relation to a risk, either that:

- (a) insurance is not available to the Manufacturer in respect of the Project in the worldwide insurance market with reputable insurers of good standing in respect of that risk; or
- (b) the insurance premium payable for insuring that risk is at such a level that the risk is not general being insured against in the worldwide insurance market with reputable insurer of good standing by contractors in the United Kingdom.

17. **BROKER'S LETTER OF UNDERTAKING**

The Manufacturer shall procure that the insurance broker appointed by the Manufacturer to place the Required Insurances delivers to the Purchaser and/or the Owner (where it is not the Purchaser and has been notified to the Manufacturer pursuant to clause 45.1) a letter substantially in the form set out in part D (Broker's Letter of Undertaking) of this schedule 13 in respect of each insurance policy or contract effected as part of the Required Insurances required under Parts A and B of this schedule 13, as soon as possible but in any event before the date falling six (6) months after the date of this Agreement and (where applicable) the subsequent renewal of each such policy.

18. **SAVING PROVISION**

None of:

- (a) the Manufacturer's compliance or failure to comply with its obligations under this schedule 13;
- (b) the existence of the Required Insurances or any other insurance procured by the Manufacturer or the absence (in whole or in part) of them; or
- (c) the terms of any policy or contract of insurance, including the limits of indemnity amounts referred to in part B (Insurance required from the Commencement Date in respect of the Works) and part C (Insurance required for the Train Warranty Period) of this schedule 13,

shall relieve or limit the Manufacturer of its liabilities and obligations under this Agreement.

Part B - Insurance required from the Commencement Date in respect of the Works

1. COMMON TO EACH POLICY IN THIS PART B

1.1 Insureds

- (a) the Manufacturer;
 - (b) the Purchaser;
 - (c) any Franchisee;
 - (d) the Concessionaire;
 - (e) the Owner (where it is not the Purchaser and has been notified to the Manufacturer pursuant to clause 45.1);
 - (f) any Financier;
 - (g) Subcontractors of any tier to the Manufacturer,
- each for their respective rights and interests in the Project.

1.2 For the purposes of this part B, a Subcontractor may either be: (a) named as an additional insured, or (b) the subject of difference in conditions/difference in limits cover to more specific insurance of the Subcontractor. Where (b) applies the Manufacturer will indemnify any Subcontractor employed by the Manufacturer for the performance of this Agreement:

- (a) in respect of liability which is not the subject of indemnity under any more specific valid and collectible insurance effected by or on behalf of the Subcontractor; and
- (b) in respect of the difference between the limit of indemnity under any more specific valid and collectable insurance offered by or on behalf of the Sub-Contractor and the Limit of Indemnity under this policy.

2. CONTRACTORS' "ALL RISKS" INSURANCE

2.1 Insured Property

- (a) The Trains and Equipment (including any Part removed from any Train or item of Equipment for maintenance or warranty work), and any other property, including property of the Purchaser, the Manufacturer (including any temporary works for which the Manufacturer is responsible at any Depot), and the directors, employees, officers, servants or agents of any of them, for incorporation in or use in connection with the construction, integration, commissioning, testing and completion of the Trains and Equipment (including testing on the Network and in depot) in respect of each Train before operational handover which shall be the relevant date of Acceptance.
- (b) Storage of Trains and Equipment until Provisional Acceptance.

2.2 Coverage

"All risks" of physical loss or damage to the Insured Property unless otherwise excluded.

2.3 Sum Insured

At all times an amount not less than the full reinstatement or replacement value of the Insured Property, plus provision to include extensions as appropriate.

2.4 Maximum Deductible

██████ (Indexed) each and every claim, increased to ██████ (Indexed) each and every claim for defective workmanship/design claims.

2.5 Territorial Limits

Worldwide including offsite storage and whilst in transit by land, air, rail, sea and inland waterway the interpretation of the policy must be under English law.

2.6 Period of Insurance

From the date of this Agreement until Provisional Acceptance of the last Train.

2.7 Cover Features and Extensions

- (a) Terrorism.
- (b) Munitions of war clause.
- (c) Additional costs of completion.
- (d) Professional fees clause (including the Purchaser's advisers' fees incurred during any period of reinstatement).
- (e) Debris removal clause.
- (f) 72 hour clause.
- (g) European Union local authorities clause.
- (h) Free issue materials clause.
- (i) 15 per cent escalation clause.
- (j) Automatic reinstatement of sum insured clause.
- (k) Loss minimisation.
- (l) Testing/commissioning.

2.8 Principal Exclusions

- (a) LEG 2.
- (b) War and related perils (UK market agreed wording).
- (c) Nuclear/radioactive risks (UK market agreed wording).
- (d) Pressure waves caused by aircraft and other aerial devices travelling at sonic or supersonic speeds.
- (e) Wear, tear and gradual deterioration.

- (f) Consequential financial losses.
- (g) Cyber risks other than physical damage arising from fire, explosion or collision or derailment of rail vehicles resulting from cyber risks.
- (h) Inventory losses, fraud and employee dishonesty.

3. **THIRD PARTY PUBLIC AND PRODUCTS LIABILITY INSURANCE**

3.1 **Interest**

To indemnify the Insureds in respect of all sums that they may become legally liable to pay (including claimant's costs and expenses) as damages in respect of accidental:

- (a) bodily injury, illness, death, disease contracted by any person;
- (b) loss or damage to property; or
- (c) interference to property or any easement right of air, light, water or way or the enjoyment or use thereof by obstruction, trespass, nuisance, loss of amenities, or any like cause,

happening during the Period of Insurance and arising out of or in connection with the Works.

3.2 **Limit of Indemnity**

Not less than [REDACTED] (or such higher amount required by the Office of Rail and Road or its successors for operators of railway assets) in respect of any one occurrence, the number of occurrences being unlimited, but in the aggregate in respect of pollution and products liability.

3.3 **Maximum Deductible**

[REDACTED] (Indexed) for each and every occurrence of property damage, escalated periodically as appropriate. (Personal injury claims will be paid in full.)

3.4 **Territorial Limits**

Worldwide The interpretation of the policy must be under English Law.

3.5 **Jurisdiction**

Worldwide.

3.6 **Period of Insurance**

Up to (and including) the later to occur of:

- (a) the expiry of the design life warranty under clause 20.1 in respect of the last Train; and
- (b) the expiry of the Component Life Warranty of all Major Components and the Recurrent Defect Period of all Recurrent Defect Extension Components.

3.7 **Cover Features and Extensions**

- (a) Munitions of war.

- (b) Cross liability clause.
- (c) Contingent motor liability.
- (d) Defence Costs in respect of Health and Safety at Work Legislation.
- (e) Corporate Manslaughter defence costs.
- (f) Full indemnity for the Purchaser, Owner (when Insureds) and Subcontractor to the extent that the Manufacturer is legally liable.
- (g) Automatic reinstatement of sum insured clause on at least one occasion for an annual period.

3.8 **Principal Exclusions**

- (a) Liability for death, illness, disease or bodily injury sustained by employees of the Insured.
- (b) Liability arising out of the use of mechanically propelled vehicles whilst required to be compulsorily insured by Legislation in respect of such vehicles.
- (c) Liability in respect of predetermined penalties or liquidated damages imposed under any contract entered into by the Insured.
- (d) Liability in respect of loss or damage to property in the care, custody and control of the Insured but this exclusion is not to apply to all property belonging to Purchaser that is in the care, custody and control of another Insured.
- (e) Liability arising out of technical or professional advice (given for a fee) other than in respect of death or bodily injury to persons or damage to third party property.
- (f) Losses under the insurances referred to in paragraph 2 of this part B of schedule 13.
- (g) Liability arising from the ownership, possession or use of any aircraft or marine vessel.
- (h) Liability arising from seepage and pollution unless caused by a sudden, identifiable, unintended and unexpected occurrence.

Part C - Insurance required for the Train Warranty Period

1. COMMON TO ALL POLICIES IN THIS PART C

1.1 Insureds

- (a) the Manufacturer;
- (b) the Purchaser;
- (c) the Owner (where it is not the Purchaser and has been notified to the Manufacturer pursuant to clause 45.1);
- (d) any Financier;
- (e) Subcontractors of any tier to the Manufacturer,

each for their respective rights and interests in the Project.

1.2 For the purposes of this part C, a Subcontractor may either be: (a) named as an additional insured, or (b) the subject of difference in conditions/difference in limits cover to more specific insurance of the Subcontractor. Where (b) applies the Manufacturer will indemnify any Subcontractor employed by the Manufacturer for the performance of this Agreement:

- (a) in respect of liability which is not the subject of indemnity under any more specific valid and collectible insurance effected by or on behalf of the Subcontractor; and
- (b) in respect of the difference between the limit of indemnity under any more specific valid and collectable insurance offered by or on behalf of the Sub-Contractor and the Limit of Indemnity under this policy.

2. PROPERTY DAMAGE INSURANCE

2.1 Insured Property

- (a) The Trains and Equipment on and following the Provisional Acceptance of such Train and Equipment Acceptance, or (where permitted by this Agreement) delivery with a Certificate of Conformance, of each relevant item of Equipment (including any Part removed from any Train or item of Equipment for maintenance or warranty work), and
- (b) any other property, including property of the Purchaser, the Manufacturer, and the directors, employees, officers, servants or agents of any of them, for incorporation in or use in connection with the carrying out of works to the Trains or Parts thereof (including testing on the Network and in depot)

save that in each case only in so far as and whenever such item is not located on the Network or on any other property of the Purchaser because it has been removed therefrom by the Manufacturer or a Subcontractor.

2.2 Coverage

"All risks" of physical loss or damage to the Insured Property from any cause not excluded.

2.3 Sum Insured

At all times an amount not less than the total reinstatement or replacement value of the Insured Property plus provision to include other extensions as appropriate.

2.4 Maximum Deductible

██████ (Indexed) each and every claim, increased to ██████ (Indexed) each and every claim for defective workmanship/design claims.

2.5 Territorial Limits

Worldwide.

2.6 Period of Insurance

The Train Warranty Period.

2.7 Cover Features and Extensions

- (a) Terrorism.
- (b) Automatic reinstatement of sum insured.
- (c) Capital additions clause.
- (d) 72 hour clause.
- (e) European Union local authorities clause.
- (f) Professional fees.
- (g) Debris removal.
- (h) Pollution and contamination to the Insured Property arising from an event which itself is not otherwise excluded. To include pollution or contamination resulting from accidental damage.
- (i) Repair/reinstatement basis of claims settlement with cash option for non-reinstatement on the basis of the real value of the Train or Equipment.

2.8 Principal Exclusions

- (a) War and related perils (UK market agreed wording).
- (b) Nuclear/radioactive risks (UK market agreed wording).
- (c) Pressure waves caused by aircraft and other aerial devices travelling at sonic or supersonic speeds.
- (d) Wear, tear and gradual deterioration.
- (e) Consequential financial losses.
- (f) Cyber risks other than physical damage arising from fire, explosion or collision or derailment of rail vehicles resulting from cyber risks.

3. **THIRD PARTY PUBLIC AND PRODUCTS LIABILITY INSURANCE**

3.1 **Interest**

To indemnify the Insured in respect of all sums that they may become legally liable to pay (including claimant's costs and expenses) as damages in respect of accidental:

- (a) death, or bodily injury, illness, death, disease contracted by any person;
- (b) loss or damage to property; or
- (c) interference to property or any easement right of air, light, water or way or the enjoyment or use thereof by obstruction, trespass, nuisance, loss of amenities, or any like cause,

happening during the Period of Insurance and arising out of or in connection with the Project and the provision of the warranty services during the Train Warranty Period.

3.2 **Limit of Indemnity**

Not less than £155,000,000 (or such higher amount required by the Office of Rail and Road or its successor for operators of Railway assets) in respect of any one occurrence, the number of occurrences being unlimited, but in the aggregate in respect of pollution and products liability.

3.3 **Maximum Deductible**

██████ (Indexed) for each and every occurrence of property damage, escalated periodically as appropriate. (Personal injury claims will be paid in full.)

3.4 **Territorial Limits**

UK only.

3.5 **Jurisdiction**

Worldwide.

3.6 **Period of Insurance**

Up to (and including) the later to occur of:

- (a) the expiry of the design life warranty under clause 20.1 in respect of the last Train; and
- (b) the expiry of the Component Life Warranty of all Major Components and the Recurrent Defect Period of all Recurrent Defect Extension Components.

3.7 **Cover Features and Extensions**

- (a) Munitions of war
- (b) Cross liability clause
- (c) Contingent motor liability
- (d) Defence costs in respect of Health and Safety at Work Legislation
- (e) Corporate Manslaughter defence costs

- (f) Full indemnity for the Purchaser, Owner (when Insureds) and Subcontractor to the extent that the Manufacturer is legally liable
- (g) Automatic reinstatement of sum insured on at least one occasion for an annual period

3.8 **Principal Exclusions**

- (a) Liability for death, illness, disease or bodily injury sustained by employees of the Insured.
- (b) Liability arising out of the use of mechanically propelled vehicles whilst required to be compulsorily insured by Legislation in respect of such vehicles.
- (c) Liability in respect of predetermined penalties or liquidated damages imposed under any contract entered into by the Insured.
- (d) Liability in respect of loss or damage to property in the care, custody and control of the Insured but this exclusion is not to apply to all property belonging to the Purchaser including Trains and Equipment after Provisional Acceptance that is in the care, custody and control of another Insured.
- (e) Liability arising out of technical or professional advice (given for a fee) other than in respect of death or bodily injury to persons or damage to third party property.
- (f) Losses under the Insurances referred to in paragraph 2 of this part C.
- (g) Liability arising from the ownership, possession or use of any aircraft or marine vessel.
- (h) Liability arising from seepage and pollution unless caused by a sudden, identifiable, unintended and unexpected occurrence.

4. **PI INSURANCE**

- 4.1 The Manufacturer undertakes itself to, and to procure that Subcontractor(s) take out and maintain in force professional indemnity insurance with worldwide jurisdiction ("**PI Insurance**").
- 4.2 Without prejudice to the other provisions of this Agreement, the Manufacturer shall provide evidence satisfactory to (as and when reasonably required by) the Purchaser of the PI Insurance being in full force and effect from the date of this Agreement until the date 12 years from and including the completion of all the services to be provided by the Manufacturer during the Train Warranty Period as appropriate such evidence to include details of the cover including confirmation of territorial limits, confirmation that coverage includes breach of intellectual property rights, levels of excess, insurers, policy number and indemnity limit which shall be a minimum of [REDACTED] and with an excess not greater than [REDACTED] for each and every loss and otherwise to be on terms satisfactory to the Purchaser.
- 4.3 The Manufacturer shall provide the Purchaser with notice of:
 - (a) any cancellation of the PI Insurance not less than 30 days prior to the relevant cancellation date; and
 - (b) any adverse material changes (including, for the avoidance of doubt, any changes to the excess levels) to or suspension of cover relevant to the Project not less than 30 days prior to the relevant change or suspension.

- 4.4 The Manufacturer shall inform the Purchaser as soon as reasonably practicable of any third party claim under the PI Insurance in respect of the Project in excess of [REDACTED] (Indexed) and provide such information to the Purchaser as the Purchaser may reasonably require in relation to such claim and provide notice of any potential breach of the aggregate limit.

Part D - Broker's Letter of Undertaking

To: Docklands Light Railway Limited
Franchisee

Dear Sir/Madam

Manufacturer and Supply Agreement dated [●] entered into between Construcciones y Auxiliar de Ferrocarriles S.A. (the "Manufacturer") and Docklands Light Railway Limited (the "Purchaser") (the "Agreement")

We refer to the Agreement. Unless the context otherwise requires, terms defined in the Agreement shall have the same meaning in this letter.

1. We act as insurance broker to the Manufacturer in respect of the Required Insurances and in that capacity we confirm that the Required Insurances which are required to be procured pursuant to clause 19 and schedule 13 of the Agreement:
 - 1.1 where appropriate name you and such other persons as are required to be named pursuant to the Agreement for their respective interests;
 - 1.2 are, in our reasonable opinion as insurance brokers, as at today's date, in full force and effect;
 - 1.3 all premiums due to date in respect of the Required Insurances are paid and the Required Insurances are, to the best of our knowledge and belief, placed with and maintained with insurers with a Standard & Poor's Corporation long-term credit rating of at least ■ (or an equivalent rating from another rating agency of equal repute). We do not however make any representations regarding such insurers' current or future solvency, or ability to pay claims; and that
 - 1.4 the endorsements set out in part E (Endorsements) of schedule 13 of the Agreement which is attached hereto are in our reasonable opinion as at today's date in full force and effect in respect of the Required Insurances.
2. We further confirm that the attached cover notes confirm this position.
3. Pursuant to instructions received from the Manufacturer and in consideration of your approving our appointment or continuing appointment as brokers in connection with the Required Insurances, we hereby undertake in relation to the Required Insurances:

(a) Notification Obligations

- (i) notify you at least 30 days prior to the expiry of any of the Required Insurances if we have not received instructions from the Manufacturer to negotiate renewal and in the event of our receiving instructions to renew, to advise you promptly of the details thereof;
- (ii) to notify you at least 30 days prior to ceasing to act as brokers in relation to the Required Insurances unless, due to circumstances beyond our control, we are unable to do so in which case we shall notify you as soon as practicable;
- (iii) to notify you as soon as reasonably practicable if the long-term credit rating of any insurer of the Required Insurances falls below the level referred to in clause 1.3 of this letter; and

- (iv) to pay without set off or deduction of any kind for any reason all payments in respect of claims received by us from insurers in relation to the Required Insurances specified in part A (Manufacturer Obligations) of schedule 13 of the Agreement in accordance with the loss payable clause endorsed on the policy as set out in part E (Endorsements) of schedule 13 of the Agreement.

(b) **Advisory Obligations**

- (i) to notify you as soon as reasonably practicable of any default in the payment of any premium for any of the Required Insurances;
- (ii) to notify you if any insurer cancels or gives notification of cancellation of any of the Required Insurances to us, at least 30 days before such cancellation is to take effect or as soon as reasonably practicable in the event that notification of cancellation takes place less than 30 days before it is to take effect;
- (iii) to notify you as soon as reasonably practicable of any act or omission, breach or default of which we have been notified which in our reasonable opinion would either, invalidate or render unenforceable in whole or in part any of the Required Insurances or, would otherwise materially impact on the extent of cover provided under the Required Insurances; and
- (iv) in accordance with our duty to the Manufacturer to notify the Manufacturer of its pre-contractual duties of disclosure to insurers, including the duty to disclose all information that would be considered material in the context of such duty.

(c) **Disclosure Obligations**

- (i) subject to the prior written consent of the Manufacturer (and we undertake to notify you as soon as reasonably practicable if such consent is withheld) to disclose to insurers all information provided to those of our employees directly involved with the placement of the Required Insurances in our capacity as insurance broker to the Manufacturer, including any fact, change of circumstance or occurrence notified to such employees, which in our reasonable opinion is material to the risks insured against under the Required Insurances and which properly should be disclosed to insurers, or in accordance with the policy terms and conditions of the relevant Required Insurance, as soon as reasonably practicable after we are in receipt of such information, fact, change of circumstance or occurrence whether prior to inception or renewal or otherwise.
- (ii) to treat as confidential all information so marked or otherwise stated to be confidential and supplied to us by or on behalf of the Manufacturer or the Purchaser and not to disclose such information, without the prior written consent of the supplier, to any third party other than those persons who, in our reasonable opinion have a need to have access to such information from time to time, and for the purpose of disclosure to the insurers or their agents in respect of the Required Insurances. Our obligations of confidentiality shall not conflict with our duties owed to the Manufacturer and shall not apply to disclosure required by an order of a court of competent jurisdiction, or pursuant to any applicable law, governmental or regulatory authority having the force of law or to information which is in the public domain.

(d) Administrative Obligations

- (i) to hold copies of all documents relating to or evidencing the Required Insurances, including but without prejudice to the generality of the foregoing, insurance slips, contracts, policies, endorsements and copies of all documents evidencing renewal of the Required Insurances, payment of premiums and presentation and receipt of claims;
- (ii) to supply to the Purchaser and/or its insurance advisers (or the Purchaser's or its insurance advisers' authorised representatives) promptly on written request copies of the documents set out in clause 3(d)(i) of this letter, and to the extent available, to make available to such persons promptly upon the Purchaser's request the originals of such documents;
- (iii) to administer the payment of premiums due pursuant to the Required Insurances such that, in so far as we hold appropriate funds, all such premiums shall be paid to insurers in accordance with the terms of the Required Insurances;
- (iv) to administer the payment of claims from insurers in respect of the Required Insurances (the "**Insurance Claims**") including:
 - (A) negotiating settlement of Insurance Claims presented in respect of the Required Insurances;
 - (B) collating and presenting all information required by insurers in relation to Insurance Claims presented in respect of the Required Insurances; and
- (v) in so far as it is relevant and practicable, liaising and reporting to the Purchaser throughout the settlement, payment and administration of such Insurance Claims;
- (vi) to advise the Purchaser as soon as reasonably practicable upon receipt of notice of any material changes which we are instructed by the Manufacturer to make in the terms of the Required Insurances and which, if effected, in our reasonable opinion as Insurance Brokers would result in any material reduction in limits or coverage or increase in deductibles, exclusions or exceptions; and
- (vii) to use our reasonable endeavours to have endorsed on each and every policy evidencing the Required Insurances (when the same is issued) endorsements substantially in the form set out in part E of schedule 13 of the Agreement.

4. Notification Details

Our obligations at clause 3 of this letter to notify or inform you shall be discharged by providing the requisite information in hard copy to:

[Address]

5. Save insofar as we have given agreements or representations in this letter, it is to be understood by the Purchaser that they may not rely on any advice which we have given to the Manufacturer, and we do not represent that the Required Insurances are suitable or sufficient to meet the needs of the Purchaser which must take steps and advice of its own as it considers necessary in order to protect its own position.

6. The representations and obligations set out in this letter are subject to our continuing appointment as insurance brokers to the Manufacturer in relation to the Required Insurances concerned, and following termination of such appointment our immediate release from all our obligations set out in this letter to the extent those obligations arise on or after the termination, and subject to any right of lien we may have over the policy and policy documents regarding the Required Insurances, arising through common law or otherwise.
7. This letter is given by us on the instructions of the Manufacturer and with their full knowledge and consent as to its terms.

Yours faithfully

For and on behalf of [**Manufacturer's broker**]

We consent to the giving of this Letter of Undertaking by our insurance brokers

For and on behalf of
Construcciones y Auxiliar de Ferrocarriles S.A.

Part E - Endorsements

Endorsement 1

Cancellation

This policy shall not be cancelled or terminated before the original expiry date is to take effect except in respect of non-payment of premium.

The insurer shall by written notice advise the Purchaser:

- (a) at least 30 days before any such cancellation or termination is to take effect;
- (b) at least 30 days before any reduction in limits or coverage or any increase in deductibles is to take effect;
- (c) of any act or omission or any event of which the insurer has knowledge and which might invalidate or render unenforceable in whole or in part this policy;
- (d) of any default in payment or any premium payable under the policy; and
- (e) of any act or omission, including but not limited to known breaches of warranty, or of any event of which the insurer has knowledge and which might invalidate or render a policy void or voidable at the insurer's discretion.

Endorsement 2

Multiple Insured/Subrogation/Non-Vitiation clause (not applicable to the PI Insurance)

Each of the Parties comprising the insured shall for the purpose of this policy be considered a separate co-insured entity, insured on a composite basis, with the words "the insured" applying to each as if they were separately and individually insured provided that the total liability of the insurers under each section of this policy to the insured collectively shall not (unless the policy specifically permits otherwise) exceed the limit of indemnity or amount stated to be insured under that section or policy. Accordingly, the liability of the insurers under this policy to any one insured shall not be conditional upon the due observance and fulfilment by any other insured party of the terms and conditions of this policy or of any duties imposed upon that insured party relating thereto, and shall not be affected by any failure in such observance or fulfilment by any such other insured party.

It is understood and agreed that any payment or payments by insurers to any one or more of the insureds shall reduce, to the extent of that payment, insurers' liability to all such parties arising from any one event giving rise to a claim under this policy and (if applicable) in the aggregate.

Insurers shall be entitled to avoid liability to or (as may be appropriate) claim damages from any insured party in circumstances of fraud misrepresentation non-disclosure or material breach of warranty or condition of this policy (each referred to in this clause as a "**Vitiating Act**") committed by that insured party save where such misrepresentation non-disclosure or breach of warranty or condition was committed innocently and in good faith.

For the avoidance of doubt it is however agreed that a Vitiating Act committed by one insured party shall not prejudice the right to indemnity of any other insured who has an insurable interest and who has not committed the Vitiating Act.

Insurers hereby agree to waive all rights of subrogation and/or recourse which they may have or acquire against any insured party (together with their employees and agents) except where the rights of subrogation or recourse are acquired in consequence of a Vitiating Act in which

circumstances insurers may enforce such rights against the insured responsible for the Vitiating Act notwithstanding the continuing or former status of the vitiating party as an insured.

Notwithstanding any other provision of this policy or any other document or any act and/or omission by any insured party insurers agree that:

- (a) no party other than the Purchaser has any authority to make any warranty, disclosure or representation in connection with this policy on behalf of Purchaser;
- (b) where any warranty, disclosure or representation is required from the Purchaser in connection with this policy insurers will contact the Purchaser in writing (in accordance with Endorsement 3 to the Agreement) and set out expressly the warranty, disclosure and/or representation required within a reasonable period of time from the Purchaser (regarding itself); and
- (c) save as set out in a request from insurers to the Purchaser in accordance with (b) above, the Purchaser shall have no duty to disclose any fact or matter to insurers in connection with this policy save to the extent that for the Purchaser not to disclose a fact or matter would constitute fraudulent misrepresentation and/or fraudulent non-disclosure.

Endorsement 3

Communications

All notices or other communications under or in connection with this policy shall be given to each insured (and the Purchaser) in writing or by facsimile. Any such notice will be deemed to be given as follows:

- (a) if in writing, when delivered
- (b) if by facsimile, when transmitted but only if, immediately after transmission, the sender's facsimile machine records a successful transmission has occurred.

The address and facsimile number of the Purchaser for all notices under or in connection with this policy are those notified from time to time by the Purchaser for this purpose to the Contractor's insurance broker at the relevant time. The initial address and facsimile number of the Purchaser is as follows:

Docklands Light Railway Limited:

Address: Docklands Light Railway Limited
55 Broadway
London
United Kingdom
SW1H 0BD

Email: [REDACTED]

Attention: Company Secretary

It is further agreed that a notice of claim given by the Purchaser or any other insured shall in the absence of any manifest error be accepted by the insurer as a valid notification of a claim on behalf of all insureds.

Endorsement 4

Loss Payee (applicable only to the Contractors' "All Risks" Policies)

All Required Insurances shall provide that claim proceeds, whether interim or final unless and until the insurers receive written notice from the Manufacturer and the Purchaser directing otherwise, shall be paid to the Purchaser, or, at the Purchaser's discretion, to other parties and where such other party is the Manufacturer, the proceeds being released to the Manufacturer against its undertaking to reinstate such loss or damage with such supporting information as the Purchaser may reasonable require:

1. in respect of loss or damage to the Trains or the Equipment (prior to Acceptance of the relevant Train or item of Equipment, or prior to delivery of the relevant item of Further Equipment with a Certificate of Conformance), to be applied in reinstatement of the insured asset in question;
2. in respect of loss of or damage to property, to be retained by the Purchaser; and
3. in respect of insurances against liabilities to third parties, to be applied to the aggrieved party or, where that liability has been met by an insured party pursuant to an indemnity or express contractual obligation under this Agreement, shall be paid to the indemnifier or the person liable for such obligations.

and shall be payable without deduction or set-off from the agreed claim.

Endorsement 5

Primary Insurance

It is expressly understood and agreed that this policy provides primary cover for the insured parties and that in the event of loss destruction damage or liability covered by this policy which is covered either in whole or in part under any other policy or policies of insurance effected by or on behalf of any of the insured parties the insurers will indemnify the insured parties as if such other policy or policies of insurance were not in force and the insurers waive their rights of recourse if any against the insurers of such other policy or policies of insurance.

Endorsement 6

Claims Negotiation Rights

Notwithstanding any claim conditions contained herein insurers agree that the Purchaser has the right to settle and negotiate any claims received from third parties subject to prior consent of insurers. If the Purchaser takes or fails to take any action as a direct result of which insurers' liability is increased then the liability of insurers to provide an indemnity is reduced to such an extent.

Endorsement 7

Ringfencing

The level of any indemnity available to an insured party under this policy in relation to any claim(s) concerning the Works shall not be affected and/or reduced by any claim(s) unrelated to the Works.

SCHEDULE 14

Responsible Procurement

1. INTRODUCTION

1.1 General

- (a) The Manufacturer is required to implement Responsible Procurement through this Agreement and its requirements for this are set out in this schedule 14.
- (b) To the extent that the Manufacturer and its Subcontractors undertake obligations under this Agreement in the United Kingdom, the Manufacturer shall comply and shall ensure that its Subcontractors comply with this schedule 14.
- (c) Without prejudice to paragraph 2.4(c) of this schedule 14, to the extent that the Manufacturer and its Subcontractors undertake obligations under this Agreement outside the United Kingdom, the Manufacturer shall comply and shall ensure that its Subcontractors comply with equivalent standards in the relevant jurisdiction to those set out in this schedule 14.

1.2 Definitions

"Apprentice" means an individual employed for a minimum of 16 hours a week who is undertaking a sector skills council/standard setting body recognised structures programme of training leading to the completion of a full apprenticeship;

"Black, Asian and Minority Ethnic" or **"BAME"** means a business in which 51 per cent or more of the share capital is owned by members of one or more Minority Ethnic Groups;

"Child" means any person less than 15 years of age unless local minimum age law stipulates a higher age for work or mandatory schooling, in which case the higher age shall apply. If however, local minimum age law is set at 14 years of age in accordance with developing country exceptions under ILO Convention No. 138, the lower age will apply;

"Child Labour" means a Child or Young Person, which does not comply with the provisions of the relevant ILO standards, and any work that is likely to be hazardous or to interfere with the Child's or Young Person's education, or to be harmful to the Child's or Young Person's health or physical, mental, spiritual, moral or social development;

"Ethical Sourcing Practices" has the meaning given to such term in paragraph 2.7(a) of this schedule 14;

"Graduate" means an individual employed for 16 hours or more a week who has completed their undergraduate degree within the last 12 months and who is beginning an employment position on a formal graduate trainee scheme with a minimum duration of six (6) months;

"ILO" means the International Labour Organisation;

"Job Start" means an individual employed for 16 hours a week or more beginning a position of employment with a minimum duration of six (6) months;

"London Borough" means a borough within the administrative area of Greater London (plus the City of London), which comprises 33 boroughs;

"London Living Wage" means the basic hourly wage of £10.55 (before tax, other deductions and any increase for overtime) determined by the Greater London Authority for employees working full time on the Works within one of the London Boroughs, as may be updated from time to time;

"Minority Ethnic Groups" means those who have classified themselves as members of ethnic groups other than 'white British';

"Placement Position" means a position intended to enable an individual to learn, develop or enhance their knowledge and skills in relation to the employment market that lasts between 11 days and 100 days and which includes elements of job coaching and support;

"Relevant Employment Vacancy" means an employment vacancy within the Manufacturer's organisation for a member of the Manufacturer's personnel and, where relevant, Subcontractors;

"Responsible Procurement" means compliance with the GLA Responsible Procurement Policy dated March 2006 (as amended in January 2008 and as may be further amended from time to time);

"Responsible Procurement Plan" means the plan developed by the Manufacturer which satisfies the requirements of DLR Standard 499901-DLR-RSTK-TR600_Z-IE-K-0114 and describes the management processes and procedures for achieving compliance with the requirements set out in this schedule 14;

"Responsible Procurement Progress Report" has the meaning given to such term in paragraph 2.3(a) of this schedule 14;

"Responsible Procurement Representative" means the person appointed by the Manufacturer pursuant to paragraph 2.1(a) of this schedule 14;

"Responsible Procurement Schedule" has the meaning given to such term in appendix 3 to this schedule 14;

"Skills and Employment Strategy" means the TfL Group's ten (10) year skills and employment strategy dated December 2011 as amended from time to time;

"SI Academy" means the Purchaser's Systems Integration Academy;

"SLNT" has the meaning given to such term in paragraph 2.5(b)(i) of this schedule 14;

"Small and Medium Enterprise" or **"SME"** means a business which meets at least two (2) of the following criteria:

- (a) turnover per annum of up to £22.8 million;
- (b) balance sheet net asset value of no more than £11.4 million;
- (c) 250 employees or fewer,

and the criteria in (b) and (c) will also be applied to group accounts where the turnover for the group does not exceed the figure stated in (a);

"STEM" means Science, Technology, Engineering and Mathematics;

"STEM Ambassador Programme" means the Purchaser's and TfL's STEM Ambassador Programme;

"Strategic Labour Needs and Training Plan" or "SLNT Plan" means the plan in appendix 4 consistent with the requirements of paragraph 2.5 of this schedule 14;

"Suppliers demonstrating a diverse workforce" means a workforce where 51 per cent or more is representative of Minority Ethnic Groups, Suppliers from under-represented groups or Suppliers from protected groups;

"Suppliers from protected groups" means groups in which 51 per cent or more of the share capital is owned by members of a group for which protection is provided by anti-discriminatory legislation;

"Suppliers from under-represented groups" means groups in which 51 per cent or more of the share capital is owned by members of one or more of the following groups:

- (a) gender – women;
- (b) disability – people with physical and sensory impairments, learning difficulties and mental health requirements;
- (c) sexual orientation – lesbians, gay men, bisexual and transgender people;
- (d) age – older people (aged 60 or over), young adults (aged 24 or under);

"Trainee" means an individual on a placement position;

"Work Force Skills" means workforce training or development activity for full time employed individuals that forms part of an accredited course of learning and development; and

"Young Person" means any worker over the age of a Child and under the age of 18.

2. **MANAGEMENT REQUIREMENTS**

2.1 **Responsible Procurement Representative**

- (a) The Manufacturer shall appoint a representative (the **"Responsible Procurement Representative"**) who shall:
 - (i) be the primary contact for all Responsible Procurement related matters under this Agreement;
 - (ii) be responsible for production, implementation, management and updating of the Responsible Procurement Plan and any further deliverables required by the plan;
 - (iii) have responsibility for ensuring that the Manufacturer's Responsible Procurement obligations are met in accordance with this Agreement; and
 - (iv) co-operate with the Purchaser in providing evidence and records in support of Responsible Procurement including evidence and records from Subcontractors employed in relation to the Works.

2.2 **Responsible Procurement Plan**

- (a) Within four (4) weeks of the Commencement Date, the Manufacturer shall produce a Responsible Procurement Plan and submit it to the Purchaser for Approval. All subsequent revisions of such plan shall be submitted to the Purchaser for Approval in accordance with paragraph 2.2(d) below.

- (b) The Responsible Procurement Plan shall:
 - (i) describe the management processes and procedures for achieving compliance with all the Responsible Procurement requirements detailed within this schedule 14 and include the Strategic Labour Needs and Training Plan;
 - (ii) demonstrate how the processes and procedures for achieving compliance with the Responsible Procurement requirements will be imposed on Subcontractors to ensure compliance throughout the supply chain; and
 - (iii) include a programme of activities to support the Responsible Procurement Plan with proposed dates for commencement and completion, including but not limited to:
 - (A) proposed training programme and dates;
 - (B) progress report submittal dates;
 - (C) progress meeting scheduled dates; and
 - (D) dates for site inspections and internal audits required to evidence progress achieved.
- (c) The Manufacturer shall manage the Works in compliance with the Approved Responsible Procurement Plan.
- (d) The Manufacturer shall review and update the Responsible Procurement Plan as necessary and in a timely way as the Works progress to ensure it reflects the current status of the Works. Revised versions of the Responsible Procurement Plan shall be submitted to the Purchaser for Approval.
- (e) The Manufacturer shall inform all employees and Subcontractors, with direct or indirect responsibilities under the Responsible Procurement Plan, of the contents of the plan that apply to their services.

2.3 **Monitoring, Reporting and Management**

Responsible Procurement Progress Report

- (a) The Manufacturer shall submit a quarterly Responsible Procurement progress report ("**Responsible Procurement Progress Report**") to the Purchaser.
- (b) The Responsible Procurement Progress Report shall include the following:
 - (i) a performance review and action plan (in the format detailed in appendix 1 (Responsible Procurement Performance Review and Action Plan Template) to this schedule 14);
 - (ii) areas of concern / areas where guidance from the Purchaser is required;
 - (iii) the strategic labour needs and training monitoring report (in the format detailed in appendix 2 (Strategic Labour Needs and Training Monitoring Report Template) to this schedule 14);
 - (iv) an updated Responsible Procurement Schedule including the Manufacturer's use of "CompeteFor";

- (v) updated Responsible Procurement Schedules submitted by Subcontractors to the Manufacturer in accordance with appendix 3 (Responsible Procurement Schedule Requirements) to this schedule 14; and
- (vi) reporting against the Responsible Procurement requirements detailed below.

(c) **Supplier Diversity Reporting**

- (i) The Manufacturer shall report the following:

- (A) The number of the Manufacturer's Subcontractors that are:

	Subcontractors (No.)
SME	
BAME	
Suppliers from other under-represented or protected groups	
Suppliers demonstrating a diverse workforce composition	

- (B) The level of spend, to date, with the Manufacturer's Subcontractors that are:

	Subcontractors	
	Level of spend (£)	Proportion of total subcontract spend (%)
SME		
BAME		
Suppliers from other under-represented or protected groups		
Suppliers demonstrating a diverse workforce composition		

(d) **Equality and Diversity Reporting**

The Manufacturer shall report the number of the Manufacturer's employees and, to the extent reasonably possible, of the employees of its Subcontractors engaged in the performance of this Agreement who are:

	Manufacturer	Subcontractors
Female		
People from Minority Ethnic Group communities		
Aged under 25		
Disabled		
Total Workforce		

(e) **Strategic Labour Needs and Training Reporting**

The Manufacturer shall provide to the Purchaser reports in relation to strategic labour needs and training in the form of each of the templates in appendix 1 (Responsible Procurement Performance Review and Action Plan Template) to this schedule 14 and appendix 2 (Strategic Labour Needs and Training Monitoring Report Template) to this schedule 14.

(f) Ethical Sourcing Practices Reporting

The Manufacturer shall report on ethical sourcing practices in accordance with the Responsible Procurement Performance Review and Action Plan template in appendix 1 (Responsible Procurement Performance Review and Action Plan Template), unless specific risks are identified following the risk analysis which then require further management and monitoring which shall be agreed by the Manufacturer and the Purchaser if required.

(g) Responsible Procurement Progress Meeting

The Manufacturer, its Subcontractors (where deemed required by the Purchaser) engaged on the Works and the Purchaser shall meet one week following receipt of the Responsible Procurement Progress Report to review Responsible Procurement activity under this Agreement. The objective of the meeting shall be to verify that work is proceeding in accordance with the Responsible Procurement Plan.

(h) External Audits

- (i) Without prejudice to clause 9 (Manufacturing Facilities and Rights of Audit):
 - (A) the Purchaser (or its nominated representative) shall undertake audits of the Manufacturer and Subcontractors working on the Works with regard to Responsible Procurement;
 - (B) The Manufacturer shall be given notice of the proposed external audit date and shall cooperate in relation to any audit, including providing or procuring full access to premises used in the Manufacturer's or Subcontractor's performance of the Works;
 - (C) The Manufacturer and its Subcontractors shall assist with these audits and make personnel and records available as required; and
 - (D) The Manufacturer and its Subcontractors shall maintain and retain records relating to the Responsible Procurement provisions of this part of this Agreement for a minimum of seven (7) years.

2.4 Responsible Procurement Requirements**(a) Encouraging a Diverse Base of Suppliers**

For the purposes of this schedule 14, the term "**Diverse Suppliers**" shall comprise the following four (4) sub-sets:

- (i) Small and Medium Enterprises;
 - (ii) Black, Asian and Minority Ethnic businesses;
 - (iii) Suppliers from other under-represented or protected groups; and
 - (iv) Suppliers demonstrating a diverse workforce composition.
- (b) The Manufacturer shall demonstrate actual and planned compliance with these targets through its supplier diversity reporting and by providing and maintaining a detailed Responsible Procurement Schedule which meets the requirements set out in appendix 3 (Responsible Procurement Schedule Requirements) to this schedule 14.

- (c) To the extent that the Manufacturer intends to use Subcontractors in jurisdictions other than the United Kingdom, the Manufacturer must:
 - (i) interpret this schedule 14 using equivalent definitions applicable in those jurisdictions or, where there are no equivalent definitions, provide an explanation and propose an alternative approach that reasonably approximates with the approach described in this schedule 14; and
 - (ii) comply with the equality and diversity requirements to the greatest extent permitted by the laws of their applicable jurisdiction and, where the legislation of that jurisdiction does not permit a reasonable approximation of the approach described in this schedule 14, provide an explanation and propose an alternative approach that reasonably approximates with the approach described in this schedule 14.
- (d) The monitoring of ethnic classification groups used for monitoring purposes are:
 - (i) White British;
 - (ii) Irish;
 - (iii) any other White background;
 - (iv) Mixed White & Black Caribbean;
 - (v) White & Black African;
 - (vi) White & Asian;
 - (vii) any other Mixed background;
 - (viii) Asian or Asian British Indian;
 - (ix) Pakistani;
 - (x) Bangladeshi;
 - (xi) any other Asian background;
 - (xii) Black or Black British Caribbean;
 - (xiii) African;
 - (xiv) any other Black background;
 - (xv) Chinese or other Ethnic Group Chinese; and
 - (xvi) any other Ethnic Group.
- (e) **Meet the Buyer Event**

The Manufacturer shall participate in "Meet the Buyer Events" as and when organised by either TfL, the Purchaser, the Purchaser's Affiliates and/or any of their subsidiaries or nominees.

2.5 Meeting Strategic Labour Needs and Enabling Training Opportunities

(a) Strategic Labour Needs and Training Plan

The Manufacturer shall develop and implement a Strategic Labour Needs and Training Plan (the "**SLNT Plan**") for this Agreement. The SLNT Plan shall form part of the Responsible Procurement Plan. The SLNT Plan shall state the Manufacturer's strategic labour needs and training objectives and the means by which the objectives shall be achieved. The Manufacturer shall update the SLNT Plan as necessary, and at least on an annual basis, and shall submit all revisions of such plan to the Purchaser for Approval.

- (b) The SLNT Plan shall include:
 - (i) the Manufacturer's proposals to deliver the strategic labour needs and training ("**SLNT**") for the performance of the Works in accordance with this Agreement including delivery against the following priority areas:
 - (A) the qualifications and training programmes identified;
 - (B) named staff resource to be deployed to support the activity;
 - (C) external funding streams identified to support the activity;
 - (D) assumptions made in proposing the activities; and
 - (E) any input required from the Purchaser to undertake these activities;
 - (ii) the Manufacturer's processes for ensuring the SLNT requirements will be met through the Manufacturer's Subcontractors, where they are responsible for delivering part of the Works, including:
 - (A) how SLNT considerations will be included in the selection, contracting and management of Subcontractors;
 - (B) how the Manufacturer plans to make Subcontractors aware of any services and government support and funding streams for any SLNT activity to be undertaken towards the Manufacturer's proposed SLNT outputs; and
 - (C) how the Manufacturer will facilitate engagement between the Purchaser and the Manufacturer's supply chain to ensure that available funding streams and training programmes can be maximised;
 - (iii) the Manufacturer's outline of its processes for monitoring and co-ordinating the delivery of the SLNT outputs, which shall include:
 - (A) details of the personnel responsible for implementing, managing and reporting SLNT activity within the Manufacturer's organisation; and
 - (B) the administrative and management arrangements that will be operated in relation to the Manufacturer's SLNT activity;
 - (iv) the Manufacturer's outline of its arrangements to put the SLNT Plan into action following Approval, which shall include the following:
 - (A) engagement with the Purchaser to develop the SLNT Plan within the Responsible Procurement Plan;
 - (B) the required administration, management and reporting structures; and

- (C) how the Manufacturer will attract, develop and retain personnel with the skills (including numeracy and literacy) necessary to deliver the Works;
- (v) The Manufacturer's approach to supporting initiatives to promote STEM education and careers including:
 - (A) establishing relationships with schools and the London Transport Museum and supporting the STEM Ambassador Programme to facilitate the promotion of careers in the engineering sector;
 - (B) providing [REDACTED] per annum from the Commencement Date until the end of the Train Warranty Period to the STEM Ambassador Programme; and
 - (C) directly supporting the delivery of educational events, materials in primary schools, nurseries and other educational settings; and
- (vi) the Manufacturer's approach to supporting the SI Academy including:
 - (A) enhancing systems integration training material and provisions with Train related material to facilitate knowledge transfer of systems integration tools and techniques;
 - (B) supporting the development of specific course content, enhancing existing courses, provision of examples, facilitation of and enabling the gathering of real world experience;
 - (C) undertaking learning development through the SI Academy to achieve systems integration competencies to reduce systems integration risks and improve knowledge transfer between the Purchaser and its suppliers, provided that all training costs shall be borne by the Manufacturer; and
 - (D) providing Train specific equipment that supports the attainment of systems integration knowledge.

2.6 Strategic Labour Needs and Training Output Breakdown

The Manufacturer shall deliver the SLNT requirements for this Agreement in accordance with this schedule 14. The Manufacturer shall deliver the following minimum requirements for SLNT:

- (a) where an apprenticeship training is for longer than one year, the Purchaser will allow each subsequent training year to count against the Manufacturer's overall SLNT requirement i.e. if the Manufacturer has an SLNT target of 12, this could either equate to 12 Apprentices each undertaking a year Apprenticeship or alternatively four (4) Apprentices undertaking a three-year Apprenticeship;
- (b) during delivery of the Works, the Manufacturer shall employ at least three (3) Graduates and five (5) Apprentices per annum in connection with the design or management of the Works. For the avoidance of doubt, this requirement shall be calculated as follows:
 - (i) [REDACTED] x (the number of years from the Commencement Date to the end of the Train Warranty Period);

- (ii) [REDACTED] x (the number of years from the Commencement Date to the end of the Train Warranty Period).

The profile for delivery of this requirement in is set out in the Strategic Labour Needs and Training Plan in appendix 4 (SLNT Plan).

2.7 Ethical Sourcing Practices

- (a) The Manufacturer shall ensure that in carrying out its obligations under this Agreement, it complies with the following minimum requirements (derived from the Ethical Trading Initiative (ETI) Base Code) (the "**Ethical Sourcing Practices**") and shall use reasonable endeavours to ensure that Subcontractors comply with these minimum requirements:
- (i) employment is freely chosen:
 - (A) there is no forced, bonded or involuntary prison labour;
 - (B) workers are not required to lodge deposits or their identity papers with their employer and are free to leave their employer after reasonable notice;
 - (ii) freedom of association and the right to collective bargaining are respected:
 - (A) workers, without distinction, have the right to join or form trade unions of their own choosing and to bargain collectively;
 - (B) the employer adopts an open attitude towards the activities of trade unions and their organisational activities;
 - (C) workers' representatives are not discriminated against and have access to carry out their representative functions in the workplace; and
 - (D) where the right to freedom of association and collective bargaining is restricted under law, the employer facilitates, and does not hinder, the development of parallel means for independent and free association and bargaining;
 - (iii) working conditions are safe and hygienic:
 - (A) a safe and hygienic working environment shall be provided, bearing in mind the prevailing knowledge of the industry and of any specific hazards. Adequate steps shall be taken to prevent accidents and injury to health arising out of, associated with, or occurring in the course of work, by minimising, so far as is reasonably practicable, the causes of hazards inherent in the working environment;
 - (B) workers shall receive regular and recorded health, safety and environment training, and such training shall be repeated for new or reassigned workers;
 - (C) access to clean toilet facilities and to potable water, and, if appropriate, sanitary facilities for food storage shall be provided;
 - (D) accommodation, where provided, shall be clean, safe, and meet the basic needs of the workers; and

- (E) the company observing the code shall assign responsibility for health, safety and environment to a senior management representative;
- (iv) Child Labour shall not be used:
 - (A) there shall be no recruitment of Child Labour;
 - (B) companies shall develop or participate in and contribute to policies and programmes which provide for the transition of any Child found to be performing Child Labour to enable him to attend and remain in quality education until no longer a Child;
 - (C) Children and Young Persons shall not be employed at night or in hazardous conditions; and
 - (D) these policies and programmes shall conform to the provisions of the relevant ILO standards;
- (v) living wages are paid:
 - (A) wages and benefits paid for a standard working week meet, at a minimum, national legal standards or industry benchmark standards, whichever is higher. In any event wages should always be enough to meet basic needs and to provide some discretionary income;
 - (B) all workers shall be provided with written and understandable information about their employment conditions in respect to wages before they enter employment and about the particulars of their wages for the pay period concerned each time that they are paid; and
 - (C) deductions from wages as a disciplinary measure shall not be permitted nor shall any deductions from wages not provided for by national law be permitted without the expressed permission of the worker concerned. All disciplinary measures should be recorded;
- (vi) working hours are not excessive:
 - (A) working hours comply with national laws and benchmark industry standards, whichever affords greater protection;
- (vii) no discrimination is practised:
 - (A) there is no discrimination in hiring, compensation, access to training, promotion, termination or retirement based on race, caste, national origin, religion, age, disability, gender, marital status, sexual orientation, union membership or political affiliation;
- (viii) regular employment is provided:
 - (A) to every extent possible work performed must be on the basis of recognised employment relationships established through national law and practice. For the avoidance of any doubt, this requires the Manufacturer to engage its workforce by using contracts of employment (i.e. a contract of service and not any other kind of contract for the provision of services) wherever possible. The creation of some relationship other than that of a contract of employment will not be justified by the worker in question expressing

a preference for that other kind of relationship, unless no other appropriately skilled workers could be engaged; and

- (B) obligations to employees under labour or social security laws and regulations arising from the regular employment relationship shall not be avoided through the use of labour-only contracting, subcontracting, or home-working arrangements, or through apprenticeship schemes where there is no real intent to impart skills or provide regular employment, nor shall any such obligations be avoided through the excessive use of fixed-term contracts of employment; and
- (ix) no harsh or inhumane treatment is allowed, and physical abuse or discipline, the threat of physical abuse, sexual or other harassment and verbal abuse or other forms of intimidation shall be prohibited.
- (b) The Manufacturer shall manage and monitor adherence to these minimum requirements throughout its supply chain and report any non-compliance and remedial actions to the Purchaser.
- (c) The Manufacturer shall comply with national and other applicable law and, where the provisions of law and these provisions address the same subject, the provision which affords the greater protection should be applied. These principles shall not dilute any other related provisions under this Agreement.
- (d) The Manufacturer shall undertake a risk analysis of its supply chain to identify any areas where unethical labour practices may occur. In the event that areas of risk are identified by the Manufacturer, the Manufacturer shall detail in the Responsible Procurement Plan the action that will be undertaken by the Manufacturer to map the at-risk supply chains and provide information on the labour conditions at relevant production sites. The Manufacturer shall then, in conjunction with the Purchaser, detail what remedial action will be undertaken to achieve compliance in accordance with Ethical Sourcing Practices. Where risks are identified the Manufacturer shall undertake social audits of production sites.
- (e) As soon as practicable following the Commencement Date, the Manufacturer shall register itself with an ethical supplier database, such as SEDEX (Supplier Ethical Data Exchange). The Manufacturer agrees that for the duration of this Agreement, it shall permit and enable the Purchaser to have access to the information in relation to the Manufacturer that subsists in such ethical supplier database.
- (f) During the course of this Agreement, the Purchaser has the right to request that the Manufacturer carries out one or more audits using a reputable auditor to verify whether the Manufacturer is complying with the Ethical Sourcing Practices. The identity of the auditor is to be approved by the Purchaser, such approval not to be unreasonably withheld or delayed. The costs of the audit shall be borne by the Purchaser.
- (g) If the Purchaser has reasonable cause to believe that the Manufacturer is not complying with any of the Ethical Sourcing Practices, then the Purchaser shall notify the Manufacturer and the Parties shall agree an action plan with appropriate timeframes for compliance by the Manufacturer (the "**Action Plan**"), such Action Plan to be agreed by the Parties by no later than one calendar month from the date of the Purchaser notifying the Manufacturer that remedial action is required or such other period as the Parties may otherwise agree in writing. The costs of the creation and implementation of the Action Plan shall be borne by the Manufacturer.

2.8 London Living Wage

- (a) Without prejudice to any other provision of this Agreement, the Manufacturer shall, and shall use reasonable endeavours to ensure that Subcontractors shall, pay their employees an hourly wage (or equivalent of an hourly wage) of not less than the London Living Wage where those employees are spending all of their working time on the Works within one of the London Boroughs.
- (b) The Manufacturer shall audit the records of its Subcontractors to ensure compliance with payment of the London Living Wage and notify the Purchaser of any non-compliance.
- (c) The Manufacturer shall, and shall use reasonable endeavours to procure that its Subcontractors shall, allow the Purchaser access to their records for the purposes of auditing compliance with the requirement to pay employees the London Living Wage.
- (d) In the event that the Manufacturer or the Purchaser discovers any non-compliance with the requirements of this paragraph 2, the Manufacturer shall co-operate fully with the Purchaser to resolve the non-compliance.
- (e) The Manufacturer shall disseminate on behalf of the Purchaser to its employees and Subcontractors engaged in provision of the Works such perception questionnaires as the Purchaser may reasonably require from time to time and promptly (and, in the case of any Subcontractor, use reasonable endeavours to ensure that such Subcontractor will) collate and return to the Purchaser responses to such questionnaires.
- (f) Apprentices will be excluded from payment of the London Living Wage and will be paid as a minimum the normal rate for an Apprentice as defined in the appropriate national agreement or other similar document.

3. **WORK RELATED ROAD RISK**

3.1 **Definitions**

For the purposes of this paragraph 3, the following definitions shall apply:

"Bronze Accreditation" means the minimum level of accreditation within the FORS Standard, the requirements of which are more particularly described at: www.fors-online.org.uk;

"Car-derived Vans" means a vehicle based on a car, but with an interior that has been altered for the purpose of carrying larger amounts of goods and/or equipment;

"Collision Report" means a report detailing all collisions during the previous 12 months involving injuries to persons or fatalities;

"Delivery and Servicing Vehicle" means a Lorry, a Van or a Car-derived Van;

"Driver" means any employee of the Manufacturer and any Subcontractor (including an agency driver) who operates Delivery and Servicing Vehicles on behalf of the Manufacturer while engaged in or in relation to the provision of the Works;

"DVLA" means the Driver and Vehicle Licensing Agency;

"FORS" means the Fleet Operator Recognition Scheme, which is an accreditation scheme for businesses operating van and lorry fleets. It is free to join and offers impartial, independent advice and guidance to motivate companies to improve their compliance with relevant laws and their environment, social and economic performance;

"FORS Standard" means the standard setting out the accreditation requirements for the Fleet Operator Recognition Scheme, a copy of which can be found at: www.fors-online.org.uk;

"Gold Accreditation" means the highest level of accreditation within the FORS Standard, the requirements of which are more particularly described at: www.fors-online.org.uk;

"Lorry" means a vehicle with a MAM exceeding 3,500 kilograms;

"MAM" means the maximum authorised mass of a vehicle or trailer including the maximum load that can be carried safely while used on the road;

"Side Guards" means guards that are fitted between the front and rear axles of a Lorry and that comply with EC Directive 89/297/EEC and the Road Vehicles (Construction and Use) Regulations 1986; and

"Silver Accreditation" means the intermediate level of accreditation within the FORS Standard, the requirements of which are more particularly described at: www.fors-online.org.uk; and

"Van" means a vehicle with a MAM not exceeding 3,500 kilograms.

3.2 **Fleet Operator Recognition Scheme Accreditation**

The Manufacturer shall within 90 Working Days of the Commencement Date:

- (a) (unless already registered) register for FORS or a scheme which in the reasonable opinion of the Purchaser is an acceptable substitute to FORS (the **"Alternative Scheme"**); and
- (b) (unless already accredited) have attained the standard of Bronze Accreditation (or higher) or the equivalent within the Alternative Scheme and shall maintain the standard of Bronze Accreditation (or equivalent standard within the Alternative Scheme) by way of an annual independent assessment in accordance with the FORS Standard, or take such steps as may be required to maintain the equivalent standard within the Alternative Scheme. Alternatively, where the Manufacturer has attained Silver Accreditation or Gold Accreditation the maintenance requirements shall be undertaken in accordance with the periods set out in the FORS Standard.

3.3 **Safety Equipment on Vehicles**

The Manufacturer shall ensure that every Lorry which is used to provide the Works shall:

- (a) have Side Guards, unless it can be demonstrated, to the reasonable satisfaction of the Purchaser, that the Lorry will not perform the function for which it was built if Side Guards are fitted;
- (b) have front, side and rear blind spots completely eliminated or minimised as far as practical and possible, through the use of fully operational direct and indirect vision aids and driver audible alerts;
- (c) have equipment fitted with an audible means of warning other road users of the Lorry's left manoeuvre; and
- (d) have prominent signage on the Lorry to warn cyclists and other road users of the dangers of passing the Lorry on the inside and of getting too close to the Lorry.

3.4 **Driver Licence Checks**

The Manufacturer shall ensure that:

- (a) it has a system in place to ensure all Drivers hold a valid driving licence for the category of vehicle that they are tasked to drive, along with recording any endorsements, or restrictions on the Drivers; and
- (b) each Driver has a driving licence check with the DVLA or such equivalent before that Driver commences delivery of the Works and that the driving licence check with the DVLA or equivalent authority is repeated in accordance with either the following risk scale (in the case of the DVLA issued licences only), or the Manufacturer's risk scale, provided that the Manufacturer's risk scale has been Approved by the Purchaser in the previous 12 months.

Points incurred on a driving licence within 12 months of any check:

0 - 3 points - annual checks;

4 - 8 points – six (6) monthly checks;

9 - 11 points - quarterly checks;

12 or more points - monthly checks.

3.5 **Driver Training**

The Manufacturer shall ensure that each Driver undergoes approved progressive training (to include a mix of theoretical, e-learning, practical and on the job training) and continued professional development to include training covering the safety of vulnerable road users and on-cycle hazard awareness, throughout the life of this Agreement.

3.6 **Collision Investigations, Collision Reports and FORS Reports**

- (a) From the Commencement Date, in the event of a collision involving the Manufacturer's freight vehicles, the Manufacturer shall:
 - (i) provide an initial Collision Report to the Purchaser Contract Manager and a copy to the Purchaser as soon as is practicable after the collision and in any case not more than 24 hours after the collision;
 - (ii) undertake a collision investigation as soon as practicable after the collision; and
 - (iii) provide a Collision Report to the Purchaser Contract Manager and a copy to the Purchaser within a reasonable time following the collision and in any case within 21 days of the conclusion of the collision investigation.
- (b) The Manufacturer shall within 30 days of becoming a FORS Bronze member or, if an existing member, within 30 days of the Commencement Date:
 - (i) make a written report to the Purchaser providing a copy to the Purchaser Contract Manager, detailing the use of any Subcontractors of any tier and compliance with the requirements in paragraphs 3.3 (Safety Equipment on Vehicles), 3.4 (Driver Licence Checks) and 3.5 (Driver Training); and
 - (ii) provide updates of the report to the Purchaser, as well as providing a copy to the Purchaser Contract Manager, every three (3) months following the Manufacturer's initial report.

3.7 **Self-Certification of Compliance**

The Manufacturer shall, before any freight movements are undertaken under this Agreement, and no later than 90 Working Days from the Commencement Date, make a written report to the Purchaser detailing its compliance with paragraph 3 of this schedule 14 (the **"WRRR Self-certification Report"**). The Manufacturer shall provide updates of the WRRR Self-certification Report to the Purchaser on each three (3) month anniversary of its submission of the initial WRRR Self-certification Report.

3.8 **Collision Reporting**

From the Commencement Date, the Manufacturer shall:

- (a) ensure that it has a system in place to capture, investigate and analyse road traffic collisions that results in fatalities, injury or damage to vehicles, persons or property and for generating Collision Reports; and
- (b) within 15 Working Days of the Commencement Date provide a Collision Report to the Purchaser. The Manufacturer shall provide to the Purchaser an updated Collision Report within five (5) Working Days of a written request from the Purchaser.

3.9 **Duty of the Manufacturer relating to Subcontractors**

The Manufacturer shall ensure that each Subcontract in relation to this Agreement contains provisions passing down the requirements set out in this paragraph 3.

3.10 **Failure to comply with any work related road risk requirements**

Without limiting the effect of any other provision of this Agreement relating to termination, if the Manufacturer or any Subcontractor fails to comply with any of the requirements set out in this schedule 14:

- (a) the Manufacturer has committed a material breach of this Agreement; and
- (b) the Manufacturer, its employees, agents and Delivery and Servicing Vehicles, operated by the Manufacturer or any Subcontractor, may be refused entry to any property that is owned, occupied, managed by, or under the responsibility of the Purchaser and no relief shall be provided to the Manufacturer under this Agreement.

4. **SUPPLY CHAIN MANAGEMENT**

4.1 **CompeteFor**

- (a) The Manufacturer shall use the "CompeteFor" web-sourcing portal, or any successor system, to advertise all 'appropriate Subcontracts' and supplier opportunities which arise through this Agreement. **"Appropriate Subcontracts"** in this context means those Subcontract opportunities that do not have preferred Key Subcontractors as specified by the Manufacturer in the Manufacturer Train Proposal.
- (b) Unless otherwise agreed with the Purchaser, the Manufacturer shall only publish a 'Contract Opportunity' when posting opportunities on "CompeteFor".
- (c) The Manufacturer shall use a naming convention as specified by the Purchaser for all opportunities the Manufacturer posts on "CompeteFor".

- (d) The Manufacturer shall use reasonable endeavours to ensure that Subcontractors use the "CompeteFor" web-sourcing portal, or any successor system, to advertise further opportunities within the Manufacturer's supply chain.
- (e) The Manufacturer shall monitor the number, type and value of "CompeteFor" contract opportunities advertised and awarded in its supply chain.

APPENDIX 1**Responsible Procurement Performance Review and Action Plan Template**

Agreement Title:				
Agreement Description:				
Manufacturer Name:				
Requirement Description	Manufacturer's statement of compliance with requirement	Action taken by Manufacturer since previous TfL Period	Proposed action to be taken by Manufacturer during next TfL Period	Action taken by Manufacturer within supply chain to implement this requirement during previous TfL Period
"CompeteFor"				
Meet the Buyer Event				
Community Relations				
Strategic Labour Needs and Training Plan (including submittal of the Strategic Labour Needs and Training Monitoring Report)				
Ethical Sourcing Practices				

APPENDIX 2**Strategic Labour Needs and Training Monitoring Report Template**

Organisation	
TfL Contract/Project	
Date	
SLNT Reporting Period	

SLNT Category	TfL Priority	Numbers				Additional Detail/Information
		Annual Target	Annual Forecast	Outputs this Period	Outputs to Date	
Worklessness						
- Apprentices (FTE)	Y					
- Job Starts (FTE)	Y					
- Placement Positions (Nos)	Y					
New Entrants						
- Apprentices (FTE)	Y					
- Job Starts (FTE)						
- Graduates (FTE)						
Trainees						
- Placement Positions (Nos)						
- Taster Positions (Nos)						
Current Workforce						
= Adult Apprentices (FTE)	Y					
- Workforce Skills (Days)						
Educational Activities (days)						
Additional Information						
Highlights						
Issues/Concerns/Risks						

APPENDIX 3**Responsible Procurement Schedule Requirements**

The Manufacturer shall provide and maintain a detailed procurement schedule in Excel format, unless agreed otherwise with the Purchaser, substantially in the form below (the "**Responsible Procurement Schedule**") identifying:

- all packages, proposed and actualised purchase orders, Subcontracts, supplies and service orders including training;
- work scope / packages proposed to be performed direct by the Manufacturer;
- planned, forecast and actualised milestone dates for each of the procurement activities;
- estimated or actual values of the planned packages; and
- all other relevant information as required by the Responsible Procurement Schedule template. For all Key Subcontractors the Manufacturer shall complete all fields of the Responsible Procurement Schedule. For all other Subcontractors the Manufacturer may choose not to complete fields F, G, H and M.

For Subcontracts where significant subcontracting by Subcontractors is anticipated, the Manufacturer shall unless otherwise agreed by the Purchaser, ensure that Subcontractors similarly complete, submit to the Manufacturer and keep updated a Responsible Procurement Schedule in respect of their part of the Works, which shall reflect the same level of information in respect of subcontractor procurement as that required under this Agreement.

Responsible Procurement Schedule

A	B	C	D	E	F	G	H
Package/ Contract No.	Work Package Description	Package Value (£) Estimated/ Actual	Possible Subcontractor(s) or In-house	Company Registration Number(s)	Procurement Route (ITT/SS)	"CompeteFor" or" (Y/N)	"CompeteFor"- Opportunity posting date

I	J	K	L	M	N	O	P	Q	R
Contract Status	ITT Issue Date	Awarded Subcontractor	Target / Actual Award Date	Form of Contract	Contract Start Date (on site)	Target / Actual Completion Date	Country and Post Code where Works or Services will be undertaken	SME?	Comments

APPENDIX 4

SLNT Plan

SCHEDULE 15

Open Book Accounting

1. The Manufacturer shall maintain on a current and accurate basis, books of account relating to the performance of this Agreement and in so doing shall observe and comply with such accounting conventions, policies and requirements as the Purchaser may from time to time specify after consultation with the Manufacturer, provided that these are compatible with generally accepted accounting practice in the UK and Good Industry Practice.
2. In relation to any Compensation Event, Change in Law or Change (being, for the purposes of this schedule 15, "**Eligible Changes**") the Manufacturer shall adopt a system of "open book" accounting which permits all components of income, costs, overheads, depreciation, taxes, tax allowances, discounts, provisions, and other financial adjustments and profit in relation to the same to be separately identified and allocated and shall make such information available to the Purchaser.
3. The Manufacturer shall further:
 - (a) nominate an individual with specific responsibility for the preparation and maintenance of financial, commercial and management information required under this Agreement; and
 - (b) maintain and provide that information in a form required by this Agreement and provide any summary of that information as reasonably required by the Purchaser.
4. In relation to any Eligible Changes, the Manufacturer shall afford or procure for the Purchaser (including advisers, consultants and agents acting on behalf of the Purchaser) and any party entitled under any law to audit or review this Agreement such access to such information, books of account, records and documentation (including any stored in digital form) and personnel of the Manufacturer as relates to such matters and as it or they reasonably consider necessary for the performance of their duties and shall provide copies of the same on demand at the Purchaser's cost.
5. The Purchaser may nominate representatives to undertake any financial or management audit of the Manufacturer. These nominees shall be allowed direct access to both the Manufacturer's personnel and all management information (including computer stored data and systems). The Manufacturer shall at its own expense provide all reasonable support to those nominees in the discharge of their functions.
6. Subject to and in accordance with the provisions of this Agreement, the Purchaser may at any time and on reasonable prior notice undertake any inspection, audit or check of any aspect of the Manufacturer's performance of this Agreement as required by the Purchaser, TfL or as may be requested by the National Audit Office or otherwise. The Manufacturer shall at its own expense promptly provide all reasonable co-operation in relation to any inspection, audit or check including:
 - (a) making any documents and records available for inspection and at the Purchaser's cost, providing a reasonable number of copies of any documents or records requested and/or granting copying facilities for the purposes of making such copies; and
 - (b) complying with the Purchaser's reasonable request for access to personnel engaged in the Manufacturer's performance of this Agreement.
7. The Manufacturer shall keep and operate in an appropriately secure environment, fitted with reliable user authentication and access control mechanisms in accordance with Good

Industry Practice, all information technology systems or networks which process financial data where the modification or destruction of such data might give rise to a fraud or financial impropriety. The Manufacturer shall consult with the Purchaser on such systems prior to their use in respect of information belonging to the Purchaser, and the Manufacturer shall implement any systems in relation to the same as reasonably required by the Purchaser.

8. The Manufacturer shall provide such other routine or special written or oral financial and management reports as the Purchaser reasonably considers necessary in respect of a part or the whole of the Manufacturer's activities under this Agreement.

SCHEDULE 16

Health, Safety and Environment

1. GENERAL

- 1.1 The Manufacturer shall have responsibility for all health, safety and welfare matters associated with the Works consistent with DLR Health, Safety and Environment Policy (appendix 1) and TfL HSE Principles (appendix 2). The Manufacturer shall also be responsible for liaison with the Purchaser and its industry partners on health and safety matters affecting the Works.
- 1.2 The Manufacturer shall comply with all relevant statutory health, safety and welfare requirements including relevant legislation, codes of practice, and Applicable Standards and the requirements of appendix 6 (Work Instructions).
- 1.3 The Manufacturer shall develop processes and programmes for delivery of excellence in health and safety performance. This programme (the "**Health and Safety Plan**") should seek to continually improve performance. Specific areas for development within this programme shall include, but are not be limited to, the following in pursuit of good industry practices:
- (a) design, manufacture and construction management;
 - (b) procurement of people, plant and materials;
 - (c) competence management of staff and contractors;
 - (d) maintenance of plant and equipment;
 - (e) proactive occupational health management of staff and contractors;
 - (f) cooperation and coordination with the Purchaser and its industry partners;
 - (g) cooperation and coordination with other contractors on site in particular in relation to the planning for, and management of emergencies; and
 - (h) health and safety targets and improvement initiatives.
- 1.4 The Manufacturer shall submit the Health and Safety Plan to the Purchaser for Approval no later than three (3) months after the Commencement Date.
- 1.5 The Manufacturer shall:
- (a) have in place at all times an appropriate occupational health and safety management system that complies with BS OH SAS 18001 or equivalent at the Manufacturer's Premises, any other principal Train and Equipment manufacturing sites, and all relevant testing sites; and
 - (b) provide evidence satisfactory to the Purchaser of such system promptly upon request by the Purchaser.
- 1.6 In developing a health and safety management system, the Manufacturer shall develop, implement and maintain, health, safety and welfare policies consistent with, and aligned to the HSE Principles set out in appendix 2 (HSE Principles) as amended from time to time.
- 1.7 The Manufacturer shall take cognisance of good practice guidance and other publications produced by the Purchaser, TfL, RSSB or Network Rail relevant to health, safety and

welfare in terms of its activities. The Manufacturer shall participate in relevant health and safety forums, developed by these partners, for sharing good practice during the Works.

- 1.8 For the duration of the Works, the Manufacturer shall collate and submit to the Purchaser health and safety performance data. This information shall be submitted every TfL Period.
- 1.9 The Manufacturer shall nominate a senior director (typically a director identified as responsible for health and safety) and respond promptly if the Purchaser requests a meeting with such senior representative from the Manufacturer to discuss any notifiable or reportable event, adverse trends or other evidence of a serious non-compliance with legislation or health and safety requirements.
- 1.10 The Manufacturer shall provide to the Purchaser until Acceptance of the last Train an annual report detailing its assessment of its health and safety performance for the previous year, including details of any significant health and safety accidents or incidents and the improvement actions it intends to implement to improve the performance during the following year.
- 1.11 The Manufacturer shall develop and implement a drugs and alcohol policy consistent with the Drugs and Alcohol Policy (appendix 3) which shall be appropriately cascaded to its own supply chain, where there is the potential that misuse could lead to an accident or incident involving their own staff or the staff of others; or passengers and members of the public.

2. **TRAIN DELIVERY AND REASSEMBLY HSE PLAN**

- 2.1 The Manufacturer shall develop and implement Train delivery and reassembly health and safety plan(s) ("**Delivery & Reassembly H&S Plans**"), which shall be consistent with:
 - (a) the Manufacturer's own health and safety management systems; and
 - (b) the DLR Health, Safety and Environment Policy (as set out in appendix 1).
- 2.2 The Delivery & Reassembly H&S Plan shall include as a minimum the following:
 - (a) method statements and risk assessments that demonstrate a safe system of work in the delivery, reassembly and handover of the Trains to the Depot;
 - (b) all necessary statutory notices required to transport the Trains; this shall include the work related road risk requirements set out at paragraph 3 of schedule 14 (Responsible Procurement);
 - (c) details of any necessary works to reassemble the Trains at the Depot and how these will meet the requirements of this Agreement;
 - (d) details of any necessary temporary works required at the Depot and how these will meet the requirements of this Agreement; and
 - (e) a detailed programme of activities required to meet the Delivery and Reassembly H&S Plan.
- 2.3 The Manufacturer shall submit the Delivery and Reassembly H&S Plan to the Purchaser for Approval no later than six (6) months before the delivery of the first Train as part of the safe delivery method statement required in clause 15.2(h).
- 2.4 The Manufacturer shall submit an updated Delivery and Reassembly H&S Plan to the Purchaser for Approval on the occurrence of any of the following:

- (a) any material change in the Delivery and Reassembly H&S Plan requirements;
 - (b) any incident that affected the Depot, the Purchaser's or Manufacturer's staff or that requires investigation by the HSE or ORR.
- 2.5 For the duration of all the works that the Manufacturer is required to undertake in the Depot, the Manufacturer shall:
- (a) adhere to all health, safety and environmental requirements applicable to the Depot, including requirements detailed in appendix 4 (Minimum On-site DLR PPE requirements);
 - (b) collate and submit to the Purchaser, every TfL Period, health, safety and environment performance data in relation to any RIDDOR incidents and/or lost time incidents that occur in relation to the Delivery and Reassembly H&S Plan works; and
 - (c) conduct proactive inspections and monitoring of the Depot for the duration of the temporary works, and submit the results of such inspections and monitoring to the Purchaser every TfL Period.

3. **PERFORMANCE MONITORING**

The Manufacturer's health, safety and environmental performance will be monitored by the Purchaser through the regular contract management meetings and formal health, safety and environment meetings referred to in paragraph 4 below. The frequency for assessment shall be determined by the Purchaser in light of the level of activity or performance. The Manufacturer shall provide such information and evidence as may be requested by the Purchaser in respect of the assessment, and shall discuss the results of any assessment with the Purchaser upon request. If required, the Manufacturer shall prepare an action plan in response to the results from an assessment, progress against which shall be monitored as part of subsequent assessments.

4. **HSE MEETINGS**

The Manufacturer shall report on its compliance with all of its obligations in this schedule 16 (Health, Safety and Environment) in each regular project progress meeting. The Manufacturer shall appoint a senior representative to act as health, safety and environment director (the "**HSE Director**") and shall ensure that the HSE Director attends formal quarterly health, safety and environment meetings with the Purchaser.

5. **HSE KPI REPORTING**

The Manufacturer shall report its own and its Subcontractors' performance with respect to all health, safety and environmental requirements of this Agreement to the Purchaser at the end of each TfL Period. The relevant data shall be provided in the format of the KPI Reporting Template set out in appendix 5 of this schedule 16, or in such other format as the Purchaser may require by notice to the Manufacturer from time to time. The Manufacturer shall submit the relevant data within three (3) Working Days of the end of the relevant TfL Period.

6. **AUDIT**

- 6.1 The Manufacturer shall provide a risk-based health, safety and environmental audit schedule to the Purchaser within three (3) months following the Commencement Date. The Manufacturer shall forward the reports completed after all audits to the Purchaser Contract Manager within 2 weeks of the relevant audit being completed. Each report shall include details of any identified issues and any proposed corrective actions. Such reports

shall be reviewed at the quarterly health, safety and environment meetings referred to in paragraph 4.

- 6.2 The Purchaser shall be entitled to observe or participate in these audits and to conduct additional independent audits, acting reasonably, with the co-operation of the Manufacturer in all cases.

7. **INSPECTIONS**

- 7.1 The Manufacturer shall undertake regular health, safety and environmental inspections of the Manufacturers' and Key Subcontractors' facilities to monitor performance in respect of health, safety and the environment. The Manufacturer shall submit completed inspection reports to the Purchaser Contract Manager no later than five (5) Working Days following the date of inspection.

- 7.2 The Purchaser shall be entitled to observe or participate in these inspections and to conduct additional independent inspections, acting reasonably, with the co-operation of the Manufacturer in all cases.

8. **INCIDENT REPORTING AND INVESTIGATION**

- 8.1 The Manufacturer shall report all health, safety and environmental incidents, accidents and 'near-miss' events to the Purchaser Contract Manager before the end of the shift in which the relevant incident occurred.

- 8.2 The Manufacturer shall also use the TfL web-based reporting system 'Info Exchange' to immediately notify and record and manage incident reporting.

- 8.3 Following any incident, the Manufacturer shall submit an initial written report to the Purchaser Contract Manager within forty eight (48) hours following the relevant incident, and within 14 days following the relevant incident (or such longer period as may be agreed with the Purchaser Contract Manager), the Manufacturer shall submit to the Purchaser Contract Manager a full report detailing, as a minimum, the following:

- (a) description of the incident;
- (b) immediate actions taken;
- (c) immediate causes;
- (d) root causes; and
- (e) actions taken to prevent a recurrence.

- 8.4 The Manufacturer shall complete all investigation reports so as to establish root causes of an incident, and to a level of detail acceptable to the Purchaser. The Purchaser may provide the Manufacturer with comments on any investigation report, and the Manufacturer shall submit an updated report addressing the Purchaser's comments if so required by the Purchaser.

- 8.5 The Manufacturer shall carry out a thorough and formal investigation of all 'Major Injuries' and 'Dangerous Occurrences' (each as defined in RIDDOR). The Purchaser reserves the right to take part in any investigation led by the Manufacturer and/or to carry out its own investigation (at the Purchaser's discretion).

- 8.6 If any incident is serious enough to warrant press attention, all communications with the press shall be via the Purchaser.

- 8.7 Nothing in this Agreement supersedes the Manufacturer's responsibility for statutory reporting of incidents/accidents.

9. **ENVIRONMENTAL MANAGEMENT SYSTEM**

- 9.1 For the duration of this Agreement, the Manufacturer shall maintain an environmental management system that is bespoke to the Agreement and requirements of the Purchaser and which, as a minimum, shall be certified to the latest BS EN ISO14001 standard, or equivalent standard, by a United Kingdom Accreditation Service ("**UKAS**") (or equivalent) accredited certification body.
- 9.2 The Manufacturer shall carry out environmental aspect and impact assessments to identify all potential environmental aspects and impacts related to their activities, products and services they deliver and the Manufacturer shall provide details of any necessary environmental control measures. These are included in risk and benefit identification, control and mitigation measures outlined in designs and safe systems of work for any element of the Works.
- 9.3 The Manufacturer shall review the environmental aspect and impact assessments as a minimum once a year, and must ensure they, and any associated control and mitigation measures, remain pertinent to the Works for the duration of this Agreement.
- 9.4 The environmental management system shall be consistent with and support the principles of the DLR Health, Safety and Environment Policy (set out in appendix 1) and the TfL Corporate Environment Framework (set out in appendix 7).

10. **ENVIRONMENTAL MANAGEMENT PLAN(S)**

- 10.1 As part of the Manufacturer's environmental management system, the Manufacturer shall develop, implement and maintain (for the duration of this Agreement) a contract specific Environmental Management Plan (the "**EMP**") for the delivery of the Works to be submitted by the Manufacturer to the Purchaser for Approval within three (3) months of the Commencement Date.
- 10.2 The Manufacturer shall update the EMP annually, not later than each anniversary of the Commencement Date.
- 10.3 The Manufacturer shall make the EMP available to the Purchaser for regular review (not less than annually), through meetings with the Purchaser Contract Manager.
- 10.4 Within the EMP, the Manufacturer shall demonstrate its contribution towards delivering the Purchaser's environmental objectives, including but not limited to how the Manufacturer shall:
- (a) ensure environmental aspects are considered and incorporated in to its activities;
 - (b) use partnership working on environmental matters (e.g. regulators, environmental bodies, industry groups, client and supply chains);
 - (c) identify all potential environmental aspects and impacts of this Agreement, specific to its activities (from planning and design to delivery) demonstrating how the Manufacturer intends to minimise the potential risks and impacts;
 - (d) ensure its environmental key performance indicators and targets contribute to the objectives and targets set out in the TfL Corporate Environment Framework (appendix 7), where the key themes are:

- (i) carbon, energy and climate resilience; e.g. demonstrating that it is actively minimising use of energy derived from fossil fuels in performing its obligations under this Agreement; setting and achieving a target/reduction in carbon dioxide emissions, in line with the Purchaser's environmental objective and target;
 - (ii) reduction of air pollutants; e.g. setting and achieving targets for reduction in air pollutants (particulate matter and nitrogen oxides) in line with the Purchaser's environmental objective and targets from sources under control of the Manufacturer, not through air sampling, demonstrating how it is meeting the Purchaser's vehicle emissions requirements;
 - (iii) reduction of noise, nuisance and vibration; e.g. setting and achieving a target/reduction in noise in line with the Purchaser's environmental objective and target;
 - (iv) materials, resources and waste management; e.g. demonstrating a reduction in use of resources, such as water, minimising the generation of waste; avoiding the use and production of hazardous materials and the prevention of pollution; achieving a % of waste diverted from landfill rate of 99% (or an equivalent reuse and recycling rate); and
 - (v) maintaining and, where possible, enhancing the quality of the built and natural environment;
- (e) demonstrate that it is meeting the requirements of the Purchaser's Sustainable Timber Policy; and
- (f) include an environmental staffing plan, describing the Manufacturer's environmental management organisation structure, identifying roles, accountabilities and responsibilities, and points of liaison with the Purchaser. The staffing plan must demonstrate resources are appropriate to the scale and nature of the work.
- 10.5 The Manufacturer shall provide an Environmental Product Declaration, ("**EPD**") in accordance with the international standard ISO 14025 (Type III Environmental Declarations) as soon as reasonably practicable after the date of this Agreement. From the date the EPD has been provided in accordance with this paragraph 10.5 the EPD will be deemed to be part of the EMP for the purposes of this Agreement.
11. **REPORT ON PROGRESS**
- 11.1 The Manufacturer shall provide the Purchaser Contract Manager with an environmental performance report, including information on the performance of the environmental management system referred to in paragraph 9 (above). The report shall be submitted annually and not later than on each anniversary of the Commencement Date, and shall contain, but not be limited to:
- (a) any updates to previous EMP;
 - (b) a summary of the environmental statistics for the previous year, including, inter alia, environmental reviews;
 - (c) a summary of findings and trends from audits, inspection and evaluation of compliance with legal and with other requirements;
 - (d) a summary of any changing circumstances, including developments in legal and other requirements; and

- (e) proposed environmental improvement targets together with commentary on the previous year's improvement targets, including status of corrective and preventative actions.

12. MANUFACTURER GENERAL REQUIREMENTS

- 12.1 Without prejudice to its other obligations contained in this Agreement, the Manufacturer shall ensure that for this duration of this Agreement, it carries out its obligations in response to any environmental incidents and their reporting in a manner agreed with the Purchaser.

13. SUSTAINABLE DESIGN, MAINTENANCE AND OPERATIONS

- 13.1 The Manufacturer shall address, as a minimum, the following principles to maximise the sustainable performance of its activities, including but not being limited to:
- (a) using principles that consider the longer-term design life of assets and that will offer innovative solutions that will remain state of the art;
 - (b) designing systems, and installing and maintaining equipment that will reduce energy use and the operational cost of assets;
 - (c) ensuring that the new systems are compatible with the energy system and load requirements at the existing site
 - (d) ensuring designs provide natural ventilation, rather than mechanical, where possible;
 - (e) designing systems, and installing and maintaining equipment that minimises water use during installation and operation of the asset; and
 - (f) maintaining assets, including natural assets (such as trees and other vegetation) to support the resilience of other assets and the operation of the transport system to extreme weather and climate change.

14. CLIMATE RESILIENCE

- 14.1 The Manufacturer shall ensure that any design, installation and maintenance plans and work takes into account the climate parameters over the whole design life in which assets (including natural assets they support, such as trees, vegetation and 'Green Infrastructure') must perform, to support resilience to extreme weather.
- 14.2 The Manufacturer shall ensure that assets remain fit-for-purpose for the Purchaser's needs during their design life period, taking into account the range of extreme weather and climate parameters that may occur during that time. This includes, but is not limited to:
- (a) ensuring assets are capable of operation within specified temperature tolerances as defined in the Standards relevant to the building and asset type applicable to this Agreement; and
 - (b) measures to assist with keeping assets resilient during their design life, including but not limited to water efficiency, natural ventilation and shading, greening, and sustainable drainage.

15. REDUCING CARBON EMISSIONS AND WATER USAGE

- 15.1 The Manufacturer shall, where appropriate:

- (a) ensure that when replacing assets, the Manufacturer uses assets with more energy efficient equipment. The Manufacturer shall notify the Purchaser Contract Manager where this is not technically feasible, e.g. heritage feature;
- (b) measure and report on carbon emissions and develop plans to reduce carbon emissions and energy usage that supports the Purchaser in delivering its programme to improve energy efficiency, helping decrease emissions and lower costs; and
- (c) make use of the Purchaser's automated Monitoring and Targeting (aM&T) software to analyse site performance, control out of hours consumption and also suggest, measure & verify efficiency enhancement projects.

16. AIR QUALITY AND DUST

- 16.1 The Manufacturer shall ensure that in the procurement or leasing of vehicles for use in the delivery of the Works:
- (a) CO₂, air quality and noise impacts are minimised; and
 - (b) a technology neutral approach is adopted.
- 16.2 All vehicles used in the delivery of the Works shall meet or exceed the following CO₂ limits and European emission standards ('Euro Standards') at the Commencement Date:
- (a) cars - maximum certified CO₂ emissions of 99 g/km and a minimum of Euro 6 emission standards and 75 g/km by 2020;
 - (b) vans equal to or less than 1205 kg kerb weight – maximum certified CO₂ emissions of 115 g/km CO₂ and a minimum of Euro 6 emission standards;
 - (c) vans between 1205 and 1660 kg kerb weight – maximum certified CO₂ emissions of 155 g/km CO₂ and a minimum of Euro 6 emission standards;
 - (d) vans greater than 1660 kg kerb weight – maximum certified CO₂ emissions of 189 g/km CO₂ and a minimum of Euro 6 emission standards; and
 - (e) heavy duty vehicles greater than 3500 kg kerb weight – Euro 6 emission standards.
- 16.3 If any vehicles used in the provision of the Works are due for replacement before the end of the term of this Agreement, the Manufacturer shall ensure that the replacement vehicle/engine meets the most stringent European or British regulated emissions standards (currently Euro 6/VI). Replacement vehicles must also meet the CO₂ limits set out above; in addition, the Purchaser reserves the right to reduce CO₂ caps for cars and vans and introduce CO₂ caps for heavy duty vehicles during the term of this Agreement.
- 16.4 The Manufacturer will be monitored, through self-certification and inspections at the Depot and the Manufacturer's Premises, to ensure compliance with these terms. The Purchaser reserves the right to refuse access to its premises to a vehicle which does not meet these criteria.
- 16.5 In line with Mayoral transport and environmental strategies and the Purchaser's commitments to reduce pollutant and carbon dioxide emissions, the Manufacturer is required to use zero or ultra low tailpipe emission vehicles such as electric, plug-in hybrid or biomethane vehicles in their fleet where feasible. Zero and ultra low tailpipe emission cars and light duty commercial vehicles are widely available; if the Manufacturer is not able to deploy such vehicles they will be required to justify their decision to the Purchaser.

- 16.6 Any necessary recharging/refuelling infrastructure required for low emission vehicles to be supplied by the Manufacturer on the Purchaser's premises will only be permitted subject to the Purchaser's written acceptance and by separate agreement on maintenance, installation and running costs. Where the Manufacturer operates such vehicles, the Manufacturer shall share operating experience and data with the Purchaser on request.
- 16.7 The Manufacturer will ensure that all vehicles used in the performance of the Works are operated in such a way to ensure that environmental impacts are reduced as far as reasonably practicable. The Manufacturer shall share operating data for all vehicles with the Purchaser upon request.
- 16.8 The Manufacturer shall:
- (a) ensure vehicles used in connection with the Works are regularly serviced in line with the Purchaser's recommendations;
 - (b) ensure all faults or problems on such vehicles are repaired/addressed as soon as practicable; and
 - (c) monitor and record all vehicle fuel and mileage in connection with the performance of the Works.
- 16.9 The Manufacturer shall report the following information to the Purchaser on a quarterly basis. The Purchaser reserves the right to include additional monitoring requirements throughout the term of this Agreement if required:
- (a) vehicle make and model;
 - (b) individual vehicle official tailpipe CO2 emissions (if available);
 - (c) individual vehicle official Euro emissions standard;
 - (d) vehicle servicing frequency;
 - (e) vehicle fuel type and consumption (litres used);
 - (f) vehicle mileage; and
 - (g) percentage of the fleet on daily hire.
- 16.10 The Manufacturer shall ensure that all driving staff undertake a fuel efficient and safe driver training course within three (3) months of their starting to perform the Works. The Manufacturer shall ensure that the training course consists of theoretical training and practical implementation skills and is a minimum duration of one hour. Details of DVSA-approved training courses including 'LoCITY Driving and Safe Urban Driving' are available on the Fleet Operator Recognition Scheme (FORS) website.
- 16.11 The Manufacturer shall provide the driver training records to the Purchaser as instructed by the Purchaser Contract Manager.

APPENDIX 1

DLR Health, Safety and Environment Policy

APPENDIX 2

HSE Principles

1. Plan improvements in health, safety, and environmental ("**HSE**") management by:
 - (a) complying with the spirit and the letter of HSE legislation, approved codes of practice and HSE Standards;
 - (b) ensuring the risks to the health and safety of employees, customers, Subcontractors and third parties are systematically managed to as low as is reasonably practicable;
 - (c) setting progressive objectives and targets to improve HSE management and performance in keeping with stakeholder expectations and the Purchaser's strategies;
 - (d) taking due account of HSE risks and benefits in decision-making and as an integral part of the business planning process including procurement and major projects;
 - (e) striving to realise environmental benefits, in addition to pollution prevention, with a focus on managing emissions and mitigating the effects of, and adapting to climate change; and
 - (f) actively supporting the Purchaser in delivering environmental strategies on air quality, ambient noise, biodiversity, energy and municipal waste.
2. Implement and operate effective risk control systems by:
 - (a) ensuring employees have the competence and resources to discharge their personal responsibilities for HSE matters and encouraging a positive HSE culture;
 - (b) providing employees with access to services to promote health and wellbeing;
 - (c) providing premises, plant and equipment and systems of work that contribute to a safe and healthy work place and minimise harm to the environment;
 - (d) securing the commitment and involvement of employees in improving HSE management through effective communication and consultation mechanisms;
 - (e) ensuring arrangements with Subcontractors promote and actively support the implementation of this policy; and
 - (f) planning for foreseeable emergency conditions to ensure effective risk controls and resilience arrangement are in place.
3. Monitor HSE performance, taking corrective action where required by:
 - (a) monitoring HSE management system indicators to improve performance;
 - (b) ensuring that root causes are identified in the investigation of incidents; and
 - (c) having effective auditing arrangements in place to provide assurance and to identify and ensure appropriate corrective action where required.
4. Undertake regular management reviews and regularly review the suitability and effectiveness of HSE management, including this policy, and undertake improvement action where appropriate.

APPENDIX 3

Drugs and Alcohol Policy

APPENDIX 4**Minimum on-site DLR PPE requirements****PPE areas**

The table below sets out the four areas, the minimum requirements and gives examples of typical tasks where PPE would be required.

	Mandatory minimum requirements	Typical tasks
GREEN – General Activities	<ul style="list-style-type: none"> • Hi-visibility vest • Safety shoes 	<ul style="list-style-type: none"> • Crowd control and incident management • Track access for object retrieval • Train dispatch and depot train movement • Front-line staff when security level raised to critical • Train wash operations • Depot access using designated walkways • Non-track surveys, inspections on Stations • Asset inspections off network
BLUE – Non-track activities	<ul style="list-style-type: none"> • Full orange • Safety boots • Gloves • Glasses 	<ul style="list-style-type: none"> • All maintenance and repair activities in Traffic hours – including working at Stations, on platforms but excluding Depots • All Telecoms and AFC repairs at Stations • All E&M repairs at Stations • Glazing and poster repairs • Maintenance and repairs to walkways, floors, stairs and walls • L&E maintenance and repairs • FLRT's attending Traffic hour call outs, but not trackside activities.
ORANGE – Depot Activities	<ul style="list-style-type: none"> • Full orange • Safety boots • Gloves • Glasses • Bump cap / hard hat 	<ul style="list-style-type: none"> • All maintenance, repair and inspection activities undertaken on Rolling Stock. This does not include Train Cleaning activities.
PURPLE– Trackside and Construction activities	<ul style="list-style-type: none"> • Full orange • Safety boots • Gloves • Glasses • Hard hat 	<ul style="list-style-type: none"> • Surveys and inspections undertaken in Engineering hours or during a Possession • Maintenance, repair activities undertaken in Engineering hours or Possessions • All project works undertaken in Engineering Hours or Possessions • Track inspections in Depots, in Traffic and Engineering Hours • FLRTs attending trackside faults during Traffic hours • Any activity undertaken within a designated construction site
Please note, based on workplace risk assessments, staff carrying out the above activities may be required to wear additional PPE.		

APPENDIX 5**KPI Reporting template**

Supplier Periodic HS&E Report			
Contract/Project:			
DLRL Project Number :	This information should be requested from the DLRL Project manager		
Contractor/Supplier:			
Period no.:	Details of Reporting periods should be requested from the DLRL Project Manager		
Date provided :	Dates of DLRL Reporting periods should be requested from the DLR Project Manager		
RAW DATA REQUIREMENTS	Unit of measure	Current Period	Notes
Number of employees	No.	0	This should include both contractor management and operatives on site, but exclude off-site labour in factories and offices.
Number of hours worked	No.	0	Total number of hours worked on the work site by supplier's staff (both permanent and temporary) and sub-contractors for the period. This should include both contractor management and operative hours whilst on site, but excludes off-site labour in factories and offices. Note: This should not include hours of any DLRL employees, or DLRL teams used as contractors.
Number of fatalities	No.	0	Death arising from an incident at an DLRL related work site. Suicides and alleged suicides are excluded as are crime-related and medical fatalities.
Number of RIDDORS	No.	0	As defined by Reporting of Injuries, Diseases and Dangerous Occurrences Regulations. Where these incidents relate to fatality, minor, major or Lost Time injuries, they should also be included in the figures for those categories of incidents.
Number of Major Injuries	No.	0	Total number of major Injuries (as per the definition of 'major' under Schedule 1 of RIDDOR) This figure should include RIDDOR reportable injuries and Lost Time injuries, where these are major injuries. NB: Injuries arising from criminal acts, alleged suicide attempts and medical conditions are excluded.
Number of Lost Time Injuries (LTIs)	No.	0	An injury or illness arising from a work-related activity resulting in the loss of one or more shifts beyond the day or shift in which it was incurred. This figure should include all RIDDOR reportable injuries, minor and major injuries, where these are Lost Time injuries.
Number of Incidents (H,S&E)	No.	0	Total number of unplanned, undesired events that resulted in, or under slightly different circumstances could have resulted in (i.e. includes near miss), harm to people, damage to property, damage to the environment, or loss of service/process.
Waste (Total)	tonnes	0	Total waste arising from activities related to Works
Percentage waste reused, recycled and recovered	%		Percentage of total tonnes of waste reused, recycled and recovered
Co2	Tonnes		Tonnes of Co2 from operational energy use
Nitrogen oxides and particulate matter	Tonnes		Tonnes of nitrogen oxides and particulate matter
Number of pollution incidents	No.		
Noise of noise related complaints	No		

APPENDIX 6

Work Instructions

1. HEALTH, SAFETY AND ENVIRONMENTAL COMPETENCE AND TRAINING

1.1 HSE Advice

The Manufacturer shall ensure that at all times it provides competent Health, Safety and Environmental ("**HSE**") support to fully implement all the applicable HSE requirements of this Agreement and to ensure a presence at the Depot at regular periods for inspections, advice and instruction.

1.2 HSE Training

The Manufacturer shall ensure that all operatives and management on site employed directly or indirectly by the Manufacturer shall have received such HSE training as may be relevant for the work they are required to undertake and are to be made fully aware of the techniques and procedures to be used during the Works with regard to their own health and safety, the health and safety of others, and the protection of the environment.

1.3 Licenses

- (a) The Manufacturer shall ensure that at all relevant times its employees, agents and subcontractors hold the following licenses (as required):
 - (i) DLR Track Awareness (for any person working on or near the track);
 - (ii) DLR Person in Charge of the Works (for any person controlling works on or near the track); and
 - (iii) DLR Non-trackside Health & Safety briefing (for any person working other than on or near the track).
- (b) The Manufacturer shall procure that any of its employees, agents or subcontractors undertake additional specific training and/or obtain additional specific licences as may be required by the Purchaser from time to time, in order to access and work in certain restricted areas.

1.4 Briefings

- (a) The Manufacturer shall attend any HSE briefings as may be specified by the Purchaser and shall include all relevant information from these in their own internal briefings.
- (b) The Manufacturer shall ensure that all visitors to the Depot (including the Purchaser's staff) are provided with an HSE briefing and induction, which will include as a minimum an overview of the activities taking place on the Depot, the likely hazards on site, the areas where they are permitted to walk, emergency evacuation routes, personal protective equipment and first aid. These briefings and inductions must be aligned with the Purchaser's local inductions where applicable.
- (c) The Manufacturer shall make available to the Purchaser a record of training and the relevant certification for all of their operatives under their control in order to demonstrate that the operatives are suitably qualified for the operations they are carrying out.

- (d) The Manufacturer shall arrange regular relevant toolbox talks for their staff, and maintain a register of attendees of these sessions for the Purchaser Contract Manager to inspect.
- (e) The Manufacturer shall take a pro-active stance on promoting health, safety and environmental awareness on the site shall comply with any reasonable requests from the Purchaser to participate in any Purchaser led HSE forums and campaigns.

1.5 Non English Speaking Workers

The Manufacturer shall have adequate arrangements in place to communicate health and safety information to non-fluent English speakers on site such that:

- (a) they receive the required HSE training/briefing (including any emergency procedures) before commencing work; and
- (b) instructions are effectively communicated to, and understood by, all such team members.

1.6 Safety Critical Work

- (a) The Manufacturer shall identify all 'Safety Critical' tasks (as defined in ROGS) associated with this Agreement and shall submit a list of all Safety Critical tasks to the Purchaser for Approval within three (3) months of the Commencement Date.
- (b) The Manufacturer shall demonstrate that they have suitable and sufficient arrangements in place to monitor the competence and fitness of those carrying out Safety Critical tasks.
- (c) The Manufacturer shall provide a means of identification for all staff employed on Safety Critical tasks.

2. PPE

- (a) The Manufacturer shall assess and provide the appropriate personal protective equipment ("**PPE**") for its personnel, as well as for all Subcontractor personnel, Purchaser personnel and visitors (to the extent appropriate for such persons).
- (b) As a minimum, the Manufacturer shall ensure that the minimum PPE requirements (as detailed in appendix 4 of this schedule 16) are met.
- (c) All high visibility clothing provided by the Manufacturer shall carry the Manufacturer's company name. The Manufacturer's staff shall not wear DLR branded high visibility clothing, unless requested to by the Purchaser Contract Manager.
- (d) The Manufacturer shall ensure that its personnel shall not wear any garment or article that impedes their vision or hearing when carrying out the Works, unless required as part of a safe system of work, e.g. hearing protection.
- (e) The Manufacturer shall ensure that none of its personnel wear of hats, clothing with hoods or any other headwear when carrying out the Works with the exception of:
 - (i) hoods or headwear required as PPE in response to a risk assessment; or
 - (ii) headwear specifically designed:
 - (A) to be compatible with PPE; and

- (B) not to impede vision or hearing.

3. **HAZARDOUS MATERIALS**

3.1 **Control of Substances Hazardous to Health (COSHH)**

The Manufacturer shall notify the Purchaser as soon as practicable of any substances to be used in the Works (to the extent that the Works are carried out in the Depot or on the DLR Infrastructure) that are, or may be, classified as hazardous and which could impact on others in the vicinity of where the material is to be used. The Manufacturer shall provide full details of any such substances, including storage details and the risk assessment for the works to be undertaken. All such details shall be submitted to the Purchaser Contract Manager for Approval prior to the work involving these materials commencing.

3.2 **Asbestos**

- (a) The Purchaser will supply all information in its possession in respect of the presence of asbestos within the Depot and the DLR Infrastructure. Based on this information, the Manufacturer shall liaise with the Purchaser to determine where additional surveys will be required and the type of survey to be undertaken.
- (b) Where the Manufacturer believes that they have disturbed asbestos as a consequence of their Works, they shall stop works immediately, inform the Purchaser Contract Manager and report the incident as a 'Near Miss' via the TfL reporting line (as described in paragraph 8.2 of schedule 16).

4. **SITE RULES**

4.1 **Agreement of Site Rules**

The Manufacturer shall ensure that all persons for whom the Manufacturer is responsible abide by the Purchaser's operational and safety requirements at all times whilst in the Depot or on the DLR Infrastructure.

4.2 **Drugs and Alcohol**

- (a) The Manufacturer shall operate a drugs and alcohol policy at least as stringent as DLR Drugs and Alcohol DLR-IMS-SAMS-PRC-00006 (appendix 3 of this schedule 16).
- (b) The Manufacturer shall implement suitable arrangements to verify compliance with its policy including undertaking the necessary alcohol and drug testing. In addition the Manufacturer shall co-operate with the Purchaser and comply with the Purchaser's requirements from time to time for execution of random and/or for cause alcohol and drug tests. The Manufacturer shall provide records of testing if requested by the Purchaser.

4.3 **Smoking**

Smoking (including e-cigarettes) within the working areas is prohibited with the exception of designated smoking areas. The Manufacturer shall provide suitably signed designated smoking areas within the working areas close to welfare facilities but away from the work locations, site access routes and sensitive neighbouring properties. The Manufacturer shall take all reasonable measures to prevent personnel under its control from smoking on the streets adjacent to worksites.

4.4 **Emergency Preparedness Plan**

- (a) The Manufacturer shall submit an Emergency Preparedness Plan (the "**EPP**") to the Purchaser for Approval not less than three (3) months prior to commencement of works at the Depot. In addition to describing the emergency arrangements for the works on site, the plan shall consider potential impacts beyond the site boundary, especially where there are interfaces with neighbours, operational assets etc. Any existing site specific EPPs will be provided as part of the pre-construction information, and should be incorporated in the EPP as appropriate.
- (b) Immediately following an emergency, or following a simulated emergency exercise, the Manufacturer shall review the actions taken against the requirements set out in the EPP, and revise the EPP accordingly. The Manufacturer shall share the output of these reviews with the Purchaser.

4.5 **Method Statements/Work Package Plans**

- (a) The Manufacturer is responsible for producing and approving all method statements (also known as 'Safe Systems of Work' and 'Work Package Plans') (the "**Method Statements**") in a format agreed with the Purchaser. The Manufacturer shall submit a schedule of Method Statements to the Purchaser for Approval at least 3 months prior to the commencement of any Works to be undertaken at the Depot or on the DLR Infrastructure. The Purchaser shall determine which Method Statements it will review for Approval.
- (b) The Manufacturer shall submit all Method Statements to the Purchaser with adequate time allowed for any required approvals to be gained prior to that element of the Works starting on site. The time allowed for review will be agreed with the Purchaser. No element of the Works shall commence without a Method Statement being produced and Approved by the Purchaser where required.
- (c) All Method Statements and supporting documentation, including any relevant approvals from others, shall represent and detail the Manufacturer's planned works and address construction sequences, co-ordination with third parties and the relevant control and mitigation measures for identified risks.
- (d) Within each Method Statement the Manufacturer shall include a risk assessment that demonstrates how potential HSE risks resulting from the works have been mitigated to ALARP status.
- (e) Where Subcontractors are used by the Manufacturer, the Manufacturer shall ensure that they have reviewed and approved all Method Statements produced by any relevant Subcontractor before they are submitted to the Purchaser.

5. **FIRE**

5.1 **General Requirements**

- (a) The Manufacturer shall ensure that all Works are compliant with all relevant legislation, Standards, TfL guidance and industry best practice in terms of fire compliance.
- (b) The Manufacturer shall make itself aware of any existing fire evacuation arrangements for the site, and co-ordinate their own arrangements with those of the Purchaser.
- (c) The Manufacturer shall develop a fire evacuation procedure for agreement with the Purchaser. The Manufacturer shall ensure that all persons working on Site or who

may have authority to visit site from time to time are aware of this procedure and receive any instruction that might be appropriate. These arrangements shall be recorded in the Emergency Preparedness Plan.

- (d) The Manufacturer shall remove all superfluous flammable materials from site on a daily basis.
- (e) The Manufacturer shall obtain the consent in writing from the Purchaser before storing or using plant, equipment or materials involving risk of fire or posing any hazard to any person and property.
- (f) The Manufacturer shall provide any additional fire extinguishers or other fire suppression systems on site as may be required to deal with the Manufacturer's method of working and/or any materials, packaging and equipment brought or stored on site by the Manufacturer.
- (g) The Manufacturer shall take all precautions to prevent the outbreak of fire arising from the Works.

5.2 **Isolations of Fire Detection and Suppression Systems**

The Manufacturer shall prepare an isolation plan acceptable to the Purchaser, and shall liaise with the Purchaser to make the necessary arrangements for these isolations.

5.3 **Hot Works**

The Manufacturer shall liaise with the Purchaser regarding 'Hot Works' and the obtaining of any necessary permits associated with these works.

6. **ELECTROMAGNETIC DISTURBANCE**

The Manufacturer shall take all necessary precautions to avoid excessive electromagnetic disturbance of apparatus outside of the site. The Manufacturer shall ensure that all electrical equipment and plant is suppressed so as to cause no unacceptable electrical or other interference to surrounding properties.

APPENDIX 7

TfL Corporate Environment Framework

SCHEDULE 17

Technical Services

Part A – Design Authority Services

1. DESIGN AUTHORITY SERVICES

- 1.1 The Manufacturer shall perform the role of the Design Authority in respect of the Trains and the Equipment in accordance with all Applicable Laws and Standards from the Commencement Date until the FSA Services Commencement Date (unless otherwise agreed by the Purchaser).
- 1.2 Without prejudice to the responsibilities of the Design Authority, the Manufacturer shall ensure that it establishes and maintains adequate technical knowledge (including configuration knowledge) and expertise for the purposes of:
- (a) understanding the technical and operational requirements of the Trains and the Equipment and retaining records identifying how these requirements influenced the design;
 - (b) developing, directing and managing the implementation of all interventions or works to the Trains and the Equipment including, at the request of the Purchaser, any maintenance;
 - (c) maintaining information and advising on Modifications and/or proposed Modifications to the original design of the Trains and the Equipment (including as modified by any prior Modifications) to ensure that such Modification does not have a detrimental effect on the safety or operational performance of the Trains and Equipment;
 - (d) approving any deviation from or Modification to the original design and providing assurance and, if requested, certification that any such deviation or Modification:
 - (i) complies with all Applicable Laws and Standards;
 - (ii) complies with schedule 27 (Cyber Security);
 - (iii) does not invalidate or adversely impact on the warranties given by the Manufacturer to the Purchaser under this Agreement;
 - (iv) does not infringe any party's Intellectual Property Rights;
 - (v) is (where relevant) consistent with the Train Technical Specification, design standards, assurance documentation and other Technical Documents; and
 - (vi) is consistent with the safe and efficient provision of DLR Train Services by the Purchaser or the Franchisee; and
 - (e) anticipating and managing the Obsolescence of any System or part of the Trains, MSA Spares, Special Tools or Equipment.
- 1.3 The Purchaser shall have absolute discretion to implement a change (or a specific aspect of a change) to the Trains or the Equipment regardless of the views of the Design Authority. If the Purchaser wishes to exercise such discretion it shall issue a notice (a **"Mandated Change Notice"**) to the Manufacturer. A Mandated Change Notice shall provide details of the change and shall state why this route has been taken. Other than having responsibility for the advice provided pursuant to paragraphs 1.3(a) and 1.3(b)

below, the Manufacturer is not responsible for matters covered by the Mandated Change Notice. On receipt of a Mandated Change Notice, the Manufacturer shall:

- (a) advise the Purchaser if it has any reasonable grounds to believe that the change will raise Safety Critical Matters or Operationally Critical Matters;
- (b) advise the Purchaser if it has any reasonable grounds to believe that the change will result in any warranties in respect of the Trains and/or the Equipment becoming invalid; and
- (c) at the request of the Purchaser, make all appropriate changes to the Technical Library as part of the Technical Library Services.

1.4 The Manufacturer as the Design Authority shall assist the Purchaser in managing and ensuring the continued availability of the Trains and all items of Equipment required for the Trains to continue in operation for the DLR Train Services. In particular:

- (a) the Manufacturer shall monitor all items of Equipment for potential Obsolescence;
- (b) the Manufacturer shall:
 - (i) produce, manage and make available to the Purchaser, on and from the Commencement Date, a complete Obsolescence risk management register and update this quarterly;
 - (ii) provide reasonable and sufficient prior written notification of any impending Obsolescence issues, such that action can be taken to avoid any impact on the safe and efficient operation of DLR Train Services; and
 - (iii) research and recommend measures by which the Purchaser can mitigate any operational or maintenance risks arising from such Obsolescence at the lowest practical cost to the Purchaser (such recommendations to be subject to Approval by the Purchaser before implementation). For the avoidance of doubt, where the implementation of the recommended measures requires a Purchaser Change, the Manufacturer shall only proceed with the relevant Purchaser Change once the Purchaser has issued a Purchaser Change Notice; and
- (c) the Manufacturer's obligations with regard to managing Obsolescence shall also apply to all Train Support Software including, without limitation:
 - (i) train data recorder download and interpretation software;
 - (ii) TCMS design, uploading and downloading software; and
 - (iii) traction/braking/doors/customer information system upload/download and interrogation software.

1.5 The Manufacturer shall obtain and review all notices issued by a competent body (including Competent Authorities) and national alerts for safety that may affect the Trains and the Equipment, their operation or maintenance. The Manufacturer shall, upon completion of its review, advise the Purchaser of all consequences for the Trains or the Equipment resulting from the review provide reasonable and sufficient prior written notification of any matters arising from the review, such that action can be taken to avoid any impact on the safe and efficient operation of DLR Train Services. For the avoidance of doubt, where the implementation of the recommended measures requires a Purchaser Change, the Manufacturer shall only proceed with the relevant Purchaser Change once the Purchaser has issued a Purchaser Change Notice.

- 1.6 If the Manufacturer becomes aware of a Substandard Condition in a critical component in a Train, item of Equipment or Part, it shall immediately notify the Purchaser.
- 1.7 If a Substandard Condition in a critical component is discovered by the Manufacturer in any Train, item of Equipment or Part which could lead to an unsafe condition and continued use of that critical component is desired by the Purchaser, then the Manufacturer shall be responsible for producing a justified CCSO, in accordance with paragraph 1.8 below.
- 1.8 Without prejudice to clause 20 of this Agreement, on the occurrence of any such Substandard Condition(s), the Manufacturer shall prepare and submit to the Purchaser a CCSO in accordance with the following:
- (a) the first issue of a CCSO shall be submitted by the Manufacturer to the Purchaser within 24 hours of discovery of the Substandard Condition. The first issue of the CCSO shall contain as much information in relation to such Substandard Condition as the Manufacturer is able to provide at that stage, and include a plan detailing how the Manufacturer intends to deal with the Substandard Condition;
 - (b) following the first issue of a CCSO pursuant to paragraph 1.8(a) above, the Manufacturer shall submit regular updates of the CCSO to the Purchaser to record:
 - (i) progress;
 - (ii) completion of actions;
 - (iii) new evidence; and
 - (iv) decisions,and such updates shall be submitted until the Substandard Condition has been resolved; and
 - (c) any updates to CCSOs pursuant to paragraph 1.8(b) above shall contain a structured argument providing a rationale for continued safe operation with supporting evidence and a plan including time-based actions to be carried out to both:
 - (i) mitigate the immediate unsafe condition; and
 - (ii) rectify and permanently resolve the condition.

Part B – Technical Library Services

1. TECHNICAL LIBRARY SERVICES

- 1.1 The Manufacturer shall maintain the Technical Library in electronic format and shall ensure that the contents are available to the Purchaser via a secure internet connection at all times. The internet connection shall be restricted in accordance with a security protocol to be agreed with the Purchaser (and in compliance with schedule 27 (Cyber Security)).
- 1.2 Without prejudice to paragraphs 1.5 and 1.6 below, the Manufacturer shall progressively populate the Technical Library with Technical Documents as soon as they are created and updated, and ensure that the documents in the Technical Library are produced in accordance with the requirements of schedule 5 (Contract Management). The Technical Library shall be structured so that the current version of each document is readily available. Superseded documents shall be available for reference but the Manufacturer shall ensure that these are appropriately marked and located to prevent any risk of their use in error.
- 1.3 The Manufacturer shall comply with all of the provisions of schedule 5 (Contract Management).
- 1.4 The Manufacturer shall ensure that the Technical Library is maintained in accordance with schedule 27 (Cyber Security) and in a secure environment and protected from unauthorised and/or malicious access, deletion or amendment. Data shall be stored in the European Union and/or the United Kingdom, unless the Purchaser gives its prior written consent otherwise, and the Manufacturer shall provide, maintain and implement adequate back-up and redundancy of systems to ensure that the Technical Library is available at all times, immediately on request by the Purchaser.
- 1.5 Data in the Technical Library shall, unless otherwise agreed by the Purchaser, be held in industry standard formats which are accessible using standard tablet devices and PCs. Software shall be agreed in advance by the Purchaser, and shall be compatible with PDF and common Microsoft Office formats.
- 1.6 Data shall be capable of being immediately printed by the Purchaser and be legible when printed on sheets no larger than A3 or equivalent ISO standard A-size paper.
- 1.7 The Manufacturer shall comply with the reasonable requirements of the Purchaser in respect of software (including versions), web browser compatibility, hardware specifications and other matters related to the Purchaser's access to the Technical Library.
- 1.8 The Technical Library shall comprise the following documents:
 - (i) all Technical Documents;
 - (ii) to the extent not covered by 1.8(i), all systems assurance submissions and associated correspondence under the Project Documents;
 - (iii) the Train Technical Specification and all the rolling stock documentation requirements therein;
 - (iv) all notices issued by a competent body or national alerts for safety that affect the Trains, their operation or maintenance;
 - (v) approvals and certificates in relation to any Modifications to the Trains;
 - (vi) recommendations Approved by the Purchaser in connection with Obsolescence; and

- (vii) any other material relevant to the operation or maintenance of the Trains.
- 1.9 The Manufacturer shall review and update the contents of the Technical Library so that:
- (i) it remains up to date and fit for its purpose, including to reflect:
 - (A) the current Train configuration, Software and Train and Equipment design from time to time;
 - (B) the current state and evaluation of the Train and Equipment design;
 - (C) any Modifications to Trains;
 - (D) any Modifications to Equipment;
 - (E) the up-to-date Train Parameters; and
 - (F) any changes to the Train Maintenance Regime;
 - (ii) its structure and contents are clear and comprehensive;
 - (iii) amendments are consolidated into relevant master documents and all other documents affected by a change are updated accordingly; and
 - (iv) it reflects all changes to the Train, maintenance processes, or significant changes to the duty cycle and operating interfaces.
- 1.10 In addition to the maintenance of the Technical Library, the Manufacturer shall integrate and maintain up-to-date Technical Documents in the DLR Database in a form which is easily searchable, readable and capable of being edited by the Purchaser.
- 1.11 The Manufacturer shall monitor the Escrow Materials and advise the Purchaser if any updates are required so as to ensure that such Escrow Materials remain fully up-to-date. Costs incurred by the Manufacturer in the preparation of any updated data will be for the Manufacturer. The depositing of such data with the Escrow Agent shall be in accordance with clause 30.12 of this Agreement.
- 1.12 The Manufacturer shall provide details of its arrangements for delivering the Technical Library Services (including those for managing and making available the Technical Library) to the Purchaser for Approval.

Part C – Technical Advice Services

1. TECHNICAL ADVICE SERVICES

- 1.1 The Technical Advice Services shall consist of verbal advice, written advice and other support (reasonably requested by the Purchaser) relating to:
- (a) the contents and structure of the Technical Library; and
 - (b) the design, function and operation of the Trains and Equipment as they exist at the time of the Purchaser enquiry,
- together, "**Technical Advice**", as set out in more detail in paragraph 1.3.
- 1.2 The Manufacturer shall provide Technical Advice as soon as reasonably practicable following any request from the Purchaser.
- 1.3 Without limitation this shall include:
- (a) providing support and advice to the Purchaser;
 - (b) on-site attendance by the Manufacturer's technical staff;
 - (c) on-site attendance by the OEM(s) procured by the Manufacturer;
 - (d) writing reports and making recommendations, including designing solutions; and
 - (e) providing advice supporting problem solving and business improvement initiatives when reasonably requested to do so by the Purchaser.
- 1.4 The Technical Advice Services shall be provided as requested by the Purchaser by the Manufacturer at any location where the Trains are for the time being operated, maintained or stabled (including on the Network or at the Depot) or as otherwise directed by the Purchaser.
- 1.5 The Purchaser shall provide a list of posts within its organisation, the holders of which have the authority to raise requests for Technical Advice ("**Designated Posts**") and keep this updated as may be necessary from time to time. Requests for Technical Advice to the Manufacturer may be raised by the holder of a Designated Post either in writing or verbally with later written confirmation (but in any event the Manufacturer shall provide Technical Advice as soon as reasonably practicable following the initial request whether this is verbal or written). The Manufacturer shall treat any request made by someone purporting to be the holder of a Designated Post as being a request under this Agreement.
- 1.6 Verbal Technical Advice shall be confirmed in writing by the Manufacturer to the Purchaser as soon as reasonably practicable and, where relevant, the Manufacturer shall update the Technical Documents and /or the Technical Library to take account of any such Technical Advice so that the Technical Library remains up to date at all times.
- 1.7 The Manufacturer shall provide details of the arrangements for provision of Technical Advice to the Purchaser, including names, email and telephone contact details for a helpdesk together with details of the Key Post(s) responsible for providing the Technical Advice Services.

SCHEDULE 18**Manufacturer Confidential Information**

	Column 1 Manufacturer Confidential Information	Column 2 For period ending on date
1.	Price breakdowns, including any financial models and supporting documents relating to this Agreement to the extent this reveals information about the Manufacturer's, any Key Subcontractors' or any of their Affiliates' costs, rates, build ups, forecasts and/or profit levels, but excluding appendix 2 (Total Contract Price) to part B (Milestones) of schedule 10 (Milestones and Security).	Duration of this Agreement
2.	Information obtained from the Manufacturer relating to risks and pricing of the same to the extent this reveals information about the Manufacturer's, any Key Subcontractors' or any of their or Affiliates' costs, rates, build ups, forecasts and/or profit levels.	Duration of this Agreement
3.	Personal information relating to any of the Manufacturer's employees or employees of any Subcontractors to the extent it contains information exempt as personal data under section 40 of the Freedom of Information Act 2000 but without prejudice to the rights of access under the DPA.	Duration of this Agreement

SCHEDULE 19

Dispute Resolution Procedure

1. DISPUTES

Any Dispute shall be resolved in accordance with this schedule 19.

2. SENIOR REPRESENTATIVES

- 2.1 Each of the Parties shall use reasonable endeavours to negotiate in good faith to settle any Dispute before taking any further action.
- 2.2 Subject to paragraph 2.1, paragraph 3 (Expert Determination) and paragraph 4 (Adjudication), either Party shall refer a Dispute, by notice in writing to the other Party, to a managerial representative of each Party (together, the **"Senior Representatives"**) who shall meet and endeavour to resolve the Dispute between them. The joint written decision of the Senior Representatives shall be binding upon the Parties.
- 2.3 If the Senior Representatives are unable to resolve the Dispute within 14 days of the meeting referred to in paragraph 2.2, either Party may escalate the Dispute as follows:
- (a) if the Dispute is an Expert Dispute, in accordance with paragraph 3 (Expert Determination) of this schedule 19; or
 - (b) if the Dispute is not an Expert Dispute, in accordance with paragraph 4 (Adjudication) of this schedule 19.

3. EXPERT DETERMINATION

- 3.1 Subject to paragraph 2 (Senior Representatives), if a Dispute is an Expert Dispute, either Party may give written notice to the other Party of its intention to refer the Dispute to expert determination in accordance with this paragraph 3. Such notice shall set out with adequate specificity the issue or issues to be investigated and resolved by the Expert appointed pursuant to paragraph 3.2 below (the **"Notice of Dispute"**).
- 3.2 The Parties shall use reasonable endeavours to agree upon an expert. If such agreement is not reached within eight (8) days of receipt of the Notice of Dispute (or within such further time as the Parties may agree), either Party may apply to the London Court of International Arbitration (**"LCIA"**) to appoint an expert, such appointment to be effected as quickly as possible and in any event within six (6) days of the application to the LCIA (such expert agreed by the Parties or appointed by the LCIA being the **"Expert"**).
- 3.3 Where the Expert has been appointed by the LCIA, the Parties shall, in the absence of direct agreement with the Expert, refer the terms of the remuneration of the Expert to the LCIA to be settled and binding upon the Parties by agreement between the LCIA and the Expert (provided that the level of the Expert's fees shall not exceed the level originally proposed to the Parties by the Expert following his appointment by the LCIA).
- 3.4 Forthwith upon the agreement or determination of the Expert's terms of appointment and remuneration between the Expert and the Parties, the Expert shall confirm his acceptance of the appointment (the **"Notice of Appointment"**).
- 3.5 Within seven (7) days of receipt of the Notice of Appointment, the referring Party shall serve on the Expert and the other Party a written submission which sets out the nature of its case and appends the supporting documentation which it considers relevant to the Expert Dispute. The submission shall, at a minimum:

- (a) set out with adequate specificity the issue or issues to be investigated and resolved by the Expert;
 - (b) be accompanied by any correspondence between the Parties that discusses the issues and the Parties' attempts to resolve them; and
 - (c) be accompanied by any relevant contractual documents, specifications and/or any technical documents or other data relevant to an initial understanding of the issue.
- 3.6 The other Party may, within seven (7) days of receipt of a submission pursuant to paragraph 3.5, serve on the Expert and the referring Party a submission in reply setting out its response to the referring Party's submission, clarifying or adding to the issues to be investigated and appending any additional supporting documentation upon which it wishes to rely.
- 3.7 The role of the Expert shall be to investigate using his professional skill and experience the issues raised by the Dispute and to determine for himself the correct answer to any disagreement or issue that is required to be resolved between the Parties to the Expert Dispute. The Expert shall not act in a judicial or quasi-judicial capacity, but instead will act on his own behalf and seek to determine on a wholly independent and objective basis his view of the correct answer or solution to any issues raised by the Parties. The Expert shall act as an expert and not as an arbitrator or adjudicator and the provisions of the Arbitration Act 1996 and the law relating to arbitration shall not apply to the Expert, his decision or the procedure by which he reached his decision.
- 3.8 The Parties agree and acknowledge that they shall act reasonably and co-operate promptly with the Expert, and shall provide (or, where applicable, shall use reasonable endeavours to procure that others provide) the Expert with such assistance and documentation as the Expert reasonably requires for the purpose of reaching his decision.
- 3.9 The Expert shall make his determination as expeditiously as reasonably practicable and in any event within 28 days of service of the Notice of Appointment or such other time as may be agreed between the Parties. The Expert shall provide, at the same time as his determination, a written set of conclusions including reasons for such conclusions, to the Parties.
- 3.10 Subject to paragraph 5.1(a), the Expert's determination shall be final and binding upon the Parties save in respect of:
 - (a) error on a point of law which any Party reasonably believes materially affects the Expert's determination;
 - (b) fraud;
 - (c) manifest error; or
 - (d) matters outside the Expert's jurisdiction.

For the avoidance of doubt, the Parties may only challenge the Expert's determination on the basis of the grounds set out in this paragraph 3.10.
- 3.11 Subject to paragraph 3.12:
 - (a) where the Expert has been appointed by the LCIA, the appointment fee of the LCIA shall be shared equally between the Parties, and if one Party pays the whole of the fee, the other Party shall pay its share of the fee upon demand; and

- (b) the Expert's fees and any costs reasonably and properly incurred by him in arriving at his determination shall be shared between the Parties.
- 3.12 The Expert may direct that any legal costs and expenses incurred by a Party in respect of the determination and/or Expert Dispute shall be paid by the other Party to the determination and/or Expert Dispute on the general principle that costs should follow the event, except where it appears to the Expert that, in the circumstances, this is not appropriate in relation to the whole or part of such costs.
- 3.13 All matters concerning the process and result of the determination by the Expert, including but not limited to any documentation provided by the relevant Parties, to the extent that they are not otherwise in the public domain, shall be treated as confidential.
- 4. **ADJUDICATION**
 - 4.1 Save where a dispute is an Expert Dispute, and subject to paragraph 2 (Senior Representatives), either Party may at any time give the other notice of intention to refer the Dispute to adjudication in accordance with this paragraph 4.
 - 4.2 When giving its notice of intention to refer the Dispute, the referring Party will nominate an adjudicator who must be approved by the non-referring Party. If such approval is not obtained within four (4) days, either Party shall have the right to apply to the Technology and Construction Bar Association (TECBAR) (or, in the event that TECBAR ceases to exist, by another nominating body agreed between the Parties within the four (4) day period), directing it to nominate an independent adjudicator within three (3) days.
 - 4.3 Once appointed pursuant to paragraph 4.2, such adjudicator shall be the "**Adjudicator**" for the purposes of this Agreement and the Dispute shall be deemed to have been referred to the Adjudicator for the purposes of this paragraph 4.
 - 4.4 The Party referring the Dispute to the Adjudicator shall, within seven (7) days of the appointment of the Adjudicator, provide its submission upon the Dispute to be considered by the Adjudicator with a copy by letter to the other Party. Any submission from the other Party to be considered by the Adjudicator shall be provided within seven (7) days from the first submission. The Parties shall comply with any request of the Adjudicator in relation to the Dispute.
 - 4.5 Any communication between either Party and the Adjudicator shall also be communicated contemporaneously to the other Party.
 - 4.6 In any event, the Adjudicator shall provide to both Parties his written decision on the Dispute within 28 days of the reference (or such longer period as the Parties may agree after the reference). The Adjudicator shall have the power to extend the period of 28 days by up to 14 days, with the consent of the Party which referred the Dispute. Unless the Parties otherwise agree, the Adjudicator shall give reasons for his decision. Unless and until the Dispute is finally determined by the Courts in accordance with paragraph 5 or by the agreement of the Parties, the Adjudicator's decision shall be binding on both Parties who shall forthwith give effect to the decision. The Adjudicator shall have the power to correct his decision so as to remove a clerical or typographical error arising by accident or omission.
 - 4.7 The Adjudicator's costs of any reference shall be borne as the Adjudicator shall specify or, in default, equally by the Parties. The Parties may agree to allocate their own costs arising out of the reference, including legal costs and the costs and expenses of any witnesses.
 - 4.8 The Adjudicator shall be deemed not to be an arbitrator but shall render his decision as an expert, and the provisions of the Arbitration Act 1996 and the law relating to arbitration

shall not apply to the Adjudicator or his determination or the procedure by which he reached his determination.

- 4.9 The Adjudicator shall act impartially and may take the initiative in ascertaining the facts and the law. The Adjudicator shall have the power to open up, review and revise any opinion, certificate, instruction, determination or decision of whatever nature given or made under this Agreement.
- 4.10 All information, data or documentation disclosed or delivered by a Party to the Adjudicator in consequence of or in connection with his appointment as Adjudicator shall be treated as confidential. The Adjudicator shall not, save as permitted by clause 39 (Confidentiality) of this Agreement, disclose to any person or company any such information, data or documentation and all such information, data or documentation shall remain the property of the Party disclosing or delivering the same and all copies shall be returned to such Party on completion of the Adjudicator's work.
- 4.11 The Adjudicator is not liable for anything done or omitted in the discharge or purported discharge of his functions as Adjudicator unless the act or omission is in bad faith. Any employee or agent of the Adjudicator is similarly protected from liability.

5. **REFERENCE TO COURT**

5.1 If:

- (a) one of the Parties is dissatisfied with the Expert's determination solely on the basis of any of the grounds set out in paragraph 3.10;
- (b) one of the Parties is dissatisfied with the decision after the Adjudicator notifies his decision; or
- (c) the Adjudicator has not notified his decision and the time provided by paragraph 4.6 has expired,

then either Party may:

- (i) within 35 days of receipt of the Expert's or Adjudicator's decision (as appropriate); or
- (ii) where the Adjudicator has not notified his decision and the time period set out in paragraph 4.6 has expired,

where appropriate, notify the other Party of its intention to refer the Dispute to the Courts of England and Wales (the "**Courts**") for final determination.

- 5.2 For the avoidance of doubt, if a Party fails to so notify the other Party pursuant to paragraph 5.1, it will be taken to have waived its right to refer the matter to the Courts and the determination of the Expert or decision of the Adjudicator will be final and binding. Otherwise, the Courts shall have the power to open up, review and revise any opinion, certificate, instruction, determination or decision of whatever nature given or made under this Agreement, to vary or cancel the decision of the Adjudicator and, where appropriate, to order financial compensation to be paid by one Party to the other.

6. **CONTINUING OBLIGATIONS AND RIGHTS**

- 6.1 Unless this Agreement has already been repudiated or terminated, the Parties shall continue to comply with, observe and perform all of their obligations under this Agreement regardless of the nature of the dispute and notwithstanding the referral of the Dispute for resolution under this schedule 19 and shall give effect forthwith to every

determination of the Expert or decision of the Adjudicator and the Courts delivered under this schedule 19. The provisions of this schedule 19 shall continue to apply to any Dispute notwithstanding the repudiation or termination of this Agreement.

- 6.2 No Party shall be prevented from, or delayed in, seeking any order for specific performance or for interim or final injunctive relief or for other equitable relief as a result of the provisions of this schedule 19, nor shall this schedule 19 apply in respect of any circumstances where such remedies are sought.

SCHEDULE 20

Termination Payments

1. TERMINATION FOR MANUFACTURER DEFAULT, SAFETY BREACH OR PROHIBITED ACT PRIOR TO ACCEPTANCE OF THE MINIMUM FLEET

1.1 If this Agreement is terminated at any time prior to Acceptance of the Minimum Fleet as a result of:

- (a) the occurrence of a Manufacturer Event of Default in accordance with clause 31 (Manufacturer Default); or
- (b) the occurrence of a Prohibited Act or Safety Breach in accordance with clause 35 (Prohibited Act and Safety Breach Termination),

the Purchaser shall, without prejudice to paragraph 3, upon the Minimum Fleet Handback Date specified by the Purchaser in the Minimum Fleet Handback Notice:

- (i) return all Accepted Trains and Equipment to the Manufacturer at the location notified to the Manufacturer in the Minimum Fleet Handback Notice. Legal and beneficial title to such Trains and Equipment shall pass to the Manufacturer by delivery; and
- (ii) be reimbursed by the Manufacturer for all payments made to the Manufacturer in relation to the supply of Trains and Equipment plus Default Interest from the date of the relevant payment by the Purchaser until the time such repayment is made.

2. TERMINATION FOR MANUFACTURER DEFAULT, SAFETY BREACH OR PROHIBITED ACT AFTER ACCEPTANCE OF THE MINIMUM FLEET AND PRIOR TO ACCEPTANCE OF THE FLEET

2.1 If this Agreement is terminated at any time following Acceptance of the Minimum Fleet but prior to Acceptance of all of the Trains and all of the Equipment relating to the Base Order and any Options that have been exercised as a result of:

- (a) the occurrence of a Manufacturer Event of Default in accordance with clause 31 (Manufacturer Default); or
- (b) the occurrence of a Prohibited Act or Safety Breach in accordance with clause 35 (Prohibited Act and Safety Breach Termination),

the Purchaser shall, without prejudice to paragraph 3, be entitled (in its absolute discretion) to:

- (i) procure the completion by the Manufacturer or a third party of all partially complete Trains and/or other items of Equipment (including any Spares which the Manufacturer is obliged to provide to the Purchaser in accordance with clause 7.15) such that they have satisfied the conditions necessary for the passing of title to the Purchaser and, upon Acceptance of all such Trains and Equipment and the passing of title to the Purchaser on the basis of clause 18.1, pay to the Manufacturer the relevant Milestone Payments for each such Train or other item of Equipment that are due but not yet paid as at the Termination Date, less (where the Purchaser has procured the completion by a third party) the cost of completion and the costs of the Purchaser's procurement of the same. Subject to clauses 38.5 and 38.6, where this gives rise to a negative figure, the corresponding positive amount

will be paid by the Manufacturer to the Purchaser together with Default Interest (calculated from the Termination Date to the date of payment by the Manufacturer); or

- (ii) require the Manufacturer to reimburse the Purchaser (in which case the Manufacturer shall pay the Purchaser) in respect of all amounts paid to the Manufacturer in relation to the supply of Trains and Equipment (other than in respect of Trains and Equipment where title has transferred to the Purchaser pursuant to clause 18 (Transfer of Title and Risk)). The amount to be reimbursed by the Manufacturer shall attract Default Interest (calculated from the date of the relevant payment by the Purchaser until the date on which such repayment is made).

3. **TERMINATION INDEMNITY**

3.1 Subject to clauses 38.5 and 38.6, if this Agreement is terminated at any time between the Commencement Date and the Acceptance of the last Train as a result of:

- (a) the occurrence of a Manufacturer Event of Default in accordance with clause 31 (Manufacturer Default); or
- (b) the occurrence of a Prohibited Act or Safety Breach in accordance with clause 35 (Prohibited Act and Safety Breach Termination),

the Manufacturer shall, in addition to any amounts payable pursuant to paragraph 1 or paragraph 2 above, be responsible for and release and indemnify the Indemnified Parties on demand on an after-Tax basis from and against all liability for the costs, losses and expenses suffered or incurred by the Indemnified Parties arising from the termination of this Agreement including, but not limited to:

- (i) the costs of procuring a replacement contract and any associated contracts including any increase in the price of the replacement contract and all project management, legal and other professional costs and fees in relation to such replacement contract;
- (ii) all other reasonable direct losses, costs and claims of the Indemnified Parties (including but without limitation, project management, legal and other professional costs and fees);
- (iii) costs of redundancy and other demobilisation costs necessary as a result of the Purchaser or the Franchisee operating a smaller fleet (if appropriate);
- (iv) the costs of retraining, re-diagramming and retendering and losses and costs incurred as a result of the Purchaser or the Franchisee operating a smaller fleet (if appropriate);
- (v) the costs of the Purchaser or the Franchisee procuring replacement trains;
- (vi) the cost of satisfying any outstanding Preconditions relating to any Trains or Equipment retained by or transferred to the Purchaser in accordance with paragraph 2; and
- (vii) an amount equal to the liquidated damages payable by the Manufacturer pursuant to clause 16 (if any) as a result of applying the tests set out in clause 16.8 on or around the date of termination, as such tests are adjusted to take into account the size of the Fleet at the time of termination (with any Acquired WIP).

4. CONSEQUENCES OF VOLUNTARY TERMINATION OR TERMINATION FOR PURCHASER DEFAULT/FORCE MAJEURE/UTILITIES CONTRACT REGULATIONS

4.1 If this Agreement is terminated prior to the Acceptance of all of the Trains and all of the Equipment relating to the Base Order and any Options that have been exercised, as a result of:

- (a) the occurrence of a Purchaser Event of Default in accordance with clause 32 (Purchaser Default);
- (b) Purchaser voluntary termination in accordance with clause 37.1 (Voluntary Termination by the Purchaser);
- (c) a continuing Force Majeure Event in accordance with clause 33 (Force Majeure);
- (d) an order of a court of competent jurisdiction that there has been a Substantial Modification as referred to in clause 34.4(a) (Substantial Modification); or
- (e) a Purchaser Serious Infringement as referred to in clause 34.4(b)(ii) (Serious Infringement),

then:

- (i) the Purchaser shall pay to the Manufacturer the fair value in respect of each partially completed Train or other item of Equipment (the "**Acquired WIP**"), (which in respect of any Train or other item of Equipment which is not complete and ready for delivery as specified in clause 15 (Acceptance of Trains and Equipment) shall be less than the Contract Price for such Train or items of Equipment) LESS the amount of Milestone Payments made in respect of such Acquired WIP. Where this gives rise to a negative figure, the corresponding positive amount shall be paid by the Manufacturer to the Purchaser; and
- (ii) the Manufacturer shall pay to the Purchaser an amount equal to the liquidated damages payable by the Manufacturer pursuant to clause 16 (if any) as a result of applying the tests set out in clause 16.8 on or around the date of termination, as such tests are adjusted to take into account the size of the Fleet at the time of termination (with any Acquired WIP).

4.2 The Purchaser may, at its own option, elect whether or not to acquire and take title to any partially completed Trains and/or items of Equipment.

4.3 Where the Purchaser elects not to acquire and take title to any partially completed Trains or other items of Equipment pursuant to paragraph 4.2, the Manufacturer shall use reasonable endeavours to dispose of such Purchased Items for a reasonable market rate and account to the Purchaser for the proceeds of any subsequent disposal of any such Trains or items of Equipment or subsequently completed Trains or items of Equipment after deducting its reasonable costs and expenses in completing the Trains or items of Equipment and in effecting disposal.

4.4 If this Agreement is terminated prior to Acceptance of all of the Trains and all of the Equipment relating to the Base Order and any Options that have been exercised, as a result of:

- (a) a Purchaser Event of Default in accordance with clause 32 (Purchaser Default);
- (b) Purchaser voluntary termination in accordance with clause 37.1 (Voluntary Termination by the Purchaser); or

- (c) a Purchaser Serious Infringement as referred to in clause 34.4(b)(ii) (Serious Infringement),

then in addition to the amounts payable pursuant to paragraph 4.1, the Purchaser shall (on having received from the Manufacturer evidence to substantiate any such claim acceptable to the Purchaser) pay the costs, expenses and other liabilities reasonably, properly, wholly and necessarily incurred by the Manufacturer as a direct result of the termination of this Agreement, but excluding loss of profit or any other type of indirect, consequential, economic or special loss or damage suffered by the Manufacturer, provided that the Manufacturer shall use all reasonable endeavours to mitigate such costs, expenses and/or other liabilities.

5. INEFFECTIVENESS

If this Agreement is terminated pursuant to clause 34.3 (Declaration of Ineffectiveness), the Purchaser shall pay the Manufacturer:

- 5.1 all amounts due to the Manufacturer as at the Termination Date in accordance with clause 26 (Payments and VAT); and
- 5.2 such sum as represents the cost of labour and materials reasonably and properly incurred or committed on arm's length terms by the Manufacturer as at the Termination Date relating to the provision of the Works.

6. TIMING OF PAYMENT

- 6.1 Any amounts payable by either Party pursuant to this schedule 20 shall be paid to the recipient Party in a lump sum (together with interest thereon calculated in accordance with paragraph 6.2 on or before the date falling 60 Working Days after the date on which the Party provides to the other Party a written invoice detailing all amounts due and payable to that Party).
- 6.2 Any amounts payable by either Party pursuant to this schedule 20 shall carry Default Interest from the Termination Date to the date of payment by the relevant Party on the basis set out in clause 26.3.

7. GENERAL

- 7.1 Without prejudice to paragraphs 3.1(b)(vii) and 4.1(e)(ii), the costs and/or expenses to be taken into account in the calculation of all termination sums due pursuant to this schedule 20 shall only be such costs and/or expenses to the extent that they are reasonable and proper in quantum and shall have been or will be reasonably and properly incurred.
- 7.2 The Parties shall each use all reasonable endeavours to mitigate all costs and expenses and other sums claims as part of any termination sums due pursuant to this schedule 20.
- 7.3 Subject to paragraphs 7.4 to 7.10 (inclusive), the amount of any compensation paid pursuant to this schedule 20 including the identification and calculation of each element comprised in or to be deducted from it, the ascertainment of any amount or matter requiring to be estimated or anticipated and (where so required by the provisions of this schedule 20) the reasonableness of any amount or matter shall be as agreed between the Parties or, if they are unable to agree within a period which is reasonable in the light of the amounts and matters requiring to be so identified, ascertained or calculated, as referred to and determined in accordance with the Dispute Resolution Procedure.
- 7.4 If the payment of any part but not all of the amount payable pursuant to this schedule 20 is disputed then any undisputed element of that amount shall be paid in accordance with

this schedule 20 and the disputed element shall be dealt with in accordance with the Dispute Resolution Procedure.

- 7.5 Payment of compensation in accordance with this schedule 20 shall be in full and final settlement of any claims and rights of the Manufacturer against the Purchaser for breaches and/or termination of this Agreement (whether under contract, tort, restitution or otherwise) save for any antecedent liability of the Purchaser which arose prior to the date of termination (but not from the termination itself) to the extent that such liability has not already been taken into account in the calculation of the compensation payable under this Agreement. The compensation payable under this schedule 20 shall be the sole remedy of the Manufacturer against the Purchaser on termination of this Agreement and the Manufacturer hereby waives any other right or redress it may have against the Purchaser arising from such termination.
- 7.6 The Purchaser shall be entitled to appoint a suitably qualified independent person (an **"Independent Auditor"**) to audit any or all of the costs, expenses and/or other liabilities incurred by the Manufacturer as a direct result of termination of this Agreement which the Manufacturer is claiming from the Purchaser pursuant to this schedule 20 and to determine whether the amount of such costs, expenses and/or liabilities were properly and reasonably incurred by the Manufacturer as a direct result of the termination of this Agreement.
- 7.7 Where the Purchaser exercises its rights pursuant to paragraph 7.6 it shall give written notice to the Manufacturer identifying the Independent Auditor appointed by the Purchaser, the terms of the Independent Auditor's appointment and the proposed timeframes for undertaking the audit. The Manufacturer shall co-operate with the Independent Auditor and grant the Independent Auditor the same rights of audit as the Purchaser enjoys under this Agreement.
- 7.8 The Purchaser shall procure that the Independent Auditor provides a copy of its decision in writing (together with reasons for its decision) to the Manufacturer at the same time as the decision is provided to the Purchaser. Where the Independent Auditor determines that some or all of a specific cost, expense and/or liability was not properly and reasonably incurred by the Manufacturer as a direct result of termination of this Agreement, the Purchaser shall not be obliged to pay such amount to the Manufacturer.
- 7.9 The costs incurred by the Independent Auditor in undertaking the audit shall be borne by the Purchaser save where the Independent Auditor determines that some or all of a specific cost, expense and/or liability was not properly and reasonably incurred by the Manufacturer, in which case the costs incurred by the Independent Auditor in undertaking the audit shall be borne by the Manufacturer.
- 7.10 If the Manufacturer disputes any findings of the Independent Auditor such Dispute shall be referred for resolution in accordance with the Dispute Resolution Procedure.

SCHEDULE 21

Pro Forma Certificates

Part A - Pro forma Certificates

FORM OF PRE-PROVISIONAL ACCEPTANCE CERTIFICATE

[To be issued to Manufacturer on Docklands Light Railway Limited's headed notepaper]

Manufacture and Supply Agreement dated [●] and made between Docklands Light Railway Limited and [●] ("Manufacturer") (the "MSA")

1. Words and expressions defined in the MSA shall have the same meanings when used in this Pre-Provisional Acceptance Certificate and the provisions of the MSA (including clause 63 (Governing Law and Jurisdiction)) shall, as applicable, apply to this Pre-Provisional Acceptance Certificate.
2. This certificate constitutes a Pre-Provisional Acceptance Certificate under the MSA.
3. We, Docklands Light Railway Limited, hereby confirm that subject to clause 15.24 of the MSA, the [***details of Train(s) receiving a Pre-Provisional Acceptance Certificate***] [comply/complies] with each of the Pre-Provisional Acceptance Criteria.

Signed for and on behalf of **Docklands Light Railway Limited**

Signature:

Name:

Position:

Date:

FORM OF QUALIFIED PROVISIONAL ACCEPTANCE CERTIFICATE

[To be issued to Manufacturer on Docklands Light Railway Limited's headed notepaper]

Manufacture and Supply Agreement dated [●] and made between Docklands Light Railway Limited and [●] ("Manufacturer") (the "MSA")

1. Words and expressions defined in the MSA shall have the same meanings when used in this Qualified Provisional Acceptance Certificate and the provisions of the MSA (including clause 63 (Governing Law and Jurisdiction)) shall, as applicable, apply to this Qualified Provisional Acceptance Certificate.
2. This certificate constitutes a Qualified Provisional Acceptance Certificate under the MSA.
3. We, Docklands Light Railway Limited, hereby confirm that subject to clause 15.24 of the MSA, the [*details of Train(s) receiving a Qualified Provisional Acceptance Certificate*] [comply/complies] with each of the Provisional Acceptance Criteria subject to the following Preconditions listed in the table below which the Manufacturer is required to satisfy in accordance with the Preconditions Timetable:

	Preconditions	Preconditions Timetable
1.		
2.		

4. Without prejudice to any other conditions to the Final Acceptance of such Trains(s) set out in clause 15.13 of the MSA, Final Acceptance of the Train(s) to which this certificate relates will not occur until the Manufacturer satisfies the Preconditions set out above in accordance with the deadline indicated in paragraph 3 of this certificate.
5. The issue by the Purchaser of this Qualified Provisional Acceptance Certificate for [***details of Train(s) receiving a QPAC***] does not imply that a Qualified Provisional Acceptance Certificate will be issued by Docklands Light Railway Limited for any other Train (and clause 15.10 of the MSA continues to apply).
6. Any Qualified Provisional Acceptance by Docklands Light Railway Limited shall be without prejudice to Docklands Light Railway Limited's right to make a Precondition Retention for any Train pursuant to clause 15.11 of the MSA.

Signed for and on behalf of **Docklands Light Railway Limited**

Signature:

Name:

Position:

Date:

FORM OF PROVISIONAL ACCEPTANCE CERTIFICATE

[To be issued to Manufacturer on Docklands Light Railway Limited's headed notepaper]

Manufacture and Supply Agreement dated [●] and made between Docklands Light Railway Limited and [●] ("Manufacturer") (the "MSA")

1. Words and expressions defined in the MSA shall have the same meanings when used in this Provisional Acceptance Certificate and the provisions of the MSA (including clause 63 (Governing Law and Jurisdiction)) shall, as applicable, apply to this Provisional Acceptance Certificate.
2. This certificate constitutes a Provisional Acceptance Certificate under the MSA.
3. We, Docklands Light Railway Limited, hereby confirm that subject to clause 15.24 of the MSA, the [**details of Train(s) receiving a Provisional Acceptance Certificate**] [comply/complies] with each of the Provisional Acceptance Criteria.

Signed for and on behalf of **Docklands Light Railway Limited**

Signature:

Name:

Position:

Date:

FORM OF FINAL ACCEPTANCE CERTIFICATE

[To be issued to Manufacturer on Docklands Light Railway Limited's headed notepaper]

Manufacture and Supply Agreement dated [●] and made between Docklands Light Railway Limited and [●] ("Manufacturer") (the "MSA")

1. Words and expressions defined in the MSA shall have the same meanings when used in this Final Acceptance Certificate and the provisions of the MSA (including clause 63 (Governing Law and Jurisdiction)) shall, as applicable, apply to this Final Acceptance Certificate.
2. This certificate constitutes a Final Acceptance Certificate under the MSA.
3. We, Docklands Light Railway Limited, hereby confirm that subject to clause 15.24 of the MSA, the [*details of Train(s) receiving a Final Acceptance Certificate*] [comply/complies] with each of the Final Acceptance Criteria.

Signed for and on behalf of **Docklands Light Railway Limited**

Signature:

Name:

Position:

Date:

FORM OF FLEET ACCEPTANCE CERTIFICATE

[To be issued to Manufacturer on Docklands Light Railway Limited's headed notepaper]

Manufacture and Supply Agreement dated [●] and made between Docklands Light Railway Limited and [●] ("Manufacturer") (the "MSA")

1. Words and expressions defined in the MSA shall have the same meanings when used in this Fleet Acceptance Certificate and the provisions of the MSA (including clause 63 (Governing Law and Jurisdiction)) shall, as applicable, apply to this Fleet Acceptance Certificate.
2. This certificate constitutes the Fleet Acceptance Certificate under the MSA.
3. We, Docklands Light Railway Limited, hereby confirm that subject to clause 15.24 of the MSA, the Fleet complies with each of the Fleet Acceptance Criteria.

Signed for and on behalf of **Docklands Light Railway Limited**

Signature:

Name:

Position:

Date:

FORM OF EQUIPMENT ACCEPTANCE CERTIFICATE

[To be issued to Manufacturer on Docklands Light Railway Limited's headed notepaper]

Manufacture and Supply Agreement dated [●] and made between Docklands Light Railway Limited and [●] ("Manufacturer") (the "MSA")

1. Words and expressions defined in the MSA shall have the same meanings when used in this Equipment Acceptance Certificate and the provisions of the MSA (including clause 63 (Governing Law and Jurisdiction)) shall, as applicable, apply to this Equipment Acceptance Certificate.
2. This certificate constitutes an Equipment Acceptance Certificate under the MSA.
3. We, Docklands Light Railway Limited, hereby confirm that subject to clause 15.24 of the MSA, the:
 - **[Simulator, i.e. details of the Simulator receiving an Equipment Acceptance Certificate];**
 - **[Spare, i.e. details of the Capital Spares, Maintenance Spares, Purchaser Fault Spares or Warranty Spares receiving an Equipment Acceptance Certificate];**
 - **[Special Tools, i.e. details of the Special Tools receiving an Equipment Acceptance Certificate];**
 - **[Mock-up, i.e. details of the Mock-up receiving an Equipment Acceptance Certificate];**
 - **[Portable Saloon Door Training Rig, i.e. details of the Portable Saloon Door Training Rig receiving an Equipment Acceptance Certificate];**
 - **[Automatic Train Scanning System, i.e. details of the Automatic Train Scanning System receiving an Equipment Acceptance Certificate];**
 - **[Manufacturer Depot Equipment, i.e. details of the Manufacturer Depot Equipment receiving an Equipment Acceptance Certificate];³**

[comply/complies] with each of the relevant Equipment Acceptance Criteria.

Signed for and on behalf of **Docklands Light Railway Limited**

Signature:

Name:

Position:

Date:

³ Note: delete as appropriate.

FORM OF CERTIFICATE OF CP SATISFACTION

[To be issued to Manufacturer on Docklands Light Railway Limited's headed notepaper]

Manufacture and Supply Agreement dated [●] and made between Docklands Light Railway Limited and [●] ("Manufacturer") (the "MSA")

1. Words and expressions defined in the MSA shall have the same meanings when used in this Certificate of CP Satisfaction and the provisions of the MSA (including clause 63 (Governing Law and Jurisdiction)) shall, as applicable, apply to this Certificate of CP Satisfaction.
2. This certificate constitutes the Certificate of CP Satisfaction under the MSA.
3. We, Docklands Light Railway Limited, hereby:
 - (a) acknowledge and agree that the conditions precedent set out in clauses 2.3 and 2.4 of the MSA have been satisfied (or agree to their waiver or deferral of the following conditions precedent [*list relevant CPs*], as applicable); and
 - (b) notify you, the Manufacturer, that the CP Satisfaction Date shall be [*insert date*].

Signed for and on behalf of **Docklands Light Railway Limited**

Signature:

Name:

Position:

Date:

FORM OF OPTION NOTICE

[To be issued to Manufacturer on Docklands Light Railway Limited's headed notepaper]

Manufacture and Supply Agreement dated [●] and made between Docklands Light Railway Limited ("Purchaser") and [●] ("Manufacturer") (the "MSA")

1. Words and expressions defined in the MSA shall have the same meanings when used in this Option Notice and the provisions of the MSA (including clause 63 (Governing Law and Jurisdiction)) shall, as applicable, apply to this Option Notice.
2. This notice constitutes an Option Notice under the MSA.
3. By delivering this notice, the Purchaser exercises an Option requiring the Manufacturer to supply to the Purchaser [x] Option Trains, (A) supplying a sufficient quantity of associated Option Spares to comply with the Manufacturer's obligations in clause 7.15; and (B) on the terms of the MSA (including part E (Option Train Changes) of schedule 12 (Change Procedure) and the Option Prices set out in part C (Options for supply of further Trains) of schedule 10 (Milestones and Security) of the MSA).
4. The Option shall be implemented in accordance with a Change Confirmation Notice or Change Confirmation Notices pursuant to part E (Option Train Changes) of schedule 12 (Change Procedure) of the MSA.

Signed for and on behalf of **Docklands Light Railway Limited**

Signature:

Name:

Position:

Date:

FORM OF OPTION SPARES/SPECIAL TOOLS NOTICE

[To be issued to Manufacturer on Docklands Light Railway Limited's headed notepaper]

Manufacture and Supply Agreement dated [●] and made between Docklands Light Railway Limited ("Purchaser") and [●] ("Manufacturer") (the "MSA")

1. Words and expressions defined in the MSA shall have the same meanings when used in this Option Spares/Special Tools Notice and the provisions of the MSA (including clause 63 (Governing Law and Jurisdiction)) shall, as applicable, apply to this Option Spares/Special Tools Notice.
2. This notice constitutes an Option Spares/Special Tools Notice under the MSA.
3. By delivering this Notice, the Purchaser exercises an option pursuant to clause 6.6(b) of the MSA requiring the Manufacturer to supply to the Purchaser:

(a) **[Insert details of Option Spares to be supplied]; [and]**

(b) **[Insert details of Option Special Tools to be supplied],**

in each case at the price per Option Spare and/or Option Special Tool, and on the terms, set out in the Bill of Materials and otherwise on the terms of the MSA.

Signed for and on behalf of **Docklands Light Railway Limited**

Signature:

Name:

Position:

Date:

Part B - Deed of Novation

THIS AGREEMENT is made the _____ day of _____ 20[●]

BETWEEN:

- (1) **DOCKLANDS LIGHT RAILWAY LIMITED** (Registered Number 02052677) a company incorporated under the laws of England and Wales whose registered office is at 55 Broadway, London, United Kingdom, SW1H 0BD ("**Purchaser**");
- (2) [**NEW Purchaser**] (No. [*company number*]) whose registered office is at [*registered office address*] (the "**New Purchaser**"); and
- (3) **CONSTRUCCIONES Y AUXILIAR DE FERROCARRILES S.A.**, (Registered Number 239, on sheet number SS-329, Folio 144, Volume 983 of the Companies Register of the province of Guipúzcoa, Spain) a company incorporated under the laws of Spain whose registered office is at Jose Miguel Iturrioz 26, 20200 Beasain, Spain ("**Manufacturer**").

WHEREAS:

- (A) The Purchaser has appointed the Manufacturer to perform the Works under a manufacturing and supply agreement dated [*to be inserted*] (the "**MSA**").
- (B) The Purchaser has entered into an agreement with the New Purchaser in respect of the Works.
- (C) The Purchaser, the Manufacturer and the New Purchaser have agreed that from the date of this Agreement, the New Purchaser shall assume the obligations of the Purchaser and that the Manufacturer shall perform its obligations under the MSA in favour of the New Purchaser and that the Purchaser on the one part and the Manufacturer on the other part shall each release the other from any obligations owed by the other to them under the MSA.

NOW IT IS HEREBY AGREED as follows:

1. **NOVATION**
 - 1.1 The Purchaser hereby releases and discharges the Manufacturer from any and all obligations and liabilities owed to the Purchaser under the MSA.
 - 1.2 The Manufacturer undertakes to perform the MSA and to be bound by its terms in every way as if the New Purchaser were, and had been from the inception, a party to the MSA in lieu of the Purchaser.
 - 1.3 The Manufacturer hereby releases and discharges the Purchaser from any and all obligations and liabilities owed to the Manufacturer under the MSA and accepts the obligations and liability of the New Purchaser under the MSA in lieu of the liability of the Purchaser.
 - 1.4 Without prejudice to clause 1.2, the Manufacturer warrants to the New Purchaser that it shall be liable for any loss or damage suffered or incurred by the New Purchaser arising out of any negligent act, default or breach by the Manufacturer in the performance of its obligations under the MSA prior to the date of this Agreement. Subject to any limitation of liability in the MSA, the Manufacturer shall be liable for such loss or damage notwithstanding that such loss or damage would not have been suffered or incurred by the Purchaser (or suffered or incurred to the same extent by the Purchaser).

- 1.5 The Manufacturer acknowledges that fees and expenses properly due to the Manufacturer under the MSA in the sum of £[*to be inserted*] have, as at the date of this Agreement, been paid by the Purchaser.
- 1.6 The New Purchaser undertakes to perform the MSA and to be bound by its terms in every way as if the New Purchaser were, and had been from the inception, a party to the MSA in lieu of the Purchaser.

2. **PROPER LAW AND JURISDICTION**

This Agreement and the rights and obligations of the parties hereto shall be governed and construed in accordance with the laws of England and Wales and the Courts of England and Wales shall have exclusive jurisdiction over any dispute or difference (whether arising out of or in connection herewith) subject only to the rights of the parties to enforce a judgment obtained in the Courts of England and Wales in any other jurisdiction.

3. **CONTRACTS (RIGHTS OF THIRD PARTIES) ACT 1999**

Notwithstanding any other provision in this Agreement, nothing in this Agreement is intended to confer on any person any right to enforce any of the provisions of this Agreement which such person would not have had, but for the Contracts (Rights of Third Parties) Act 1999.

IN WITNESS whereof the parties hereto have executed this Agreement as a Deed the day and year first before written.

Executed as a deed by affixing the)
common seal of)
DOCKLANDS LIGHT RAILWAY)
LIMITED in the presence of:)

Authorised signatory

Name of authorised signatory

The common seal of **[NEW**)
PURCHASER] was affixed in the)
presence of:)

Director

Director/Secretary

Executed as a deed by)
CONSTRUCCIONES Y AUXILIAR DE)
FERROCARRILES S.A. acting by)

under a power of attorney:

Authorised signatory

SCHEDULE 22

Form of Parent Company Guarantee



Parent Company Guarantee

Construcciones y Auxiliar de Ferrocarriles S.A.

and

Docklands Light Railway Limited

20[●]

THIS DEED OF GUARANTEE is made on

20[●]

BETWEEN:

- (1) **CONSTRUCCIONES Y AUXILIAR DE FERROCARRILES S.A.** (Registered Number 239, on sheet number SS-329, Folio 144, Volume 983 of the Companies Register of the province of Guipúzcoa, Spain) a company incorporated under the laws of Spain whose registered office is at Jose Miguel Iturriz 26, 20200 Beasain, Spain (the "**Guarantor**"); and
- (2) **DOCKLANDS LIGHT RAILWAY LIMITED** (No. 02052677) whose registered office is at 55 Broadway, London, United Kingdom, SW1H 0BD (the "**Purchaser**").

WHEREAS:

- (A) The Guarantor is the parent company of [Insert details of the Manufacturer] (Registered Number [x]) whose registered office is at [x] (the "**Manufacturer**").
- (B) The Purchaser and the Manufacturer are party to an agreement (the "**MSA**") pursuant to which the Manufacturer is obliged to design, build, test, commission and supply rolling stock and related equipment for use in the provision of passenger services on the Network and provide other related services.
- (C) The Guarantor has agreed to guarantee the performance by the Manufacturer of its obligations under the MSA on the terms and conditions set out in this Guarantee.

NOW THIS DEED WITNESSES as follows:

1. DEFINITIONS AND INTERPRETATION

1.1 Definitions

"**MSA**" has the meaning given to it in recital (B);

"**Manufacturer**" has the meaning given to it in recital (A);

"**Manufacturer's Obligations**" has the meaning given to it in clause 2; and

1.2 Interpretation

In this Guarantee, except where the context otherwise requires:

- (a) a reference to an enactment or statutory provision shall include a reference to any subordinate legislation made under the relevant enactment or statutory provision and is a reference to that enactment, statutory provision or subordinate legislation as from time to time amended, consolidated, modified, re-enacted or replaced;
- (b) words in the singular shall include the plural and vice versa;
- (c) references to one gender include other genders;
- (d) a reference to a person shall include a reference to a firm, a body corporate, an unincorporated association, a partnership or to an individual's executors or administrators and references to a company shall include Transport for London;
- (e) a reference to a clause shall be a reference to a clause of this Guarantee;
- (f) if a period of time is specified as from a given day, or from the day of an act or event, it shall be calculated exclusive of that day;

- (g) references to any English legal term for any action, remedy, method of judicial proceeding, legal document, legal status, court, official or any legal concept or thing shall in respect of any jurisdiction other than England be deemed to include what most nearly approximates the English legal term in that jurisdiction and references to any English statute or enactment shall be deemed to include any equivalent or analogous laws or rules in any other jurisdiction;
- (h) a reference to includes or including shall mean includes without limitation or including without limitation;
- (i) the contents page and headings in this Guarantee are for convenience only and shall not affect its interpretation;
- (j) references to this Guarantee include this Deed of Guarantee as amended or supplemented in accordance with its terms;
- (k) a reference to the Guarantor, the Purchaser or the Manufacturer includes their respective (and any subsequent) successor(s) in title, and their respective permitted transferee(s) or assignee(s);
- (l) references in this Guarantee to costs, expenses and losses which are to be indemnified to, or recovered by, the person incurring the same shall be construed as references to an amount equal to the amount of such costs, expenses and losses together with any amount that represents VAT or other similar tax properly chargeable therein in any jurisdiction;
- (m) references in this Guarantee to any other agreement or other instrument (other than an enactment or statutory provision) shall be deemed to be references to that agreement or instrument as from time to time amended, varied, supplemented, substituted, novated or assigned;
- (n) references to otherwise and words following other shall not be limited by any foregoing words where a wider construction is possible; and
- (o) words and expressions defined in the MSA shall, unless otherwise defined in this Guarantee, have the same meaning in this Guarantee.

1.3 **Deed**

The parties to this Guarantee intend it to take effect as a deed.

2. **GUARANTEE AND INDEMNITY**

- (a) In consideration of the Purchaser entering into the MSA with the Manufacturer, the Guarantor irrevocably and unconditionally:
 - (i) guarantees to the Purchaser for the benefit of the Purchaser:
 - (A) the proper, complete and punctual performance and observance by the Manufacturer of all of the Manufacturer's obligations, undertakings, duties and responsibilities under the MSA when such obligations, undertakings, duties and responsibilities become due according to the terms of the MSA; and
 - (B) the due and punctual payment and discharge by the Manufacturer of all sums, liabilities, awards, losses, damages, costs, charges and expenses that may be or become due, owing or payable to the Purchaser under or arising out of the MSA in accordance with its

terms or otherwise by reason of or in consequence of any breach thereof on the part of the Manufacturer (including legal fees, taxes and any other costs, on a full indemnity basis, incurred by the Purchaser in connection with the Purchaser validly and justifiably seeking to enforce any of the above),

(together, the "**Manufacturer's Obligations**"), and the Guarantor covenants and undertakes with the Purchaser that if and whenever the Manufacturer fails to pay, perform and/or discharge and/or is otherwise in default in respect of any of the Manufacturer's Obligations, the Guarantor shall within five (5) Working Days of being served a written demand by the Purchaser, pay, fully perform and/or discharge or procure the payment, full performance and/or discharge of the Manufacturer's Obligations and make good the failure or other default as if the Guarantor, instead of the Manufacturer, was expressed to be the principal obligor; and

- (ii) agrees with the Purchaser, as a separate, independent, primary and additional obligation (and without prejudice to clause 2(a)(i), (b) and/or clause 15), to indemnify and keep indemnified the Purchaser within five (5) Working Days of being served a written demand by the Purchaser and on an after tax basis in respect of all losses, damages, costs, claims, liabilities, demands and expenses arising from the Manufacturer failing to pay, fully perform and/or discharge and/or being otherwise in default in respect of any of the Manufacturer's Obligations or as a result of any of the Manufacturer's Obligations being or becoming void, voidable, unenforceable or ineffective as against the Manufacturer for any reason whatsoever whether or not known to the Manufacturer or any other person, and the amount of such losses, damages, costs, claims, liabilities, demands and expenses is the amount which the person suffering it would otherwise have been entitled to recover from the Manufacturer on the assumption that the MSA is not void, voidable, unenforceable or ineffective against the Manufacturer.
- (b) The Guarantor's liability under this Guarantee (including the liability provided for in clause 15) shall, notwithstanding the multiple draws under this Guarantee, be limited to the Manufacturer's liability under the MSA (except in relation to any costs incurred in enforcing this Guarantee and any costs incurred pursuant to clause 14 and/or clause 21 hereof) such liability to be determined on the assumption that the MSA is not void, voidable, unenforceable or ineffective against the Manufacturer.

3. **PRINCIPAL OBLIGOR**

Without prejudice to the Purchaser's rights against the Manufacturer as principal obligor, the Guarantor shall be deemed the principal obligor in respect of its obligations under this Guarantee and not merely a surety and accordingly the Guarantor shall not be discharged nor shall its liability under this Guarantee be affected by any act or thing or means whatsoever by which its said liability would have been discharged or affected if it had not been the principal obligor.

4. **WAIVER OF DEFENCES**

The obligations of the Guarantor under this Guarantee will not be affected by (and the intention of the Guarantor is that its obligations shall continue in full force and effect notwithstanding) any act, omission, matter or thing which, but for this clause 4, would reduce, release or prejudice any of its obligations under this Guarantee (without limitation and whether or not known to it or the Purchaser) including:

- (a) any termination, alteration, amendment, variation, novation, supplement, extension or reinstatement to any provision of the MSA or in the extent or nature

or method or timing of the Manufacturer's Obligations, or novation of the MSA (in whole or in part) (in all cases, however fundamental), provided that the Guarantor's obligations under this Guarantee shall be varied to the extent of any such alteration, amendment, variation, supplement, extension or reinstatement;

- (b) the taking, variation, compromise, exchange, renewal or release of, or refusal or neglect to perfect, take up or enforce, any rights against, or security over assets of, the Manufacturer or other person or any non-presentation or non-observance of any formality or other requirement in respect of any instrument or any failure to realise the full value of any security;
- (c) any incapacity or lack of power, authority or legal personality of or dissolution or change in the members or status of the Manufacturer or any other person;
- (d) the granting by the Purchaser of any time, indulgence, concession, consent or waiver granted to, or any concession or arrangement made with, the Manufacturer or any other person (whether expressly or by conduct);
- (e) the granting of any other bond, security or guarantee now or hereafter held by the Purchaser for all or any part of the Manufacturer's Obligations;
- (f) the release or waiver of any such bond, security or guarantee referred to in clause (e) above;
- (g) any claim or enforcement of payment from the Manufacturer or any other person;
- (h) any act or omission which would not have discharged or affected the liability of the Guarantor had it been a principal debtor instead of a guarantor or by anything done or omitted which but for this provision might operate to exonerate the Guarantor;
- (i) any delay or forbearance by the Purchaser in exercising its rights or remedies under this Guarantee, or the enforcement or absence of enforcement of this Guarantee;
- (j) the bankruptcy, insolvency, liquidation, winding-up, dissolution, administration or incapacity of (or the appointment of an administrator or receiver of) or the amalgamation, reconstruction, merger, reorganisation or any analogous proceeding relating to the Manufacturer or the Guarantor or any change in status, function, control or ownership of the Manufacturer;
- (k) the illegality, invalidity, unenforceability or frustration of the MSA or any of the Manufacturer's Obligation(s) for any reason, or any defect in any provision of, the MSA or any other security given in relation to the Manufacturer's Obligations;
- (l) any present or future law or regulations purporting to reduce or prejudice any of the Manufacturer's Obligations;
- (m) any other act, event, fact, circumstance or omission which, but for the provisions of this Guarantee, and in particular this clause 4, might operate to discharge, impair or otherwise affect any of the obligations of the Guarantor contained in this Guarantee or any of the rights, powers or remedies conferred upon the Purchaser by this Guarantee or by law; and
- (n) anything that the Purchaser may do, or omit or neglect to do which, but for this provision, might exonerate, discharge, reduce or extinguish the liability of the Guarantor under this Guarantee.

5. **DISCHARGE**

Notwithstanding any composition, release, arrangement or waiver effected by the Purchaser with the Manufacturer, the Guarantor's liability under this Guarantee shall be discharged only by performance, payment and/or discharge by the Guarantor to the Purchaser in full of the Manufacturer's Obligations from time to time.

6. **CONTINUING OBLIGATIONS**

6.1 **Continuing Guarantee**

This Guarantee shall be a continuing guarantee and shall remain in operation and full force and effect until all the Manufacturer's Obligations (whether actual or contingent) have been duly and completely performed and observed and the Manufacturer shall have ceased to be under any actual or contingent liability to the Purchaser under the MSA and all obligations (whether actual or contingent) of the Guarantor under this Guarantee have been satisfied or performed in full.

6.2 **Future Exercise**

No single exercise of any right, power or privilege conferred by this Guarantee shall preclude any other or future exercise thereof or the exercise of any other right, power or privilege, nor shall any failure or delay by the Purchaser in exercising any right, power or privilege under this Guarantee or the MSA operate as a waiver thereof.

6.3 **Unlimited Demands**

The Purchaser is entitled to make any number of demands under this Guarantee.

7. **REINSTATEMENT**

If any payment by the Manufacturer or Guarantor or any discharge given by the Purchaser (whether in respect of Manufacturer's Obligations or the obligations of the Guarantor or any security for those obligations or otherwise) is avoided or reduced as a result of insolvency or any similar event:

- (a) the liability of the Manufacturer and Guarantor shall continue as if the payment, discharge, avoidance or reduction had not occurred; and
- (b) the Purchaser shall be entitled to recover the value or amount of that security or payment from the Manufacturer or Guarantor, as if the payment, discharge, avoidance or reduction had not occurred.

8. **ENFORCEMENT**

This Guarantee may be enforced without taking any proceedings or demanding upon, enforcing or exhausting any right or remedy against the Manufacturer or any other person, or taking any action to enforce any other security, bond or guarantee held by the Purchaser or making or filing any claim in a bankruptcy, liquidation, administration or insolvency of the Manufacturer or any person. This Guarantee is in addition to and not in substitution for any present and future guarantee, lien or other security to be held by the Purchaser. The Purchaser's rights hereunder are in addition to and not exclusive of those provided by law (in accordance with clause 20), in the MSA or in any other document, instrument or agreement executed in connection with the MSA.

9. **NON-COMPETITION**

9.1 **Non-competition**

Until all amounts which may be or become payable and all liabilities, obligations, warranties, duties and undertakings in respect of the Manufacturer's Obligations have been irrevocably paid, performed or discharged in full, the Guarantor shall not, after a claim has been made or by virtue of any payment, performance or discharge by it under or in accordance with this Guarantee:

- (a) be subrogated to any rights, security or moneys held, received or receivable by the Purchaser (or any trustee or agent on its behalf) or be entitled to any right or contribution or indemnity in respect of any payment made or moneys received on account of the Guarantor's liability under this Guarantee;
- (b) claim, rank, prove or vote as a creditor of the Manufacturer or its estate in competition with the Purchaser (or any trustee or agent on its behalf); or
- (c) receive, claim or have the benefit of any payment, distribution or security from or on account of the Manufacturer, or exercise any rights of set-off as against the Manufacturer.

9.2 **Trust**

The Guarantor shall hold in trust for and forthwith pay or transfer to the Purchaser any payment or distribution or benefit of security received by it either contrary to this clause 9 or as a result of a direction of the Purchaser under clause 9.1(b) or 9.1(c).

9.3 **Suspense account**

Until all the Manufacturer's Obligations have been irrevocably satisfied in full, the Purchaser may place and keep any money received or recovered from the Guarantor in relation to the Manufacturer's Obligations in a Suspense account.

10. **ADDITIONAL SECURITY**

This Guarantee is in addition to and is not in any way prejudice by any other security now or subsequently held by the Purchaser.

11. **RETENTION OF THIS GUARANTEE**

The Purchaser shall be entitled to retain this Guarantee after as well as before the payment or discharge of all of the Manufacturer's Obligations for such period as the Purchaser may determine. At such time as the Guarantor considers that all of the Manufacturer's Obligations and that all of the Guarantor's obligations under this Guarantee have been paid and/or discharged in full as applicable, it may request that the Purchaser provide confirmation in writing of such payment and discharge. The Purchaser shall provide such confirmation in writing if it agrees that all the Manufacturer's Obligations and Guarantor's obligations under this Guarantee have been paid and/or discharged in full in accordance with this Guarantee.

12. **REPRESENTATIONS AND WARRANTIES**

12.1 **Security**

The Guarantor warrants that it has not taken or received, and undertakes that until all the Manufacturer's Obligations or other amounts due under this Guarantee have been performed, paid or discharged in full, it will not take or receive, the benefit of any security

or encumbrance of any kind from the Manufacturer or any other person in respect of its obligations under this Guarantee.

12.2 **Representations and Warranties**

The Guarantor represents and warrants in favour of the Purchaser that:

- (a) it is duly formed and validly existing under the laws of its jurisdiction of formation and has the full corporate power and authority to own its assets and to carry on its business as is now being conducted by it;
- (b) it has full corporate power and authority to enter into, perform and deliver, and has taken all necessary action to authorise the entry into, performance and delivery of, this Guarantee;
- (c) this Guarantee constitutes, subject to any general principles of law limiting its obligations, its legal, binding, valid and enforceable obligations;
- (d) the entry into and performance by it of, and the transactions contemplated by, this Guarantee do not and will not conflict with or result in a breach of:
 - (i) any law or regulation or judicial or official order to which the Guarantor is subject; or
 - (ii) its constitutional documents; or
 - (iii) any agreement or instrument which is binding upon it or any of its assets or result in the creation of (or a requirement for the creation of) any security or encumbrance of any kind over its assets;
- (e) to the best knowledge and belief of the Guarantor there is no litigation, arbitration or administrative proceedings, in each case current or pending, of or before any court, arbitral body or agency of any country threatened against the Guarantor which separately or in the aggregate, could have a material adverse effect on the ability of the Guarantor to perform its obligations under this Guarantee;
- (f) the execution by it of this Guarantee constitutes, and the exercise by it of its rights and performance of its obligations under this Guarantee will constitute, private and commercial acts performed for private and commercial purposes and it will not be entitled to claim immunity from suit, execution, attachment or other legal process in any proceedings taken in its jurisdiction of incorporation in relation to this Guarantee; and
- (g) without prejudice to the generality of clause 12.2(c) its:
 - (i) irrevocable submission under this Guarantee to the exclusive jurisdiction of the courts of England;
 - (ii) agreement that this Guarantee is governed by English law; and
 - (iii) agreement not to claim any immunity to which it or its assets may be entitled,

are legal, valid and binding under the laws of its jurisdiction of incorporation and any judgment obtained in England will be recognised and be enforceable by the courts of its jurisdiction of incorporation.

13. WITHHOLDINGS AND DEDUCTIONS

All payments to be made by the Guarantor under this Guarantee shall be made without any set-off, counterclaim or equity and (subject to the following sentence) free from, clear of and without deduction for any taxes, duties, levies, imposts or charges whatsoever, present or future. If the Guarantor is compelled by the law of any applicable jurisdiction (or by an order of any regulatory authority in such jurisdiction) to withhold or deduct any sums in respect of taxes, duties, levies, imposts or charges from any amount payable to the Purchaser under this Guarantee or, if any such withholding or deduction is made in respect of any recovery under this Guarantee, the Guarantor shall pay such additional amount so as to ensure that the net amount received by the Purchaser shall equal the full amount due to it under the provisions of this Guarantee (had no such withholding or deduction been made).

14. PAYMENTS AND INTEREST

14.1 Payments

- (a) All payments by the Guarantor under this Guarantee must be made to the Purchaser to its account at a bank in the United Kingdom as the Purchaser may notify the Guarantor on the date of this Guarantee or otherwise in any notice of demand served under the terms of clause 2.
- (b) If a payment under this Guarantee is due on a day which is not a Working Day the due date for that payment will instead be the next Working Day.
- (c) If this Guarantee does not provide for when a particular payment is due, that payment will be due within 30 Working Days of demand by the Purchaser.

14.2 Interest Rate

The Guarantor hereby agrees to pay to the Purchaser, in respect of any amount demanded from it in accordance with this Guarantee, interest at the Default Rate from first demand by the Purchaser of the Manufacturer.

14.3 Accrual of Interest

Such interest at the Default Rate shall accrue due on a daily basis from the demand by the Purchaser until actual payment by the Guarantor (both before and after any further demand or judgment or the liquidation of the Guarantor or the Manufacturer).

15. INDEMNITY

As a separate, independent and additional obligation (and without prejudice to clause 2) the Guarantor unconditionally and irrevocably agrees (for the benefit of the Purchaser) to indemnify and keep indemnified the Purchaser within five (5) Working Days of being served a written demand by the Purchaser and on an after tax basis in respect of all losses, damages, costs, claims, liabilities, demands and expenses which may be suffered or reasonably incurred by the Purchaser and arise from any default or breach by the Guarantor of its obligations under this Guarantee.

16. ASSIGNMENT/NOVATION

16.1 The Purchaser's Assignment/Novation

The Purchaser may at any time assign, transfer or novate without the consent of the Guarantor, the benefit of and/or its rights and/or obligations under this Guarantee (whether or not accrued), to any person to whom the benefit of the MSA is assigned,

transferred or, as applicable, to whom the MSA is novated in accordance with and subject to the terms thereof and the Guarantor shall at its own cost execute such documents and do such other things as the Purchaser may reasonably require in order to facilitate and perfect such assignment, transfer or novation.

16.2 **Guarantor's Assignment**

The Guarantor may not assign or transfer any of its rights or obligations under this Guarantee.

17. **SEVERANCE**

If any provision or part of this Guarantee is illegal, void or unenforceable due to any applicable law, it shall be deemed to be deleted and the remaining provisions of this Guarantee shall continue in full force and effect.

18. **NO WAIVER**

The rights and remedies of the parties to this Guarantee shall not be affected by any failure to exercise or delay or forbearance in exercising any right or remedy or by the giving of any indulgence by one party to this Guarantee or by anything whatsoever except a specific waiver or release in writing and any such waiver or release shall not prejudice or affect any other rights or remedies of the parties to this Guarantee. No single or partial exercise of any right or remedy shall prevent any further or other exercise thereof or the exercise of any other right or remedy.

19. **ENTIRE AGREEMENT**

19.1 **Whole Agreement**

Each party confirms that this Guarantee and any other documents referred to in this Guarantee represents the entire understanding, and constitutes the whole agreement, in relation to its subject matter and supersedes any previous agreement between the parties with respect thereto.

19.2 **Non-Reliance**

Each party acknowledges that:

- (a) entering into this Guarantee it has not relied on any representation, warranty, assurance, covenant, indemnity, undertaking or commitment which is not expressly set out or referred to in this Guarantee or any other documents referred to in this Guarantee; and
- (b) neither party has any other right or remedy (whether by way of a claim for contribution or otherwise) in tort (including negligence) or for misrepresentation (whether negligent or otherwise, and whether made prior to, and/or in, this Guarantee) save for any liability for fraudulent misrepresentation or fraudulent misstatement.

20. **RIGHTS CUMULATIVE WITH THOSE AT LAW**

20.1 **Rights Cumulative**

The powers, rights and remedies conferred on the parties herein shall be in addition and without prejudice to all other powers, rights and remedies available to the parties by law.

20.2 **Equitable Remedies**

Without prejudice to any other rights or remedies that the parties may have, the parties acknowledge and agree that the remedies of injunction and specific performance as well as any other equitable relief for any threatened or actual breach of the provisions of this Guarantee by any party shall be available to the parties and that no proof of special damages shall be necessary for the enforcement of the provisions of this Guarantee

21. **COSTS**

Each party shall be responsible for their own legal costs in relation to the negotiation and execution of this Guarantee.

22. **LANGUAGE**

This Guarantee is executed in English and all communications under this Guarantee shall be made in English.

23. **CURRENCY AND EXCHANGE RATE**

All payments under this Guarantee shall be made in Pounds Sterling. All risks associated with movements in foreign currency exchange rates and/or the costs of activities performed outside of the United Kingdom shall be borne by the Guarantor.

24. **CONFIDENTIALITY**

The parties hereby agree that the terms of clause 39 (Confidentiality) of the MSA shall apply as appropriate to this Guarantee as if set out in this Guarantee in full save that references to Manufacturer shall be replaced by Guarantor and references to Agreement shall be replaced by "Guarantee".

25. **VARIATION**

No variation of this Guarantee shall be effective unless it is made by deed and executed by or on behalf of each of the parties to this Guarantee. The expression variation includes supplement, deletion or replacement, however effected.

26. **FURTHER ASSURANCE**

Each party to this Guarantee shall (at its own cost) do and execute, or arrange for the performance and execution of, each necessary act or document to implement its obligations under this Guarantee.

27. **COUNTERPARTS**

This Guarantee may be executed in any number of counterparts and by the parties to it on separate counterparts, each of which when so executed and delivered shall be an original but all the counterparts shall together constitute one and the same instrument.

28. **CONTRACTS (RIGHTS OF THIRD PARTIES) ACT**

No provision of this Guarantee is enforceable under the Contracts (Rights of Third Parties) Act 1999 by a person who is not a party to this Guarantee.

29. **NOTICES**

29.1 **Requirement for notice in writing**

Any notice, consent, approval, certificate or determination to be given or issued by any person under this Guarantee shall be deemed a notice and shall be in writing unless otherwise specified and the words notify, consent, approve, certify and determined shall be construed accordingly.

29.2 **Service of notices**

(a) Subject to clause 29.2(b), any notice made under or in connection with the matters contemplated by this Guarantee shall be deemed duly given if delivered personally or sent by email or by prepaid first-class post or by airmail if posted to or from a place outside the United Kingdom in accordance with the requirements of this clause 29.

(b) Notices shall be served:

(c) If to the Purchaser to:

Docklands Light Railway Limited
55 Broadway,
London,
United Kingdom,
SW1H 0BD

Attention: Company Secretary

Email: [REDACTED]

If to the Guarantor to:

[x]

Attention: [x]

Fax: [x]

29.3 **Time of service**

A notice shall be deemed to have been received:

(a) if delivered by hand, at the time when the notice is left at the address of the party to be served;

(b) if sent by first-class post, on the Working Day next following the day of posting or, if the day of posting was not a Working Day, the Working Day next following the first Working Day after the day of posting;

(c) if sent by airmail, five (5) Working Days after the day of posting; and

(d) if sent by email, upon receipt by the sender of a "delivered" confirmation (provided that the sender shall not be required to produce a "read" confirmation),

provided that if, in accordance with the above provision, any such notice would otherwise be deemed to be given or made after 5.00 p.m. such notice shall be deemed to be given or made at 9.00 a.m. on the next Working Day. For the purposes of this clause, all times are to be read as local time in the place of deemed receipt.

29.4 Change of details

A party may notify the other party to this Guarantee of a change to its name, relevant addressee, postal address or email address to update the information in clause 29.2(b) provided that such notification shall only be effective:

- (a) on the date specified in the notification as the date on which the change is to take place; or
- (b) if no date is specified or the date specified is less than five (5) Working Days after the date on which notice is given, the date falling five (5) Working Days after notice of any such change has been given.

30. GOVERNING LAW AND JURISDICTION

30.1 Governing Law

This Guarantee and any non-contractual obligations arising out of it or in connection with it shall be governed by, and construed in accordance with, English law.

30.2 Exclusive Jurisdiction

- (a) For the benefit of the Purchaser and subject to clause 30.2(b), the parties irrevocably agree that the courts of England are to have exclusive jurisdiction for the purpose of hearing and determining any suit, action or proceedings and/or to settle any disputes arising out of or in any way relating to this Guarantee or its formation ("**Proceedings**") and for the purpose of enforcement of any judgment against its property or assets.
- (b) Nothing in this clause shall (or shall be construed so as to) limit the right of the Purchaser to take Proceedings against the Guarantor in the courts of any country in which the Guarantor has assets or in any other court of competent jurisdiction nor shall the taking of Proceedings in any one or more jurisdiction preclude the taking of proceedings in any other jurisdiction (whether concurrently or not) if and to the extent permitted by applicable law.

30.3 Forum

Each party irrevocably waives any right that it may have to object to any Proceedings being brought in the English Courts, to claim that the Proceedings have been brought in an inconvenient forum, or to claim that the English Courts do not have jurisdiction.

30.4 Service of Process

- (a) Without prejudice to any other mode of service allowed under any relevant law, the Guarantor irrevocably appoints [x] whose registered office is at [x], United Kingdom as its agent for service of process in relation to any proceedings before the English courts in connection with this Guarantee and agrees that failure by a process agent to notify the Guarantor of the process will not invalidate the proceedings concerned.
- (b) The Purchaser agrees that the documents which commence any Proceedings and any other documents required to be served in relation to those Proceedings may be served on it at its address specified above or such other address in the United Kingdom as notified in accordance with clause 29 from time to time.

30.5 **Final Determination**

The parties acknowledge and agree that any final determination, where all rights of appeal have been exhausted or expired, of the Manufacturer's liability in respect of an issue to which this Guarantee applies, will be conclusive evidence of the Guarantor's liability under this Guarantee with respect to such issue or issues.

IN WITNESS of which the Guarantor and the Purchaser have executed and delivered this Guarantee as a Deed the day and year first above written.

Executed as a deed by affixing the)
common seal of)
DOCKLANDS LIGHT RAILWAY)
LIMITED in the presence of:)

Authorised signatory

Name of authorised signatory

Executed as a deed by)
CONSTRUCCIONES Y AUXILIAR DE)
FERROCARRILES S.A. acting by)

under a power of attorney:

.....

Authorised signatory

SCHEDULE 23

Intellectual Property

Part A - Software Escrow Agreement



Software Escrow Agreement

Date: ☐ [x]

Owner: ☐ [x]

Agreement Number: ☐ [x]

Notice: The parties to this Agreement are obliged to inform NCC Group of any changes to the Package or in their circumstances (including change of name, registered office, contact details or change of owner of the intellectual property in the Package).

20[●]

Escrow Agreement Dated:

BETWEEN:

- (1) **CONSTRUCCIONES Y AUXILIAR DE FERROCARRILES S.A.** (Registered Number 239, on sheet number SS-329, Folio 144, Volume 983 of the Companies Register of the province of Guipúzcoa, Spain) a company incorporated under the laws of Spain whose registered office is at Jose Miguel Iturrioz 26, 20200 Beasain, Spain) ("**Owner**");
- (2) **DOCKLANDS LIGHT RAILWAY LIMITED** (No. 02052677) a company registered in England whose registered office is at 55 Broadway, London, United Kingdom, SW1H 0BD ("**Licensee**"); and
- (3) **NCC GROUP ESCROW LIMITED** (No. 03081952) a company registered in England whose registered office is at Manchester Technology Centre, Oxford Road, Manchester, M1 7EF, England ("**NCC Group**").

BACKGROUND:

- (A) The Licensee has contracted with the Owner for the purchase of a new fleet of trains, associated spares and other tools subject to the terms set out in the Licence Agreement.
- (B) The Licensee has contracted with the Service Provider for the subsequent technical support of the trains, associated spares and other tools subject to the terms of the Fleet Support Agreement.
- (C) The Licensee has been granted a licence under the Licence Agreement to use the Package which comprises computer programs.
- (D) Certain technical information and/or documentation relating to the software package is the confidential information and intellectual property of the Owner or a third party.
- (E) The Owner acknowledges that in certain circumstances, such information and/or documentation would be required by the Licensee in order for it to continue to exercise its rights under the Licence Agreement.
- (F) The parties therefore agree that such information and/or documentation should be placed with a trusted third party, NCC Group, so that such information and/or documentation can be released to the Licensee should certain circumstances arise.

AGREEMENT:

In consideration of the mutual undertakings and obligations contained in this Agreement, the parties agree that:

1. DEFINITIONS AND INTERPRETATION

- 1.1 In this Agreement the following terms shall have the following meanings:

"Agreement" means the terms and conditions of this escrow agreement set out below, including the appendices hereto.

"Confidential Information" means all technical and/or commercial information not in the public domain and which is designated in writing as confidential by any party together with all other information of any party which may reasonably be regarded as confidential information.

"Full Verification" means the tests and processes forming NCC Group's Full Verification service and/or such other tests and processes as may be agreed between the parties for the verification of the Material.

"Fleet Support Agreement" or **"FSA"** means the agreement between the Service Provider and the Licensee (as Customer) pursuant to which the Service Provider will provide additional spares and undertake certain technical support services in respect of the trains supplied under the Licence Agreement, entered into on or around the date of the Licence Agreement.

"Independent Expert" means a suitably qualified and independent solicitor or barrister.

"Integrity Testing" means those tests and processes forming NCC Group's Integrity Testing service, in so far as they can be applied to the Material.

"Intellectual Property Rights" mean any copyright, patents, design patents, registered designs, design rights, utility models, trademarks, service marks, trade secrets, know how, database rights, moral rights, confidential information, trade or business names, domain names, and any other rights of a similar nature including industrial and proprietary rights and other similar protected rights in any country or jurisdiction together with all registrations, applications to register and rights to apply for registration of any of the aforementioned rights and any licences of or in respect of such rights.

"Licence" means the licence granted to the Licensee to use the Package.

"Licence Agreement" means the agreement listed in appendix 3 under which the Licensee was granted the Licence.

"Material" means the Source Code of the Package and such other material and documentation (including updates and upgrades thereto and new versions thereof) as are necessary to be delivered or deposited to comply with clause 2 (Owner's Duties and Warranties) of this Agreement.

"Order Form" means the order form setting out the details of the order placed with NCC Group for setting up this Agreement.

"Package" means the software package together with any updates and upgrades thereto and new versions thereof licensed to the Licensee under the Licence Agreement details of which are set out in appendix 1.

"Release Events" has the meaning given to it in clause 6.1 of this Agreement.

"Release Purposes" means the purposes of understanding, maintaining, modifying and correcting the Package exclusively for and on behalf of the Licensee together with such other purposes (if any) as are permitted under the Licence Agreement.

"Source Code" means the computer programming code of the Package in human readable form.

"Third Party Material" means Source Code which is not the confidential information and intellectual property of the Owner or the Licensee.

1.2 This Agreement shall be interpreted in accordance with the following:

- (a) headings are for ease of reference only and shall not be taken into consideration in the interpretation of this Agreement;

- (b) all references to clauses and appendices are references to clauses and appendices of this Agreement;
- (c) all references to a party or parties are references to a party or parties to this Agreement; and
- (d) capitalised terms used and not defined in this Agreement shall have the meaning ascribed to such terms in the Licence Agreement.

2. **OWNER'S DUTIES AND WARRANTIES**

2.1 The Owner shall:

- (a) deliver a copy of the Material to NCC Group as soon as reasonably practicable after its creation and in any event within 28 days of the commencement of the Testing and Inspection Programme;
- (b) deliver a further copy of the Material to NCC Group:
 - (i) each time that there is a change to the Package; and
 - (ii) on the occurrence of the events listed in clause 29.12(b) of the Licence Agreement;
- (c) ensure that each copy of the Material deposited with NCC Group comprises the Source Code of the latest version of the Package used by the Licensee;
- (d) deliver to NCC Group a replacement copy of the Material within 30 days after the anniversary of the last delivery of the Material to ensure that the integrity of the Material media is maintained;
- (e) deliver a replacement copy of the Material to NCC Group within 14 days of a notice given to it by NCC Group under the provisions of clause 4.1(c);
- (f) deliver with each deposit of the Material the following information:
 - (i) details of the deposit including the full name of the Package (i.e. the original name as set out under appendix 1 together with any new names given to the Package by the Owner), version details, media type, backup command/software used, compression used, archive hardware and operating system details;
 - (ii) password/encryption details required to access the Material; and
 - (iii) any other information or documentation required to be disclosed under the Licence Agreement or to facilitate the use of any of the Material.
- (g) deliver with each deposit of the Material the following technical information (where applicable):
 - (i) documentation describing the procedures for building, compiling and installing the software, including names and versions of the development tools;
 - (ii) software design information (e.g. module names and functionality); and
 - (iii) name and contact details of employees with knowledge of how to maintain and support the Material; and

- (h) if required by the Licensee, deposit a backup copy of the object code of any third party software package and any other information or documentation required to access, install, build or compile or otherwise use the Material.
- 2.2 The Owner warrants to both NCC Group and the Licensee at the time of each deposit of the Material with NCC Group that:
 - (a) other than any third party object code referred to in clause 2.1(h) or any Third Party Material or any Material owned by the Licensee by virtue of the provisions of the Licence Agreement, it owns the Intellectual Property Rights in the Material;
 - (b) in respect of any Third Party Material, it has been granted valid and ongoing rights under licence by the third party owner(s) thereof to deal with such Third Party Material in the manner anticipated under this Agreement and that the Owner has the express authority of such third party owner(s) to deposit the Third Party Material under this Agreement as evidenced by a signed letter of authorisation in the form required by NCC Group;
 - (c) in entering into this Agreement and performing its obligations under it, it is not in breach of any of its ongoing express or implied obligations to any third party(s);
 - (d) the Material deposited under clause 2.1 contains all information in human-readable form (except for any third party object code deposited pursuant to clause 2.1(h)) and is on suitable media to enable a reasonably skilled programmer or analyst to understand, maintain, modify and correct the Package; and
 - (e) in respect of any third party object code that the Owner, at its option, or, at the request of the Licensee, deposits with NCC Group in conjunction with the Material pursuant to clause 2.1(h), it has the full right and authority to do so.
- 3. **LICENSEE'S RESPONSIBILITIES AND UNDERTAKINGS**
 - 3.1 The Licensee shall notify NCC Group of any change to the Package that necessitates a replacement deposit of the Material.
 - 3.2 In the event that the Material is released under clause 6, the Licensee shall, subject to the terms of the Licence Agreement:
 - (a) keep the Material confidential at all times, on the basis set out in the Licence Agreement;
 - (b) use the Material only for the Release Purposes;
 - (c) not disclose the Material to any person save: (i) such of the Licensee's employees or contractors who need to know the same for the Release Purposes; and (ii) as permitted by the Licence Agreement. In the event that Material is disclosed to its employees or contractors, the Licensee shall ensure that they are bound by the same confidentiality obligations as are contained in this clause 3.2 or otherwise set out in the Licence Agreement;
 - (d) hold all media containing the Material in a safe and secure environment when not in use; and
 - (e) forthwith destroy the Material should the Licensee cease to be entitled to use the Package under the terms of the Licence Agreement.

- 3.3 In the event that the Material is released under clause 6, it shall be the responsibility of the Licensee to obtain the necessary licences to utilise the object code of any third party material deposited by the Owner pursuant to clause 2.1(h).

4. **NCC GROUP'S DUTIES**

4.1 NCC Group shall:

- (a) at all times during the term of this Agreement, retain the latest deposit of the Material in a safe and secure environment;
- (b) inform the Owner and the Licensee of the receipt of any deposit of the Material by sending to both parties a copy of the Integrity Testing report or Full Verification report (as the case may be) generated from the testing processes carried out under clause 10; and
- (c) notify the Owner and the Licensee if it becomes aware at any time during the term of this Agreement that the copy of the Material held by it has been lost, damaged or destroyed so that a replacement may be obtained.

- 4.2 In the event of failure by the Owner to deposit any Material with NCC Group, NCC Group shall not be responsible for procuring such deposit and may, at its sole discretion, notify the Licensee of the Owner's failure to deposit any Material.

- 4.3 NCC Group may appoint agents, contractors or sub-contractors as it deems fit to carry out the Integrity Testing and the Full Verification processes. NCC Group shall ensure that any such agents, contractors and sub-contractors are bound by the same confidentiality obligations as are contained in clause 8.

- 4.4 NCC Group has the right to make such copies of the Material as may be necessary solely for the purposes of this Agreement.

5. **PAYMENT**

- 5.1 The parties shall pay NCC Group's standard fees and charges as published from time to time or as otherwise agreed, in the proportions set out in appendix 2. NCC Group's fees as published are exclusive of value added tax.

- 5.2 NCC Group shall be entitled to review and vary its standard fees and charges for its services under this Agreement from time to time but no more than once a year and only upon 45 days written notice to the parties.

- 5.3 All invoices are payable within 30 days from the date of invoice. NCC Group reserves the right to charge interest in respect of the late payment of any sum due under this Agreement (both before and after judgement) at the rate of [REDACTED] over the prevailing base rate of HSBC Bank Plc accruing on a daily basis from the due date therefor until full payment.

6. **RELEASE EVENTS**

- 6.1 Subject to: (i) the remaining provisions of this clause 6 and (ii) the receipt by NCC Group of its release fee and any other fees and interest (if any) outstanding under this Agreement, NCC Group will release the Material to a duly authorised officer of the Licensee if any of the following events ("**Release Event(s)**") occur:

- (a) if the Owner or Service Provider is a company:

- (i) an order is made for the winding up of the Owner or Service Provider, the Owner or Service Provider passes a resolution for winding up (other than for the purposes of a solvent reconstruction or amalgamation) or a liquidator of the Owner or Service Provider is appointed; or
- (ii) an order is made for the appointment of an administrator of the Owner or Service Provider, or an administrator of the Owner or Service Provider is appointed; or
- (iii) the Owner or Service Provider enters into a compromise or arrangement with creditors; or
- (iv) the Owner or Service Provider has a receiver, administrative receiver or manager appointed over all or any part of its assets or undertaking; or
- (v) the Owner or Service Provider is dissolved; or
- (b) if the Owner or Service Provider is an individual:
 - (i) the Owner or Service Provider enters into a compromise or arrangement with creditors; or
 - (ii) the Owner or Service Provider is declared bankrupt; or
 - (iii) the Owner or Service Provider dies; or
- (c) if the Owner or Service Provider is a partnership:
 - (i) any of the partners in the Owner or the Service Provider are declared bankrupt or enter into a compromise or arrangement with creditors; or
 - (ii) the Owner or Service Provider is wound up or dissolved; or
 - (iii) the Owner or Service Provider enters into a compromise or arrangement with creditors; or
 - (iv) a partnership administration order is made in respect of the Owner or the Service Provider; or
- (d) any similar or analogous proceedings or event to those in clauses 6.1(a) to 6.1(c) above occurs in respect of the Owner or Service Provider within any jurisdiction outside England; or
- (e) the Owner or Service Provider ceases to carry on its business or the part of its business which relates to the Package; or
- (f) the Owner assigns its rights to the Intellectual Property Rights in the Material to a third party ("**Assignee**") and the Assignee fails, within 60 days of all parties' knowledge of such assignment, to continue escrow protection for the benefit of the Licensee by failing to enter into either:
 - (i) a novation agreement with the Licensee and NCC Group for the assumption of the Owner's rights and obligations under this Agreement by the Assignee on terms reasonably satisfactory to the Licensee; or
 - (ii) a new escrow agreement with the Licensee for the Package which offers the Licensee substantially similar protection to that provided by this Agreement without significantly increasing the overall cost to the Licensee,

provided that if the Assignee offers to enter into a novation or new escrow agreement on terms reasonably satisfactory to the Licensee within 60 days of all parties' knowledge of the assignment and the Licensee fails to accept the Assignee's offer within 30 days of such offer being notified to the Licensee, there shall be no Release Event under this clause; or

- (g) [Not used.]
- (h) [Not used.]
- (i) [Not used.]
- (j) [Not used.]
- (k) [Not used.]
- (l) for the avoidance of doubt, should the Owner instruct NCC Group to release the Material to the Licensee at any time in a written format which is acceptable to NCC Group and which has been signed by an authorised officer of the Owner, NCC Group will do so in a timely manner without following the process set out in this clause 6. The Owner shall indemnify NCC Group fully against any claim brought against NCC Group by the Licensee or any third party for acting in accordance with this clause 6.1(l).

6.2 The Licensee must notify NCC Group of the Release Event specified in clause 6 by delivering to NCC Group a statutory or notarised declaration ("**Declaration**") made by an officer of the Licensee declaring that such Release Event has occurred, setting out the facts and circumstances of the Release Event, that the Licence Agreement and any maintenance agreement (including the FSA), if relevant, for the Package was still valid and effective up to the occurrence of such Release Event and exhibiting such documentary evidence in support of the Declaration as NCC Group shall reasonably require.

6.3 Upon receipt of a Declaration from the Licensee claiming that a Release Event has occurred:

- (a) NCC Group shall submit a copy of the Declaration to the Owner by courier or other form of guaranteed delivery; and
- (b) unless within 14 days after the date of despatch of the Declaration by NCC Group, NCC Group receives a counter-notice signed by a duly authorised officer of the Owner stating that in their view no such Release Event has occurred or, if appropriate, that the event or circumstance giving rise to the Release Event has been rectified as shown by documentation in support thereof,

NCC Group will release the Material to the Licensee for its use for the Release Purposes.

6.4 Upon receipt of the counter-notice from the Owner under clause 6.3(b), NCC Group shall send a copy of the counter-notice and any supporting evidence to the Licensee by courier or other form of guaranteed delivery.

6.5 Upon receipt by the Licensee of the counter-notice from NCC Group or, in any event, within 90 days of despatch of the counter-notice by NCC Group, the Licensee may give notice to NCC Group that they wish to invoke the dispute resolution procedure under clause 7.

6.6 If, within 90 days of despatch of the counter-notice by NCC Group to the Licensee, NCC Group has not been informed by the Licensee that they wish the dispute resolution procedure under clause 7 to apply, the Declaration submitted by the Licensee will be

deemed to be no longer valid and the Licensee shall be deemed to have waived their right to release of the Material for the particular reason or event specified in the original Declaration.

- 6.7 For the avoidance of doubt, where a Release Event has occurred under clauses 6.1(a) to 6.1(e) or 6.1(g) to 6.1(l), a subsequent assignment of the Intellectual Property Rights in the Material shall not prejudice the Licensee's right to release of the Material and its use for the Release Purposes.

7. **DISPUTES**

- 7.1 NCC Group shall notify the Owner of the Licensee's request for dispute resolution. Unless the Owner or the Licensee objects, NCC Group's Chief Executive Officer for the time being will appoint an Independent Expert to resolve the dispute. If the Owner or the Licensee objects to this appointment, they shall endeavour to appoint a mutually acceptable Independent Expert within seven (7) days of registering their objection. If they fail to appoint an Independent Expert within this seven (7) day period, NCC Group shall request that the President of The Law Society appoints an Independent Expert to resolve the dispute. Any appointment of an Independent Expert under this clause shall be binding upon the parties.

- 7.2 Within five (5) working days of the appointment of the Independent Expert, the Owner and the Licensee shall each provide full written submissions to the Independent Expert together with all relevant documentary evidence in their possession in support of their claim.

- 7.3 The Independent Expert shall be requested to give a decision on the matter within 14 days of the date of referral or as soon as practicable thereafter and to send a copy of that decision to the Owner, Licensee and NCC Group. The Independent Expert's decision shall be final and binding on all parties and shall not be subject to appeal to a court in legal proceedings except in the case of manifest error.

- 7.4 If the Independent Expert's decision is in favour of the Licensee, NCC Group is hereby authorised to release and deliver the Material to the Licensee within five (5) working days of the decision being notified by the Independent Expert to the parties.

- 7.5 The parties hereby agree that the costs and expenses of the Independent Expert shall be borne by the party against whom the decision of the Independent Expert is given.

8. **CONFIDENTIALITY**

- 8.1 The Material shall remain at all times the confidential and intellectual property of its owner.

- 8.2 Subject to the terms of the Licence Agreement, in the event that NCC Group releases the Material to the Licensee, the Licensee shall be permitted to use the Material only for the Release Purposes, and otherwise as set out in the relevant Licence Agreement.

- 8.3 NCC Group agrees to keep all Confidential Information relating to the Material and/or the Package that comes into its possession or to its knowledge under this Agreement in strictest confidence and secrecy. NCC Group further agrees not to make use of such information and/or documentation other than for the purposes of this Agreement and, unless the parties should agree otherwise in writing, will not disclose or release it other than in accordance with the terms of this Agreement.

9. **INTELLECTUAL PROPERTY RIGHTS**

- 9.1 The release of the Material to the Licensee will not act as an assignment of any Intellectual Property Rights that the Owner or any third party possesses in the Material.

- 9.2 The Intellectual Property Rights in the Integrity Testing report and any Full Verification report shall remain vested in NCC Group. The Owner and the Licensee shall each be granted a non-exclusive right and licence to use such report for the purposes of this Agreement and their own internal purposes only.

10. INTEGRITY TESTING AND FULL VERIFICATION

- 10.1 NCC Group shall bear no obligation or responsibility to any party to this Agreement or person, firm, company or entity whatsoever to determine the existence, relevance, completeness, accuracy, operation, effectiveness, functionality or any other aspect of the Material received by NCC Group under this Agreement.
- 10.2 As soon as practicable after the Material has been deposited with NCC Group, NCC Group shall apply its Integrity Testing processes to the Material.
- 10.3 Any party to this Agreement shall be entitled to require NCC Group to carry out a Full Verification. Subject to clause 10.4, NCC Group's prevailing fees and charges for the Full Verification processes and all reasonable expenses incurred by NCC Group in carrying out the Full Verification processes shall be payable by the requesting party.
- 10.4 If the Material fails to satisfy NCC Group's Full Verification tests as a result of being defective or incomplete in content, NCC Group's fees, charges and expenses in relation to the Full Verification tests shall be paid by the Owner.
- 10.5 Should the Material deposited fail to satisfy NCC Group's Integrity Testing or Full Verification tests under clauses 10.2 or 10.3, the Owner shall, within 14 days of the receipt of the notice of test failure from NCC Group, deposit such new, corrected or revised Material as shall be necessary to ensure its compliance with its warranties and obligations in clause 2. If the Owner fails to make such deposit of the new, corrected or revised Material, NCC Group will issue a report to the Licensee detailing the problem with the Material as revealed by the relevant tests.

11. NCC GROUP'S LIABILITY

- 11.1 Nothing in this clause 11 excludes or limits the liability of NCC Group for:
- (a) fraud or fraudulent misrepresentation;
 - (b) death or personal injury caused by NCC Group's (or its employees', agents' or sub contractors') negligence; or
 - (c) any matter for which it is not permitted by law to exclude or limit, or to attempt to exclude or limit, its liability.

Without prejudice to clauses 11.1(a) to 11.1(c) (inclusive), the following provisions set out the entire financial liability of NCC Group (including any liability for the acts or omissions of its employees, agents and sub-contractors) arising out of or in connection with this Agreement, whether in contract, tort, misrepresentation, under statute or otherwise, howsoever caused including (without limitation) by negligence and also including (without limitation) any liability arising from a breach of, or a failure to perform or defect or delay in performance of, any of NCC Group's obligations under this Agreement.

- 11.2 NCC Group shall not be liable for any loss or damage caused to the other parties except to the extent that such loss or damage is caused by the negligent acts or negligent omissions of or a breach of any contractual duty by NCC Group, its employees, agents or sub-contractors in performing its obligations under this Agreement and in such event NCC Group's maximum aggregate liability arising out of or in connection with this Agreement,

whether in contract, tort, misrepresentation, under statute or otherwise, howsoever caused including (without limitation) by negligence and also including (without limitation) any liability arising from a breach of, or a failure to perform or defect or delay in performance of, any of NCC Group's obligations under this Agreement, shall be limited to [REDACTED].

- 11.3 Subject to clause 11.1, NCC Group shall not be liable to the other parties for any:
- (a) indirect, consequential and/or special loss or damage;
 - (b) loss of profit (direct or indirect);
 - (c) loss of revenue, loss of production or loss of business (in each case whether direct or indirect);
 - (d) loss of goodwill, loss of reputation, or loss of opportunity (in each case whether direct or indirect);
 - (e) loss of anticipated saving or loss of margin (in each case whether direct or indirect); and/or
 - (f) loss or damage arising out of any failure by the Owner to keep full and up-to-date back-ups and security copies of any Materials delivered under this Agreement,

arising out of or in connection with this Agreement, whether in contract, tort, misrepresentation, under statute or otherwise, howsoever caused including (without limitation) by negligence and also including (without limitation) any liability arising from a breach of, or a failure to perform or defect or delay in performance of, any of NCC Group's obligations under this Agreement.

- 11.4 NCC Group shall not be liable in any way to the Owner or the Licensee for acting in accordance with the terms of this Agreement and specifically (without limitation) for acting upon any notice, written request, waiver, consent, receipt, statutory declaration or any other document furnished to it pursuant to and in accordance with this Agreement.
- 11.5 NCC Group shall not be required to make any investigation into and shall be entitled in good faith without incurring any liability to the Owner or the Licensee to assume (without requesting evidence thereof) the validity, authenticity, veracity and due and authorised execution of any documents, written requests, waivers, consents, receipts, statutory declarations or notices received by it in respect of this Agreement.

12. **INDEMNITY**

- 12.1 Save for any claim falling within the provisions of clause 11.1 or 11.2, the Owner and the Licensee jointly and severally agree at all times to indemnify and hold harmless NCC Group in respect of all of its legal and all other costs, fees and expenses incurred directly or indirectly as a result of being brought into or otherwise becoming involved in any form of dispute resolution proceedings or any litigation of any kind between the Owner and the Licensee in relation to this Agreement to the extent that this Agreement does not otherwise provide for reimbursement of such costs.
- 12.2 The Owner shall assume all liability and shall at all times indemnify and hold harmless NCC Group and its officers, agents, sub-contractors and employees from and against any and all liability, loss, damages, costs, legal costs, professional and other expenses and any other liabilities of whatever nature, awarded against or agreed to be paid or otherwise suffered, incurred or sustained by NCC Group, whether direct, indirect or consequential as a result of or in connection with any claim by any third party(s) for alleged or actual infringement of Intellectual Property Rights arising out of or in connection with all and any

acts or omissions of NCC Group in respect of the Material as contemplated under this Agreement.

13. TERM AND TERMINATION

- 13.1 This Agreement shall continue until terminated in accordance with this clause 13.
- 13.2 If the Owner or the Licensee, as the case may be, fails to pay an invoice addressed to it for services under this Agreement within 30 days of its issue, NCC Group reserves the right to give that party written notice to pay the outstanding invoice within 30 days. If the Licensee has not paid its invoice by the expiry of the 30 day notice period, this Agreement will automatically immediately terminate. If the Owner has not paid its invoice by the expiry of the 30 day notice period, NCC Group will give the Licensee a period of 15 days to pay the Owner's invoice. If the Owner's invoice has not been paid by the expiry of the 15 day optional payment period given to the Licensee, this Agreement will automatically immediately terminate. Any amounts owed by the Owner but paid by the Licensee will be recoverable by the Licensee direct from the Owner as a debt and, if requested, NCC Group shall provide appropriate documentation to assist in such recovery.
- 13.3 Upon termination under the provisions of clause 13.2, for 30 days from the date of termination NCC Group will make the Material available for collection by the Owner or its agents from the premises of NCC Group during office hours. After such 30 day period NCC Group will destroy the Material.
- 13.4 Notwithstanding any other provision of this clause 13, NCC Group may terminate this Agreement by giving 30 days written notice to the Owner and the Licensee. In that event, the Owner and the Licensee shall appoint a mutually acceptable new custodian on similar terms and conditions to those contained herein. If a new custodian is not appointed within 14 days of delivery of such notice, the Owner or the Licensee shall be entitled to request the President for the time being of the British Computer Society (or successor body) to appoint a suitable new custodian upon such terms and conditions as he/she shall require. Such appointment shall be final and binding on the Owner and the Licensee. If NCC Group is notified of the new custodian within the notice period, NCC Group will forthwith deliver the Material to the new custodian. If NCC Group is not notified of the new custodian within the notice period, NCC Group will return the Material to the Owner.
- 13.5 The Licensee may terminate this Agreement at any time by giving written notice to NCC Group. Upon such termination, NCC Group will return the Material to the Owner.
- 13.6 If all of the Intellectual Property Rights in the Material have been assigned to a third party and the proviso in clause 6.1(f) applies such that there has been no Release Event under that clause, NCC Group shall be entitled to terminate this Agreement immediately by written notice to the Owner and the Licensee and upon such termination, unless otherwise instructed by the Owner or the Assignee, NCC Group shall destroy the Material.
- 13.7 Subject to clause 13.8, the Owner may only terminate this Agreement with the written consent of the Licensee.
- 13.8 This Agreement shall automatically immediately terminate upon release of the Material to the Licensee in accordance with clause 6.
- 13.9 If this Agreement is superseded and replaced by a new agreement in respect of the Material, this Agreement shall, upon the coming into force of the new agreement, automatically terminate. The relevant party or parties shall request NCC Group to either transfer the Material to the new agreement or ask the owner under the new agreement to deposit new material. If new material is deposited, upon its receipt, NCC Group shall, unless otherwise instructed, destroy the Material.

- 13.10 The provisions of clauses 1, 3.2, 3.3, 5, 8, 9, 10.1, 11, 12, 13.10 to 13.12 (inclusive) and 14 shall continue in full force after termination of this Agreement and the provisions of clauses 6.1(j) and 7 shall continue in full force and effect until such time as the Material has been released to the Licensee by NCC Group.
- 13.11 On and after termination of this Agreement, the Owner and/or the Licensee (as appropriate) shall remain liable to NCC Group for payment in full of any fees and interest which have become due but which have not been paid as at the date of termination.
- 13.12 The termination of this Agreement, however arising, shall be without prejudice to the rights accrued to the parties prior to termination.

14. **GENERAL**

- 14.1 A party shall notify the other parties to this Agreement, within 30 days of its occurrence, of any of the following:
- (a) a change of its name, registered office, contact address or other contact details; and
 - (b) any material change in its circumstances that may affect the validity or operation of this Agreement.
- 14.2 Within 14 days of any assignment or transfer by the Owner of any part of its Intellectual Property Rights in the Material, the Owner shall notify:
- (a) NCC Group and the Licensee of such assignment and the identity of the Assignee; and
 - (b) the Assignee of the provisions of clause 6.1(f).
- 14.3 The formation, existence, construction, performance, validity and all other aspects of this Agreement shall be governed by and construed in accordance with the laws of England and the parties submit to the exclusive jurisdiction of the English courts.
- 14.4 This Agreement, together with the Order Form and any relevant NCC Group standard terms and conditions represent the whole agreement relating to the escrow arrangements between NCC Group and the other parties for the Package and shall supersede all prior agreements, discussions, arrangements, representations, negotiations and undertakings. In the event of any conflict between any of these documents, the terms of this Agreement shall prevail.
- 14.5 Unless the provisions of this Agreement otherwise provide, any notice or other communication required or permitted to be given or made in writing hereunder shall be validly given or made if delivered by hand or courier or if despatched by first class recorded delivery (airmail if overseas) addressed to the address specified for the parties in this Agreement (or such other address as may be notified to the parties from time to time) or if sent by facsimile message to such facsimile number as has been notified to the parties from time to time and shall be deemed to have been received:
- (a) if delivered by hand or courier, at the time of delivery;
 - (b) if sent by first class recorded delivery (airmail if overseas), 2 Working Days after posting (6 days if sent by airmail);
 - (c) if sent by email, at the time of receipt by the sender of a "delivered" confirmation (provided that the sender shall not be required to produce a "read" confirmation).

- 14.6 The Owner and the Licensee shall not assign, transfer or subcontract this Agreement or any rights or obligations thereunder without the prior written consent of the other parties.
- 14.7 NCC Group shall be entitled to transfer or assign this Agreement upon written notice to both the Owner and the Licensee.
- 14.8 This Agreement shall be binding upon and survive for the benefit of the successors in title and permitted assigns of the parties.
- 14.9 If any provision of this Agreement is declared too broad in any respect to permit enforcement to its full extent, the parties agree that such provision shall be enforced to the maximum extent permitted by law and that such provision shall be deemed to be varied accordingly. If any provision of this Agreement is found by any court, tribunal or administrative body of competent jurisdiction to be wholly or partly illegal, invalid, void or unenforceable, it shall, to the extent of such illegality, invalidity or unenforceability, be deemed severable and the remaining part of the provision and the rest of the provisions of this Agreement shall continue in full force and effect.
- 14.10 Save as expressly provided in this Agreement, no amendment or variation of this Agreement shall be effective unless in writing and signed by a duly authorised representative of each of the parties to it.
- 14.11 The parties shall not be liable to each other or be deemed to be in breach of this Agreement by reason of any delay in performing, or failure to perform, any of their obligations under this Agreement if the delay or failure was for a reason beyond that party's reasonable control (including, without limitation, fire, flood, explosion, epidemic, riot, civil commotion, any strike, lockout or other industrial action, act of God, war or warlike hostilities or threat of war, terrorist activities, accidental or malicious damage, or any prohibition or restriction by any governments or other legal authority which affects this Agreement and which is not in force on the date of this Agreement). A party claiming to be unable to perform its obligations under this Agreement (either on time or at all) in any of the circumstances set out above must notify the other parties of the nature and extent of the circumstances in question as soon as practicable. If such circumstances continue for more than six (6) months, any of the other parties shall be entitled to terminate this Agreement by giving one month's notice in writing.
- 14.12 No waiver by any party of any breach of any provisions of this Agreement shall be deemed to be a waiver of any subsequent or other breach and, subject to clause 6.6, no failure to exercise or delay in exercising any right or remedy under this Agreement shall constitute a waiver thereof.
- 14.13 This Agreement is not intended to create any right under the Contracts (Rights of Third Parties) Act 1999 which is enforceable by any person who is not a party to this Agreement and the rights of any third party under the said act are hereby expressly excluded.
- 14.14 This Agreement may be executed in any number of counterparts and by different parties in separate counterparts. Each counterpart when so executed shall be deemed to be an original and all of which together shall constitute one and the same agreement.

Signed for and on behalf of **CONSTRUCCIONES Y AUXILIAR DE FERROCARRILES S.A.**

Name:;

Position:;

Signed for and on behalf of **NCC GROUP ESCROW LIMITED**

Name:;

Position:;

Signed for and on behalf of **Docklands Light Railway Limited**

Signature:

Name:

Position:

Date:

APPENDIX 1

The Package

The software package known as [x]⁴ or any other name(s) as may be given to it by the Owner from time to time.

⁴ Insert name of software.

APPENDIX 2**NCC Group's Fees**

	DESCRIPTION	OWNER	LICENSEE
1.	Annual Fee (payable on completion of this Agreement and in advance of each anniversary thereafter)	Nil	██████
2.	Scheduled Update Fee (2nd and subsequent scheduled deposits in any one year, payable on completion of this Agreement and in advance of each anniversary thereafter)	Nil	██████
3.	Unscheduled Update Fee (per unscheduled deposit)	Nil	██████
4.	Release Fee (plus NCC Group's reasonable expenses)	Nil	██████

Additional fees will be payable to NCC Group by the Licensee (unless otherwise agreed between the parties) for the following where applicable:

- Storage Fee for deposits in excess of one cubic foot;
- Any novation or replacement of this Agreement at the request of the Owner or the Licensee;
- Integrity Testing Fee for deposits consisting of more ████████████████████.

APPENDIX 3
Licence Agreement⁵

⁵ Note: Insert full details of the agreement related to the Package.

Part B - Corporate IPR

1. **Docklands Light Rail Signs standard (Issue 2):** <https://tfl.gov.uk/info-for/suppliers-and-contractors/design-standards>
2. The TfL and London Underground Roundel, including the following registered and pending trademarks:

Country	Registration/ Application	Trademark	Class
UK	1321443	BLANK ROUNDDEL	39
UK	1094664	ROUNDDEL & DEVICE	6 16 19 21 26 28
UK	586249	ROUNDDEL	16
UK	2236110	UNDERGROUND & ROUNDDEL	3 16 18 32 42
UK	1094661	UNDERGROUND & ROUNDDEL DEVICE	24 25
UK	2224385	UNDERGROUND AND ROUNDDEL	25
UK	1321442	UNDERGROUND ROUNDDEL	39
UK	1178433	BAR & CIRCLE DEVICE	12
CTM	1101336	LONDON UNDERGROUND & ROUNDDEL	14 16 18 25 32
CTM	299206	ROUNDDEL DEVICE	16 25 28 39
CTM	814004	ROUNDDEL DEVICE & UNDERGROUND	18 25 42
UK	3399528	DLR & ROUNDDEL	6 9 12 16 18 19 25 35 36 37 39 42 43
UK	3399536	DLR & ROUNDDEL	6 9 12 16 18 19 25 35 36 37 39 42 43

3. The New Johnston typeface of design type NJBook98, NJLight98 and NJMedium98 (the New Johnston Typeface).
4. The Docklands Light Railway Route Map.
5. The London Underground Tube Map.
6. The following registered and pending trademarks:

Country	Registration/ Application	Trademark	Class
UK	1527316	BAKERLOO	39
UK	1527393	JUBILEE	39
UK	2153485	MIND THE GAP	16 25 42
UK	1527319	THE CENTRAL LINE	39
UK	1527391	THE CIRCLE LINE	39
UK	1527429	THE DISTRICT LINE	39
UK	1527308	THE METROPOLITAN LINE	39
UK	1527388	THE NORTHERN LINE	39
UK	1527310	THE PICCADILLY LINE	39
UK	1527320	THE TUBE	39
UK	1527321	THE UNDERGROUND	39
UK	1527312	THE VICTORIA LINE	39
UK	2216375	TRAMLINK AND DEVICE	6 16 25 39
UK	1454868	DEVICE ONLY	16
UK	1454869	DEVICE ONLY	35
UK	1454870	DEVICE ONLY	37
UK	1454871	DEVICE ONLY	39

UK	1454872	DEVICE ONLY	42
UK	1457590	LONDON UNDERGROUND	16
UK	2251158	THE TUBE/TUBE	3 9 14 16 18 21
UK	2251513	TfL/TfL	6 9 12 16 19 35 36 37 39
CTM	1580992	ALL ZONES	16 21 25
CTM	448571	LONDON UNDERGROUND	14 16 25 28
CTM	1677277	LOST PROPERTY	3 14 16
CTM	1677814	LOST PROPERTY	18 25 30
CTM	299578	UNDERGROUND	16 25 28
UK	3399522	Docklands Light Railway	6 9 12 16 18 19 25 35 36 37 39 42 43
UK	3399515	DLR	6 9 12 16 18 19 25 35 36 37 39 42 43

7. The following unregistered trademarks:

- The Hammersmith & City Line
- The Waterloo & City Line
- The East London Line

SCHEDULE 24

[Not used.]

SCHEDULE 25

[Not used.]

SCHEDULE 26

[Not used.]

SCHEDULE 27**Cyber Security****Part A – Information Security Management**

The cyber security obligations set out in this schedule 27 apply solely to the extent that such cyber security obligations are relevant to the Software, the IT-related elements of the Purchased Items and/or the IT-related elements of the Manufacturer's performance of its obligations under this Agreement (excluding this schedule 27).

1. SCOPE AND PURPOSE

1.1 This part A (Information Security Management) of schedule 27 (Cyber Security) covers:

- (a) the principles of protective security to be applied by the Manufacturer in its delivery of the Works, including any use by the Manufacturer of computer hardware and software, information technology systems and processes in relation thereto (the **"IT Services"**);
- (b) wider aspects of security relating to the IT Services;
- (c) the testing and audit of the performance of the IT Services to ensure their compliance with the security requirements;
- (d) compliance with all applicable security standards as detailed herein;
- (e) obligations in the event of an actual, potential or attempted breach of security;
- (f) development, implementation, operation, maintenance and continual improvement of the Information Security Management Plan as described in paragraph 13 of this part A of schedule 27 (the **"Information Security Management Plan"** or **"ISMP"**);
- (g) development, implementation, operation, maintenance and continual improvement of the Information Security Management System as described in paragraph 14 of this part A of schedule 27 (the **"Information Security Management System"** or **"ISMS"**); and
- (h) certification of the IT Services and/or ISMS to ISO/IEC 27001 and ISO/IEC 27002.

2. SECURITY PRINCIPLES

2.1 The Manufacturer must at all times comply with the security standards set out in the Purchaser's Information Security Policy and apply Good Industry Practice in the delivery of the Works.

2.2 The Manufacturer shall, and procure that its Subcontractors shall, at all times ensure that the Works are carried out in such a way as to:

- (a) minimise and mitigate security threats to the Works to the fullest extent possible;
- (b) shall fully comply at all times with:
 - (i) the Purchaser's Information Security Policy;
 - (ii) the requirements of PCI DSS if relevant from time to time;

- (iii) Good Industry Practice in the delivery of the Works and provision of the IT Services; and
 - (iv) the policies and requirements set out in any applicable Security Aspects Letter.
- 2.3 The Manufacturer shall keep all data, information, premises, and IT system(s) secure and protected against all loss, damage, corruption, unavailability and unauthorised use, access or disclosure in accordance with standards not to fall below those standards:
 - (a) set out in the Purchaser's Information Security Policy; and
 - (b) consistent with Good Industry Practice.
- 2.4 The Purchaser may from time to time specify the appropriate security classification at which the Manufacturer shall protect and keep secure all data, information, and IT system(s) and the Manufacturer shall design and implement the controls, processes and procedures required to comply with such security classification. To the extent that the security classification specified by the Purchaser requires any changes to this Agreement, the impact of such changes shall be considered and implemented in accordance with the Change Procedure.
- 2.5 The Manufacturer shall be liable for any breaches of the access permissions allocated to the Manufacturer or its personnel for access to the IT Services.

3. **ACCESS CONTROLS AND SECURE CONFIGURATION OF SYSTEMS**

- 3.1 The Manufacturer shall comply with all obligations relating to the patching and configuration management of the IT Services and the performance of the Works in accordance with the Purchaser's Information Security Policy. The Manufacturer shall develop and implement policies to ensure that:
 - (a) security patches are applied in a reasonable time in accordance with overall risk management;
 - (b) account management and configuration control processes are implemented to ensure that access by the Manufacturer's personnel is limited to the functionality required for their role in supporting the delivery of the IT Services including the review and revocation of any rights when any of the Manufacturer's personnel change roles or no longer support the delivery of the IT Services. Such processes shall include consideration of authentication mechanisms such as password complexity and additional authentication factors (such as physical tokens);
 - (c) any system administration functionality is strictly controlled and restricted to those of the Manufacturer's personnel who need to have access and that the ability of any of the Manufacturer's personnel to change configurations is limited and fully auditable;
 - (d) each of the Manufacturer's personnel understand what is acceptable use of the IT Services and are aware of the consequences of non-compliance;
 - (e) any preconfigured passwords delivered with any Computer Based Engineering Assets are changed prior to their implementation for use in carrying out the IT Services; and
 - (f) the IT Services have appropriate boundary controls in place to ensure that risk of unauthorised access is reduced to an acceptable level in accordance with any risk management procedures.

- 3.2 In the absence of any specific obligations on the Manufacturer relating to asset management and the provisions of asset registers set out in this Agreement, the Manufacturer shall create and maintain an inventory of Computer Based Engineering Assets used to supply the IT Services recording the classification of information advised by the Purchaser and identifying the criticality of the Computer Based Engineering Assets in the provision of the Works.

4. **MANUFACTURER PERSONNEL**

- 4.1 The Manufacturer shall appoint a member of its organisation who shall be responsible for the development, monitoring, enforcing, maintenance and enhancement of all security aspects set out under this Agreement (the "**Security Manager**").
- 4.2 The Manufacturer shall certify to the Purchaser that the Manufacturer's personnel hold all appropriate security clearances required to perform their duties under this Agreement. Certification shall include, but not be limited to:
- (a) any individual who will be engaged on supporting the delivery of the Works at any time during the following six (6) months; and
 - (b) the name, date of birth, type of clearance and clearance reference number for each such individual.
- 4.3 The Manufacturer shall provide the security clearance certification set out in paragraph 4.2 within five (5) Working Days of the Effective Date and at six (6) monthly intervals thereafter.
- 4.4 The Manufacturer shall immediately notify the Purchaser where any security clearance issues have been raised with respect to any of the Manufacturer's personnel and the Manufacturer shall undertake any mitigating action as requested by the Purchaser in relation to security clearance issues.
- 4.5 The Manufacturer shall inform the Purchaser immediately of the names of any of the Manufacturer's personnel whose employment is terminated , and those whose position has changed in relation to the provision of the Works such that system access rights are no longer appropriate, and will assist the Purchaser as reasonably required to revoke all systems access rights and user accounts associated with the named terminated or re-allocated personnel.
- 4.6 Where the Manufacturer's systems will have connections to transfer data to and from the Purchaser's systems, the TfL Code of Connection and the Purchaser's Information Security Policy must be adhered to.
- 4.7 The Manufacturer shall maintain a joiners and leavers policy in line with Good Industry Practice and shall, on the Purchaser's request, promptly supply a copy of this policy to the Purchaser.
- 4.8 If the Manufacturer is required to delete or remove any data relating to the Project from any systems not owned or managed by the Purchaser, the Manufacturer shall employ data sanitisation mechanisms to permanently remove such data in such a way that the data is made non-recoverable, in a manner with the strength and integrity commensurate with the security category or classification of the relevant data stored or processed.

5. **TRAINING**

- 5.1 The Manufacturer shall ensure that any of the Manufacturer's personnel who will be engaged in the provision of the Works have undergone suitable security awareness training prior to their deployment such security awareness to include, but not be limited to,

account usage, malicious software, home and mobile working, use of removable media, audit and inspection and Security Incident reporting. Thereafter the Manufacturer shall implement a continuous programme of security awareness training for the duration of this Agreement.

- 5.2 The Manufacturer shall provide additional training as required which may result from a Security Incident, patches and updates or any other changes or variations to the IT Services.
- 5.3 The Manufacturer shall ensure that all of its personnel are familiar with their responsibilities under relevant legislation or policies including, but not limited to, the Data Protection Act, the Freedom of Information Act, as well as the handling of protectively marked materials both in employment and following any termination or change of employment.
- 5.4 The Manufacturer shall monitor the effectiveness of any training given to its personnel.

6. **TESTING & AUDIT**

- 6.1 The Manufacturer shall conduct regular automated vulnerability scans of the Works and make sure that any identified vulnerabilities are remedied within a reasonable period of time.
- 6.2 The Manufacturer shall conduct security tests to assure compliance with the Information Security Management Plan (to be agreed by the Purchaser as part of the AiP Assurance Stage (as defined in the TAP). Security testing should be conducted by the Manufacturer in accordance with the agreed Information Security Management Plan. Such security tests must be conducted, as a minimum, every 12 months from the Commencement Date and shall also include security penetration testing of the Works and the associated technical infrastructure. Wherever the IT Services are accessible from the internet or other such public network then security penetration tests must also be carried out from the internet or the public network, and vulnerabilities remediated.
- 6.3 The Purchaser reserves the right to require the Manufacturer to carry out additional security testing over and above the obligations set out in paragraph 6.2 as a result of a Security Incident.
- 6.4 The Purchaser shall be entitled to send a representative to witness the conduct of any audit or security tests. The Manufacturer shall provide the Purchaser with the results of such audits (in a form agreed with the Purchaser in advance) as soon as practicable after the completion of each audit or test.
- 6.5 Where any testing or audit carried out pursuant to this paragraph 6 reveals any non-compliance or vulnerability then the Manufacturer shall promptly notify the Purchaser and submit a rectification plan to the Purchaser to address such non-compliance or vulnerabilities.
- 6.6 In addition to the auditing requirements of PCI DSS or other industry standards, where applicable, the Manufacturer shall at least once within each 12 month period from the Commencement Date, engage an appropriately skilled third party to conduct a formal audit of the IT Services against the then current versions of the following:
 - (a) the controls, processes and procedures put in place or required pursuant to this Agreement;
 - (b) the Data Protection Act (using BS10012 or another standard as agreed with the Purchaser) where applicable; and

(c) the agreed Information Security Management Plan.

6.7 Without prejudice to any other right of audit or access granted to the Purchaser pursuant to this Agreement, the Purchaser and/or its representatives may, subject to the Manufacturer's consent as to process and timing, (such consent not to be unreasonably withheld or delayed), carry out such audits as are reasonably necessary in relation to the Information Security Management Plan.

7. **SECURITY INCIDENT MANAGEMENT**

7.1 The Manufacturer shall, and shall procure that its Subcontractors shall:

- (a) establish a capability to identify and respond to Security Incidents to mitigate their impact on the IT Services and/or performance of the Works;
 - (i) promptly identify all Security Incidents;
 - (ii) record each Security Incident and corresponding severity level in an incident log; and
 - (iii) without limitation to the other provisions of this Agreement, follow the Purchaser's instructions in relation to the identification and resolution of any Security Incident.

7.2 In the event of a Security Incident:

- (a) either Party shall notify the other as soon as possible in accordance with the agreed Security Incident management process (to be detailed within the Information Security Management Plan upon becoming aware of any Security Incident or any potential Security Incident.
- (b) the Manufacturer shall:
 - (i) immediately take the steps necessary to remedy or protect the integrity of the IT Services and the Works against any such Security Incident;
 - (ii) promptly escalate to a level of seniority within the Manufacturer's organisation as the Purchaser may reasonably require; and
 - (iii) develop and submit a remediation plan including full details of the steps to be taken by the Manufacturer to:
 - (A) correct, make good, reinstate, replace and remediate all deficiencies and vulnerabilities, loss and/or damage to the IT Services and/or the Works in connection with the Security Incident; and
 - (B) perform or re-perform any security tests or alternative tests relating to the security of the IT Services and/or the Works as appropriate and within the timescales specified by the Purchaser, to assure the Purchaser that the Security Incident has been addressed and its effects mitigated,

and shall submit a copy of such remediation plan to the Purchaser for its Approval. Subject to such Approval, the Manufacturer shall fully implement and comply with the remediation plan.

7.3 The Manufacturer shall provide a detailed report to the Purchaser within two (2) Working Days of the resolution of the Security Incident, such report to detail:

- (a) the nature of the Security Incident;
 - (b) the causes and consequences of the Security Incident;
 - (c) the actions taken to handle the Security Incident and timeframes applicable to resolution of the Security Incident; and
 - (d) actions to prevent recurrence of the Security Incident.
- 7.4 The Purchaser shall have the right to assess and inspect any and all records and registers relating to any Security Incident or security breach which has occurred or where the Purchaser believes that a breach of security has or is likely to occur.
8. **SECURITY LOGGING AND MONITORING**
- 8.1 The Manufacturer shall ensure it has a monitoring strategy for all aspects of this part A (Information Security Management) of schedule 27 (Cyber Security). This monitoring strategy should be adapted and altered where necessary to reflect:
- (a) emerging changes in Good Industry Practice;
 - (b) any operational changes or variations to the IT Services and/or associated processes;
 - (c) any perceived or changed security threats;
 - (d) any Security Incident; and
 - (e) any reasonable request by the Purchaser.
- 8.2 The monitoring strategy should include, but not be limited to, monitoring and logging:
- (a) networks and host systems to detect attacks;
 - (b) activity of the Manufacturer's personnel to identify accidental input of information, misuse or unauthorised use of the IT Services, access to sensitive data and appropriate use;
 - (c) wireless access points to ensure that any wireless network is secure and no unauthorised access points are available; and
 - (d) traffic for unusual or malicious incoming and outgoing activity that could be indicative of an attempt or actual attack.
- 8.3 The Manufacturer shall ensure that any monitoring process complies with all Applicable Laws and Standards.
- 8.4 The Manufacturer shall maintain a log of:
- (a) all access by its personnel to personal data;
 - (b) all logon attempts by its personnel and those of its Subcontractors, successful and failed, to the IT Services requiring authentication;
 - (c) all actions taken by any of the Subcontractors' or Manufacturer's personnel with administrative privileges;
 - (d) all creations of accounts for any of the Subcontractors' or Manufacturer's personnel and their relevant privileges;

- (e) all deletions of accounts for any of the Subcontractors' or Manufacturer's personnel;
 - (f) IT system group memberships;
 - (g) group privilege changes against each of the system resources;
 - (h) unauthorised use of input and output devices and removable media; and
 - (i) all access to log files and audit systems.
- 8.5 The Manufacturer shall implement recording mechanisms to identify any of the Subcontractors' or Manufacturer's personnel and their actions when cases of misuse and fraud are being investigated and shall ensure that any recording mechanisms are protected against manipulation and disruption.
- 8.6 Logs must be retained by the Manufacturer.
- 8.7 The Manufacturer shall regularly review logs to identify anomalies or suspicious activity and any Security Incidents must be notified to the Purchaser in accordance with paragraph 7 (Security Incident Management).
- 8.8 The Manufacturer shall provide copies of any system audit log data (being any log data that is collected by the Manufacturer during the delivery of the Works and IT Services) to the Purchaser on request in a human readable electronic format, acceptable formats including, but not limited to, Comma Separated Value or Microsoft Excel.
9. **MALICIOUS SOFTWARE**
- 9.1 The Manufacturer shall, as an enduring obligation and at its own cost, use the latest versions of anti-virus definitions and software available from an industry accepted anti-virus software vendor (unless otherwise agreed in writing between the Parties) to check for, contain the spread of, and minimise the impact of malicious software.
- 9.2 The Manufacturer shall not introduce into any of the Purchaser's or the TfL Group's computer systems anything, including any computer program code, virus, malware, authorisation key, license control utility or software lock, which is intended by any person to, is likely to, or may:
- (a) impair the operation of the software or any other computer systems or programs in the possession of the Purchaser or the TfL Group or impair the receipt of the benefit of the Works; or
 - (b) cause loss of, or corruption or damage to, any program or data held on the Purchaser's or the TfL Group's computer systems.
10. **REMOVABLE MEDIA**
- 10.1 Removable media shall only be used to support the delivery of the Works with the prior consent of the Purchaser and appropriate controls must be put in place to ensure that the use of any input or output devices and removable media is restricted strictly to that needed to supply and support delivery of the Works.
- 10.2 All of the Manufacturer's personnel with access to removable media must be subject to acceptable use policies, ongoing risk management procedure and appropriate training. Such policies and procedures shall seek to minimise the use of removable media and the integrity of removable media.

- 10.3 Where removable media is approved for use by the Purchaser, the Manufacturer shall ensure that suitable anti-virus and anti-malware checking solutions shall be deployed to actively scan for the introduction of malware onto systems and networks through all data imports and exports from removable media and that the removable media is encrypted to a suitable standard agreed by the Purchaser.
- 10.4 Where data created by or on behalf of the Purchaser is imported or exported via removable media, the removable media should be suitably encrypted to a standard agreed by the Purchaser.
- 10.5 Any loss or interception of data as a result of use of removable media must be reported to the Purchaser in accordance with Paragraph 7 (Security Incident Management) and the Purchaser reserves the right in such instances to rescind its approval to further use of removable media.

11. **MOBILE AND HOME WORKING**

- 11.1 Where home or mobile working is carried out by any of the Manufacturer's personnel, the Manufacturer shall develop and maintain a home and mobile working policy. This policy must be approved by the Purchaser and ensure that:
 - (a) data is protected and suitably encrypted when stored outside of the Manufacturer's premises;
 - (b) data is protected when being accessed, imported or exported through a connection other than one which is accessed at the Manufacturer's premises; and
 - (c) Security Incident management plans acknowledge the increased risk posed by home and mobile working such as theft or loss of data and/or devices.
- 11.2 Where the Manufacturer does not have a home and mobile working policy in place, then the Purchaser's home and mobile working policy shall apply to the Manufacturer.
- 11.3 Any loss or interception of data as a result of home or mobile working must be reported to the Purchaser in accordance with paragraph 7 (Security Incident Management).

12. **DISPOSALS**

- 12.1 Any Computer Based Engineering Assets or removable media used in the performance of the Works shall not be reused or shall only be reused after secure wiping to a standard agreed with Purchaser. Where Computer Based Engineering Assets are to be disposed of they shall be suitably securely disposed to a standard agreed with the Purchaser following termination of this Agreement or when it is no longer required for the delivery of the Works, whichever is sooner, and documented accordingly.
- 12.2 The Manufacturer shall ensure that whenever a Computer Based Engineering Asset is disposed of its disposal and any appropriate disposal record is recorded against its entry in any asset register, or in the absence of an asset register, the inventory developed under paragraph 3.2.
- 12.3 Where a Computer Based Engineering Asset is disposed of which is the property of the Purchaser, any achieved scrap value shall be for the Purchaser's account.

13. **INFORMATION SECURITY MANAGEMENT PLAN**

- 13.1 The Manufacturer shall provide the Information Security Management Plan within three (3) months of the Commencement Date (for Approval by the Purchaser). The Information Security Management Plan must be based on the draft information security management

plan submitted by the Manufacturer in support of the submission with respect to the AiP Assurance Stage (as defined in the TAP).

13.2 The Manufacturer shall ensure that the Information Security Management Plan as a minimum shall:

- (a) set out the security measures to be implemented and maintained by the Manufacturer in relation to all aspects of the Works and all processes associated with the delivery of the Works (including the IT Services) and shall at all times comply with and specify security measures and procedures which are sufficient to ensure the Works and IT Services comply with this part A (Information Security Management) of schedule 27 (Cyber Security);
- (b) reference and comply with any Applicable Laws and Standards and the Purchaser's Information Security Policy;
- (c) state any other cyber security industry standards over and above those set out in this part A (Information Security Management) of schedule 27 (Cyber Security) which are applicable to the Works and/or IT Services;
- (d) state all applicable information security legislation and regulations applicable to the delivery of the Works and the IT Services; and
- (e) comply with any other security requirements as the Purchaser may reasonably request from time to time.

13.3 The Manufacturer shall submit the draft Information Security Management Plan for Approval by the Purchaser as part of the technical case with respect to the AiP Assurance Stage (as defined in the TAP).

13.4 The Information Security Management Plan will be fully reviewed by the Manufacturer at least annually and updated as required to reflect:

- (a) changes to Applicable Laws and Standards;
- (b) emerging changes in Good Industry Practice;
- (c) any operational change or variation to the Works and/or associated processes (including the IT Services);
- (d) any new perceived or changed security threats; and
- (e) any reasonable request by the Purchaser,

and any changes made to the Information Security Management Plan shall be submitted to the Purchaser for Approval.

13.5 In the event that the Manufacturer is unable to meet any of the obligations set out in paragraphs 13.1, 13.2 or 13.4 above, the Manufacturer shall submit a rectification plan to the Purchaser and the Purchaser may, at its absolute discretion, agree to the waiving of certain obligations as part of the Approval of such rectification plan.

13.6 Where unspecified in this Agreement, and where relevant to this Agreement, the Manufacturer must also comply with UK government '10 Steps to Cyber Security', and any other standard deemed necessary at that time.

13.7 Where the Manufacturer is not complying with aspects of '10 Steps to Cyber Security', the Manufacturer must inform the Purchaser and provide the Purchaser with a register of

areas of non-compliance for consideration. The Purchaser may carry out a risk assessment to establish whether the areas of '10 Steps to Cyber Security' with which the Manufacturer is failing to comply has an impact on the security of the Works or the IT Services.

14. INFORMATION SECURITY MANAGEMENT SYSTEM (ISMS)

- 14.1 The Manufacturer shall develop, implement, operate, maintain and regularly improve the ISMS. The Manufacturer shall ensure that the ISMS includes the Security Incident management process, dealing with, among other matters, data Security Incident management.
- 14.2 The ISMS shall, unless otherwise specified by the Purchaser, be designed to protect all aspects of the Works and all processes associated with the delivery of the Works, including the Purchaser's and TfL's information technology systems, the IT Services and any ICT system, information and data (including Confidential Information and the Purchaser's data) to the extent used by the Purchaser or the Manufacturer in connection with this Agreement.
- 14.3 Any document referenced in the ISMS shall be made available to the Purchaser.
- 14.4 In the event that the investigation of a Security Incident reveals weaknesses or flaws in the ISMS, then any change to the ISMS to remediate the weakness or flaw must be Approved by the Purchaser through re-submission of the Information Security Management Plan. For the avoidance of doubt, the change to the ISMS shall be at no cost to the Purchaser.
- 14.5 The Manufacturer shall process personal data, for lawful purposes, only to the extent, and in such manner, as is necessary for the provision of the Works or as is required by Law or any Competent Authority.
- 14.6 The ISMS shall be fully reviewed / fully audited in accordance with ISO/IEC 27001 by the Manufacturer at least annually, or from time to time as agreed with the Purchaser, to reflect:
- (a) emerging changes in Good Industry Practice;
 - (b) any operational changes or variations or proposed operational changes or variations to the Works and/or associated processes (including the IT Services);
 - (c) any new perceived or changed security threats; and
 - (d) any reasonable request by the Purchaser.
- 14.7 The Manufacturer shall provide the Purchaser with the results of such reviews as soon as reasonably practicable after their completion. The results of the review should include, without limitation:
- (a) suggested improvements to the effectiveness of the ISMS;
 - (b) updates to the risk assessments;
 - (c) proposed modifications to the procedures and controls that affect the ability to respond to events that may impact on the ISMS; and
 - (d) suggested improvements in measuring the effectiveness of controls.
- 14.8 Any change or amendment which the Manufacturer proposes to make to the ISMS as a result of a review of the ISMS or to address a non-compliance with the Information

Security Policy shall be subject to the Change Procedure and shall not be implemented until Approved by the Purchaser. Such change or amendment shall be made at no cost to the Purchaser.

- 14.9 Without prejudice to paragraph 14.8, any other change or amendment which the Manufacturer proposes to make to the ISMS shall be subject to Approval by the Purchaser.

15. **COMPLIANCE WITH ISO/IEC 27001**

- 15.1 The Manufacturer shall provide a statement of applicability with respect to ISO/IEC 27001 for Approval by the Purchaser.
- 15.2 The Manufacturer shall obtain certification from a UKAS registered organisation of the ISMS to ISO/IEC 27001 for any aspects of the Manufacturer's business that are necessary to support the Works. The Manufacturer shall obtain such certification within 12 months of the Commencement Date and shall maintain such certification for the duration of this Agreement.
- 15.3 If certain parts of the ISMS do not conform to Good Industry Practice, or controls as described in ISO/IEC 27001, the Manufacturer shall promptly notify the Purchaser of this and the Purchaser in its absolute discretion may waive the requirement for certification in respect of the relevant parts.
- 15.4 Without prejudice to any other right of audit or access granted to the Purchaser pursuant to this Agreement, the Purchaser shall be entitled to carry out, or appoint an independent auditor to carry out, such regular security audits as may be required in accordance with Good Industry Practice in order to ensure that the ISMS maintains compliance with the principles and practices of ISO/IEC27001.
- 15.5 If, on the basis of evidence provided by such audits, it is the Purchaser's reasonable opinion that compliance with the principles and practices of ISO/IEC 27001 is not being achieved by the Manufacturer, then the Purchaser shall notify the Manufacturer of the same and the Manufacturer shall submit a rectification plan setting out how it will become compliant with principles and practices of ISO/IEC 27001.

16. **APPROVED PRODUCTS**

- 16.1 The Manufacturer shall ensure that products providing security enforcing functionality are certified under the CESG Commercial Product Assurance (CPA) Scheme to the appropriate grade, as required by the Information Security Policy documents, where such product is available.
- 16.2 Where a product provides cryptographic functionality but has no assurance under the CPA Scheme, then the product should be assured under the CESG Assisted Products Services (CAPS) to a level commensurate with the assurance requirements set out in IAS1&2 Supplement.
- 16.3 Where a product is not assured under either the CPA or CAPS schemes, the Purchaser will consider other recognised assurance, such as Common Criteria Certification, to a level commensurate with the assurance requirements set out in IAS1&2 Supplement.
- 16.4 Where a product has no formal assurance, the Purchaser reserves the right to require bespoke assurance of that product under a recognised scheme such as CESG Tailored Assurance Service (CTAS).

17. **INSPECTION**

- 17.1 The Purchaser and any person nominated by the Purchaser has the right to audit any and all records at any time from the date of this Agreement until the end of the Train Warranty Period on giving to the Manufacturer what the Purchaser considers to be reasonable notice (whether in writing or verbally) and at any reasonable time to inspect any aspect of the Manufacturer's performance of the Works (including the provision of the IT Services). The Purchaser shall use reasonable endeavours to co-ordinate its audits and to manage the number, scope, timing and method of undertaking audits so as to ensure that the Manufacturer is not, without due cause, disrupted or delayed in the performance of its obligations under this Agreement.
- 17.2 The Manufacturer grants to the Purchaser and its agents the right, at any time, on two Working Days' notice, to audit and/or test the security and robustness of the software, the Works, the IT Services and/or the Manufacturer's compliance with the Purchaser's requirements on security, data integrity and protection against breach of confidentiality. Such audits and tests may include penetration testing and ethical hacking and the Manufacturer grants consent for such tests and audits to be performed notwithstanding any provisions contained within the Computer Misuse Act 1990 or the Police and Justice Act 2006. In view of the fact that such audits and testing may be intended to simulate a criminal attack, the Manufacturer agrees not to take any action against the Purchaser or its agents performing the audits or tests and that the Purchaser and its agents shall not be responsible or liable for any loss, damage, expenses or claims incurred by the Manufacturer as a result of such tests or audits, including any loss or damage caused to the Manufacturer's systems or the Manufacturer's business or any third party claims brought against the Manufacturer relating to or arising out of such tests or audits except to the extent that it would be unlawful for the Purchaser not to be responsible or liable. The Manufacturer agrees to indemnify the Purchaser and its agents against any loss, damage or expenses that the Purchaser or its agents may incur by reason of claims, actions, demands or proceedings brought against the Purchaser or its agents by third parties, including the Manufacturer's suppliers, arising out of or in connection with such audits or tests.
- 17.3 The Manufacturer shall provide the Purchaser and/or any person nominated by the Purchaser with all reasonable co-operation including:
- (a) granting access to any premises, equipment, plant, machinery or systems used in the Manufacturer's performance of this Agreement, and where such premises, equipment, plant, machinery or systems are not the Manufacturer's own, using all reasonable endeavours to procure such access;
 - (b) ensuring that appropriate security systems are in place to prevent unauthorised access to, extraction of and/or alteration to any records;
 - (c) making all records available for inspection and providing copies of any records if requested; and
 - (d) making the Manufacturer's personnel available for discussion with the Purchaser.
- 17.4 Any audit, inspection and/or testing by the Purchaser pursuant to paragraph 17.2 shall not relieve the Manufacturer or any of its Subcontractors from any obligation under this Agreement or prejudice any of the Purchaser's rights, powers or remedies against the Manufacturer.
- 17.5 The Manufacturer shall promptly, to the extent reasonably possible in each particular circumstance, comply with the Purchaser's reasonable requests for access to senior personnel engaged in the Manufacturer's performance of the Works and/or the IT Services.

17.6 This paragraph 17 shall survive termination of this Agreement.

Part B - Cyber Security

1. DEFINITIONS

For the purposes of this schedule 27, the following words and expressions shall have the following meanings:

"Access Control Lists" means the table that tells a computer operating system which access rights each user has to a particular system object, such as a file directory or individual file;

"Access Layer" means the lowest layer of the hierarchical network design model, providing local network access to hosts or endpoints (also known as the **"desktop layer"**);

"Achieved Security Level" means actual levels of security for a particular system, measured after a system design is available or when a system is in place. They are used to establish that the system security is meeting the goals that were originally set out in the Target Security Level;

"Cell Security Zone" [REDACTED]

"Computer Based Engineering Asset" means any engineering asset containing software, firmware, programmable hardware devices or data links;

"Control Hierarchy Level(s)" means those levels that define the specific functions and domains of control, operations and other business systems within manufacturing/industrial organisations as per the PERA model;

"Core Layer" means the highest layer of the hierarchical network design model, providing optimal transport between sites using high speed switching (also known as the **"backbone"** or **"foundation network"**);

"Cyber Security Case" has the meaning given in paragraph 33.1(h) of this part B of schedule 27;

"Cyber Security Management Plan" or **"CSMP"** has the meaning given in paragraph 3.1 of this schedule 27;

"Data Diode" means a unidirectional gateway implemented at the physical layer;

"Distribution Layer" means the middle layer of the hierarchical network design model, which provides routing and policy based connectivity (also known as the **"workgroup layer"**);

"Enterprise Security Zone" [REDACTED]

"Information Technology" means computer based assets and supporting network infrastructure for commercial decision making, planning, business process management, and resource allocation;

"Manufacturing Security Zone"

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED];

"Operational Technology" means the hardware and software that detects or causes a change through the direct monitoring and/or control of physical devices, processed and events in the enterprise;

"Penetration Testing" means the tools and techniques for testing a computer system, network or web application to find vulnerabilities that an attacker could exploit;

"Proxy ARP Protection" means a technique by which a device on a given network answers ARP queries for a network address that is not on that network;

"Security Zone" or **"Zone"** means a logical grouping of physical, informational, and application assets sharing common security requirements. A security zone has a border, which is the boundary between included and excluded components. The concept of security zone also implies the need to access the assets in a security zone from both internal and external. There can also be security zones within security zones, or security subzones to provide layered security;

"Statement of Applicability" or **"SOA"** means a document which identifies the controls chosen for the relevant environment, and explains how and why they are appropriate. The SOA is derived from the output of the risk assessment/risk treatment plan and, if ISO27001 compliance is to be achieved, must directly relate the selected controls back to the original risks they are intended to mitigate; and

"Target Security Level" means the desired level of security for a particular system, usually determined by performing a risk assessment on a system and determining that it needs a particular level of security to ensure its correct operation.

2. **GLOSSARY**

Acronym	Description
AES	Advanced Encryption Standard
ARP	Address Resolution Protocol
BIOS	Basic Input/Output System
CBC	Cipher Block Chaining
CCMP	Counter Mode CBC-MAC Protocol
CISSP	Certificate Information Security Professional
CPNI	Centre for the Protection of National Infrastructure
CPU	Central Processor Unit
DMZ	De-Militarised Zone
DoS	Denial of Service

Acronym	Description
DSA	Digital Signature Algorithm
DVD	Digital Video Disc
EAP	Extensible Authentication Protocol
EAP-TLS	Extensive Authentication Protocol – Transport Layer Security
FHRPs	First Hop Redundancy Protocols
GICSP	Global Industrial Cyber Security Professional
HIDS	Host Intrusion Detection System
IM	Information Management
IP	Internet Protocol
IT	Information Technology
MAC	Media Access Control
MitM	Man in the Middle
NIDS	Network Intrusion Detection System
OS	Operating System
PERA	Purdue Enterprise Reference Architecture
RSA	Rivest-Shamir-Adlemam
SCADA	Supervisory Control and Data Acquisition System
SHA	Secure Hash Algorithm
SIL	Safety Integrity Level
SQL	Structured Query Language
SSH	Secure Shell (Protocol)
TCP	Transmission Control Protocol
UDP	User Datagram Protocol
USB	Universal Serial Bus
VLAN	Virtual Local Area Network
VPN	Virtual Private Network

3. INTRODUCTION

- 3.1 The Manufacturer shall provide the Purchaser with a cyber-security management plan, including details of its cyber security organisation with clearly defined roles and responsibilities ("**Cyber Security Management Plan**"). The CSMP shall describe how cyber security will be managed throughout the project lifecycle and demonstrate that sufficient provisions have been made for the management of security following completion of the Works.
- 3.2 The CSMP shall cover two distinct areas and include the corresponding sets of controls:
- (a) For the Trains (including signalling system interface), Simulator, Mock-up, Systems and Equipment the engineering asset security controls defined in appendix 1 (Cyber Security Requirements) and appendix 2 (Secure Network Engineering) shall be applied.
 - (b) The CSMP shall provide an overview management plan for performing structured risk-based analyses, identifying electronic security risks and vulnerabilities, and evaluating and mitigating risks throughout the project lifecycle. The plan shall address the progressive review and proactive mitigation of the electronic security risks and vulnerabilities of the project.
 - (c) The Manufacturer shall also adhere to the following policies and standards:
 - (i) CPNI "Security for Industrial Control Systems Framework" good practice guide;
 - (ii) "IEC 62443 Industrial Communication Networks Network and System Security" series of Standards; and
 - (iii) "Rail Cyber Security – Guidance to Industry" published by the Department for Transport.
 - (d) For the off-train maintenance and diagnostic tools and interfaces and similar equipment, the information security management controls established within "ISO27001:2013 Information Security Management Systems" and associated artefacts shall be applied.
- 3.3 The applicability of each set of controls to Systems on the Train and Equipment shall be Approved by the Purchaser during the Preliminary Design Phase and the Detailed Design Phase.
- 3.4 The CSMP shall also address the management of the vulnerabilities, controls and mitigations with regard to Interfaces in conjunction with the Interface Control Document (ICD).
- 3.5 The CSMP shall be submitted to the Purchaser for Approval within 12 months of the date of this Agreement and subsequently at each Assurance Stage.

APPENDIX 1**Cyber Security Requirements****1. CYBER SECURITY - GENERAL****1.1 Requirements**

- (a) The Manufacturer shall provide physical and cyber security features, including, but not limited to, authentication, encryption, access control, event and communication logging, monitoring and alarming, in order to protect the Trains, applicable Systems (as detailed in the Cyber Security Management Plan) and Equipment from unauthorised modification or use.
- (b) The Manufacturer shall clearly identify the physical and cyber security features and provide the methodology for maintaining such features, including the methods to change settings from the Manufacturer-configured or manufacture default conditions.
- (c) The Manufacturer shall verify as part of the Train Technical Case that the addition of security features to the Trains, Applicable Systems and Equipment does not adversely affect connectivity, latency, bandwidth, response time, and throughput.
- (d) The Manufacturer shall remove or disable all software components that are not required for the operation and maintenance of the Trains, Applicable Systems and Equipment prior to the Type Test. The Manufacturer shall provide documentation verifying all software components which remain enabled and the purpose of such software.
- (e) The Manufacturer shall ensure and provide documentation verifying that any Manufacturer-configured or manufacture default accounts, usernames, passwords, security settings, security codes, and other access methods are changed, disabled, or removed.
- (f) The Manufacturer shall provide, until the end of the Train Warranty Period, appropriate software and service updates and/or workarounds to mitigate all vulnerabilities associated with the Trains, Applicable Systems and Equipment and to maintain the established level of system security.
- (g) The Manufacturer shall disable by hardware and software means all unused ports and input/output devices.
- (h) Until the end of the Train Warranty Period, as security issues are identified, the Manufacturer shall provide upgrades and patches to the Trains, Applicable Systems and Equipment in order to maintain the established level of system security.
- (i) Until the end of the Train Warranty Period, the Manufacturer shall provide immediate notification to the Purchaser of known vulnerabilities, of which it becomes aware, affecting the Trains, Applicable Systems and Equipment, with recommendations regarding mitigation and resolution of such vulnerabilities.
- (j) The Manufacturer shall document the dossier of cyber security evidence (including signalling system interface) in the Cyber Security Case, which shall be a standalone document and referenced within the Integrated Train Safety Case.

1.2 Type Test requirements

- (a) The Manufacturer shall demonstrate and provide documentation that all applicable requirements have been met with respect to physical and cyber security features, including but not limited to authentication, encryption, access control, event and communication logging, monitoring, and alarming in order to protect the device and configuration computer from unauthorised modification or use.
- (b) The Manufacturer shall demonstrate and provide documentation of the absence of known vulnerabilities, or the effectiveness of implemented mitigation and containment controls.
- (c) The Manufacturer shall demonstrate and provide documentation to demonstrate the absence of malware prior to testing.
- (d) The Manufacturer shall run all supplied systems for the duration of the Type Test.
- (e) The Purchaser may request additional tests with respect to verifying the Manufacturer's compliance with the requirements of this schedule 27 (Cyber Security) at its discretion.

2. **WIRELESS TECHNOLOGY**

2.1 **Requirements**

- (a) The Manufacturer shall verify and provide documentation that the range of the wireless communications is limited to the required area.
- (b) As part of the Train Technical Case, the Manufacturer shall provide specific protocols and other detailed information required for the wireless device to communicate.
- (c) The Manufacturer shall provide documentation that the wireless device complies with all operational and security requirements as specified by the applicable wireless standard(s) or specification(s).
- (d) The Manufacturer shall provide documentation on the range of the wireless device and power requirements and the designated frequencies of operation for each device.
- (e) The Manufacturer shall provide any test data (including appropriate analysis) associated with the wireless system.
- (f) The Manufacturer shall remove or disable all software artefacts that are not required for the operation and maintenance of the device prior to the Type Test.
- (g) The wireless device shall provide encryption of radio signals. The Manufacturer shall clearly identify these security devices and methods in order to change them from the Manufacturer-configured or manufacture default conditions.
- (h) The wireless device shall be provided with security devices, such as passwords or security codes, to protect the device from unauthorised modification or use. The Manufacturer shall clearly identify these security devices and methods to change them from the Manufacturer-configured or manufacture default conditions.
- (i) Any Manufacturer-configured or manufacturer default usernames, passwords, or other security codes shall be changed or removed at handover to the Purchaser.

- (j) The Manufacturer shall document the equipment configuration and specifically note any security measures associated with the system (including encryption devices and password protection).
- (k) The Manufacturer shall identify the configuration control options that will enable varying of the security level of the device.
- (l) The Manufacturer shall demonstrate or provide test data demonstrating, how eavesdropping, MitM and DoS attacks, including spoofing and jamming are mitigated by the wireless device.
- (m) The Manufacturer shall supply current system configuration to the Purchaser at handover to allow traceability and to ensure no extra services are installed.

2.2 Until the end of the Train Warranty Period, the Manufacturer shall provide upgrades and patches to the wireless system as vulnerabilities are identified in order to maintain the identified level of system security in the following Type Test requirements:

- (a) The Manufacturer shall provide, if available, an interference rejection test and supply the results with an explanation of the results.
- (b) The Manufacturer shall provide test data with analysis showing that basic attacks, such as malformed packet injection, do not cause the wireless device to crash, hang or otherwise malfunction.
- (c) The Manufacturer shall ensure that the Type Test includes exercising all functionality and examining the input or output, and validating the results.
- (d) The Manufacturer shall run the device continuously during the entire Type Test process.
- (e) The Manufacturer shall verify compatibility of the wireless device with other devices with which the device must interface.

3. **WEB-BASED INTERFACES**

3.1 **Requirements**

- (a) If implemented, the Manufacturer shall provide documentation of input sanitisation for all web-form inputs, including, but not limited to, measures for prevention of command injection, SQL injection, directory traversal, "Remote File Include", "Cross-Site Scripting", and buffer overflow.
- (b) The Manufacturer shall, and shall use reasonable endeavours to procure that third parties shall, follow secure development practices and reporting for all web-based interface software, in accordance with the Information Security Management Plan. This requirement shall include both web applications and web servers.
- (c) The Manufacturer shall provide user configurable and managed passwords for the web-based interfaces.
- (d) The Manufacturer shall provide an independent third-party security code validation of all web-based interface software.

4. **HARDWARE CONFIGURATION**

4.1 **Requirements**

- (a) When technically feasible, the Manufacturer shall disable, through software or physical disconnection, all unneeded communication ports and removable media drives, or provide engineered barriers, and provide documentation to demonstrate the results.
- (b) The Manufacturer shall password protect the BIOS from unauthorised changes unless in the reasonable opinion of the Purchaser this is not technically feasible, in which case the Manufacturer shall document this case and provide mitigation measures to the Purchaser.
- (c) The Manufacturer shall provide to the Purchaser a written list of all enabled USB ports, CD/DVD drives, and other removable media devices, including justification as to why they have been left enabled.
- (d) The Manufacturer shall configure the network devices to limit access to/from specific locations, where appropriate, and provide documentation of such configuration.
- (e) The Manufacturer shall configure the system to allow the system administrators the ability to re-enable devices if the devices are disabled by software and provide documentation of the configuration as long as the existing software allows it.

4.2 **Type Test requirements**

The Manufacturer shall provide, as a part of the Type Test, demonstration and documentation of the disabled or locked physical access and the removed drives.

5. **CHANGES TO FILE SYSTEM AND OPERATING SYSTEMS PERMISSIONS**

5.1 **Requirements**

- (a) When technically feasible (and to the extent that the cost to the Manufacturer of doing so is not significantly disproportionate to the benefit which would be gained by the Purchaser), the Manufacturer shall configure hosts with the lowest privilege file and account access and provide documentation of the configuration.
- (b) When technically feasible (and to the extent that the cost to the Manufacturer of doing so is not significantly disproportionate to the benefit which would be gained by the Purchaser), the Manufacturer shall configure the necessary system services to execute at the lowest user privilege level possible for that service and provide documentation of the configuration.

5.2 **Type Test requirements**

The Manufacturer shall provide, as a part of the Type Test, validation and documentation of the permissions assigned.

6. **REMOVAL OF UNNECESSARY SERVICES AND PROGRAMS**

6.1 **Requirements**

- (a) As part of the AFT-MTT Technical Case, the Manufacturer shall provide documentation detailing all applications, utilities, system services, scripts, configuration files, databases, and all other software required and the appropriate configurations, including revisions and/or patch levels for each of the computer systems associated with the Trains, Applicable Systems and Equipment.

- (b) The Manufacturer shall provide a listing of services required for any computer system. The listing shall include all ports and services required for operation, with an explanation or cross reference to justify why each service is necessary for operation.
- (c) The Manufacturer shall remove and/or disable all software components that are not required for the operation and maintenance of the Trains, Applicable Systems and Equipment prior to Type Test. The Manufacturer shall provide documentation on what has been removed and/or disabled and provide documentation and justification where any of the components listed below have been left enabled. The software to be removed and/or disabled shall include, but is not limited to:
 - (i) games;
 - (ii) device drivers for network devices not delivered;
 - (iii) instant messaging services;
 - (iv) servers or clients for unused internet services;
 - (v) software compilers;
 - (vi) unused networking and communications protocols;
 - (vii) unused administrative utilities, diagnostics, network management, and system management functions;
 - (viii) backups of files, databases, and programs used only during system development;
 - (ix) all unused data and configuration files;
 - (x) sample programs and scripts; and
 - (xi) unused document processing utilities (for example, Microsoft Word, Excel, PowerPoint, Adobe Acrobat, OpenOffice).

6.2 **Type Test requirements**

The Manufacturer shall conduct cyber security scans (as a minimum a vulnerability and active port scan, with the most current signature files) on the Trains, Applicable Systems and Equipment. The result of this scan shall be compared with an inventory of the required services, patching status, and documentation to validate this requirement. Other measures shall include:

- (a) The Manufacturer shall provide for each networked device the following configuration documentation lists:
 - (i) network services required for operation of that device indicating the service name, protocol (for example, TCP and UDP) and port range;
 - (ii) dependencies on underlying operating system services;
 - (iii) dependencies on networked services residing on other network devices;
 - (iv) all of the software configuration parameters required for proper system operation;
 - (v) certified OS, driver, and other software versions installed on the device; and

- (vi) results found by the vulnerability scans with mitigations carried out by the Manufacturer.
- (b) The Manufacturer shall provide a summary table indicating each communication path required by the system, which shall include the following information:
 - (i) source device name and MAC/IP address;
 - (ii) destination device name and MAC/IP address; and
 - (iii) protocol (for example, TCP and UDP) and port or range of ports.
- (c) The Manufacturer shall perform network-based validation and documentation steps on each device full TCP and UDP port scan on [REDACTED]. This scanning needs to be completed during a simulated "normal system operation".

7. SOFTWARE INSTALLATION AND UPDATES

7.1 Requirements

- (a) Supplied software must be the most current, stable version supported by the vendor, which does not impact compatibility with other system components.
- (b) The Manufacturer shall establish a software update process.
- (c) The Manufacturer shall provide a patch management process to include policies and procedures for the system after installation. These policies and procedures shall include the patch management process and mitigation strategies for instances when the Manufacturer informs the user not to apply released patches.

7.2 Type Test requirements

- (a) The Manufacturer shall install and update all tested and validated security patches prior to the start of the Type Test.
- (b) The Manufacturer shall verify and provide documentation that all updates have been tested and installed.
- (c) The Manufacturer shall perform security scans (with the most current signature files) to verify that the system has not been compromised during the Testing phase.
- (d) The Manufacturer shall provide documentation of the results of the scans referred to in paragraph (c) above.

8. DISABLING, MODIFYING OR REMOVING WELL KNOWN OR GUEST ACCOUNTS

8.1 Requirements

- (a) In the Train Technical Case submission the Manufacturer shall provide documentation on which guest accounts need to be active and those that can be disabled, removed, or modified.
- (b) The Manufacturer shall disable, remove or modify all the guest accounts accordingly.

8.2 Type Test requirements

- (a) The Manufacturer shall demonstrate that the stated accounts have been disabled, removed or modified by examining the log files and validating the results.

9. **HEARTBEAT SIGNALS**

9.1 **Requirements**

- (a) The Manufacturer shall identify heartbeat signals or protocols and recommend whether any should be included in network monitoring.
- (b) The Manufacturer shall provide packet definitions of the heartbeat signals and examples of the heartbeat traffic if the signals are included in the network monitoring.

9.2 **Type Test requirements**

- (a) The Manufacturer shall provide, as a part of the Type Test, documentation of the requirements set out in paragraph 9.1 above.
- (b) The Manufacturer shall create a baseline of the heartbeat communications traffic to include frequency, packet sizes, and expected packet configurations.

10. **FIREWALLS**

10.1 **Requirements**

- (a) The Manufacturer shall provide next generation firewalls ("**NGFWs**") capable of deep packet application-level inspection, intrusion prevention, malware protection, proxy server functionality. NGFWs must have, as a minimum, deep packet inspection enabled.
- (b) The Manufacturer shall provide firewall rule sets and/or other equivalent documentation. The basis of the rule set shall be "deny all," with exceptions explicitly identified by the Manufacturer. Note that this information is deemed by the Purchaser to be business sensitive and the Manufacturer shall protect it as such.
- (c) The Manufacturer shall provide detailed information on all communications (including protocols, ports and addresses) required through a firewall, whether inbound or outbound, and identify each network device initiating a communication.

10.2 **Type Test requirements**

- (a) The Manufacturer shall run the firewall continuously during the entire Type Test process.
- (b) The Manufacturer shall exercise this functionality, examining the log files, and validating the results.

11. **DATA-DIODES**

11.1 **Requirements**

- (a) Where appropriate, the Manufacturer shall provide uni-directional data-diodes between network zones.
- (b) The Manufacturer shall provide data-diode configuration settings and/or other equivalent documentation and detailed information on all communications (including protocols) required through a data-diode.

11.2 **Type Test requirements**

- (a) The Manufacturer shall install and run the data-diode continuously during the entire Type Test process.
- (b) The Manufacturer shall exercise this functionality, examine the data-diode performance, and validate the results.

12. **HOST INTRUSION DETECTION SYSTEMS**

12.1 **Requirements**

- (a) The Manufacturer shall provide a configured HIDS for configuration/maintenance laptops.
- (b) The Manufacturer shall configure the HIDS such that all system and user account connections are logged. This log will be configured such that an alarm can be passed to the TCMS if an abnormal situation occurs.
- (c) The Manufacturer shall recommend log review and notification software tools.
- (d) The Manufacturer shall configure devices as "append only" to prevent alteration of records for local storage devices.

12.2 **Type Test requirements**

- (a) The Manufacturer shall run the HIDS during the entire Type Test process and periodically interject applicable malware.
- (b) The Manufacturer shall exercise this functionality, examine log files and validate the expected results.

13. **NETWORK INTRUSION DETECTION SYSTEMS (NIDS)**

13.1 **Requirements**

- (a) Network Intrusion Detection Systems (NIDS) are required at, but not limited to, all network perimeters and internal network boundaries.
- (b) The Manufacturer shall provide a recommended placement of the NIDS within the Trains, Applicable Systems and Equipment at the Preliminary Design Submission.
- (c) The Manufacturer shall provide traffic profiles with expected communication paths, network traffic (e.g. IP addresses, ports, services, protocols), and expected utilisation boundaries for anomaly-based NIDS.
- (d) The Manufacturer shall provide appropriate signatures for signature-based NIDS.
- (e) The Manufacturer shall provide a configured NIDS on the Trains, Applicable Systems and Equipment as appropriate.

13.2 **Type Test requirements**

- (a) The Manufacturer shall run the NIDS continuously during the entire Type Test process.
- (b) The Manufacturer shall exercise this functionality, examining the log files, and validating the results.

14. **SESSION MANAGEMENT**

14.1 **Requirements**

- (a) If technically feasible (and to the extent that the cost to the Manufacturer of doing so is not significantly disproportionate to the benefit which would be gained by the Purchaser) and if required according to the risk analysis results, the Manufacturer shall not permit user credentials to be transmitted in clear text.
- (b) The Manufacturer shall provide the strongest encryption method commensurate with the technology platform and response time constraints.
- (c) The Manufacturer, in those devices that support these features, shall not allow multiple concurrent logins, applications to retain login information between sessions, provide any auto-fill functionality during login, or allow anonymous logins.
- (d) For those devices that support it, the Manufacturer shall provide user account-based logout and timeout settings.

14.2 **Type Test requirements**

The Manufacturer shall demonstrate during the Type Test process validation of the requirements set out in paragraph 14.1 above.

14.3 **Maintenance requirements**

- (a) The Manufacturer shall change encryption keys at reasonable intervals commensurate with need.

15. **PASSWORD/AUTHENTICATION POLICY AND MANAGEMENT**

15.1 **Requirements**

- (a) When technically feasible (and with a minimal cost impact) (i.e. including with respect to wayside workstations, configuration/maintenance laptops and some of the on-board devices), the Manufacturer shall provide a configurable account password management system that allows for selection of password length, frequency of change, setting of required password complexity, number of login attempts, inactive session logout, screen lock by application, and denial of repeated or recycled use of the same password.
- (b) The Manufacturer shall not store passwords electronically or in Manufacturer-supplied hardcopy documentation in clear text unless the media is physically protected.

15.2 **Type Test requirements**

The Manufacturer shall demonstrate during the Type Test process validation and documentation of the password and authentication policy and management.

16. **ACCOUNT AUDITING AND LOGGING**

16.1 **Requirements**

- (a) When technically feasible (and with a minimal cost impact), the Manufacturer shall store log files in a read-only format.

- (b) The Trains, Applicable Systems and Equipment shall log account activity if they support this feature. This log shall be auditable both from a management (policy) and operational (account use activity) perspective.
- (c) The Manufacturer shall time stamp and control access to audit trails and log files when technically feasible.

16.2 **Type Test requirements**

The Manufacturer shall demonstrate that the Type Test includes validation and documentation of the requirements.

17. **SEPARATION AGREEMENT**

17.1 **Requirements**

- (a) The Manufacturer shall provide a separation agreement to delineate how Manufacturer employees who have sensitive knowledge of the Purchaser's control systems and who leave their positions or have responsibilities changed will be prohibited from disclosing that knowledge, where disclosure could lead to a reduction in security.
- (b) The Manufacturer shall notify the Purchaser when personnel who have knowledge of the security arrangements in relation to the Trains, Applicable Systems and Equipment leave or change positions.
- (c) The Manufacturer shall provide detailed documentation on how the security of the Trains, Applicable Systems and Equipment can be maintained and supported at the end of the Train Warranty Period for this Agreement and for the duration of the FSA.

17.2 **Type Test requirements**

The Manufacturer shall demonstrate during the Type Test the ability to change key employee/support personnel access and permissions.

18. **CODING FOR SECURITY**

18.1 **Requirements**

- (a) During the Preliminary Design Phase, the Manufacturer shall provide an overview of the development practices and standards applied to software, including firmware, used to ensure a high level of defence against unauthorised access.
- (b) As part of the Train Technical Case submission and Cyber Security Case, the Manufacturer shall provide documentation of coding practices used in developing the delivered software.

19. **NOTIFICATION AND DOCUMENTATION FROM MANUFACTURER**

19.1 **Requirements**

- (a) The Manufacturer shall have a written flaw remediation process.
- (b) The Manufacturer shall provide appropriate software updates and/or workarounds to mitigate all vulnerabilities associated with the flaw until the end of the Train Warranty Period.

- (c) The Manufacturer shall provide notification of any flaws affecting security of the Trains, Applicable Systems and Equipment as soon as the Manufacturer is made aware of or discovers such flaw. Notification shall include, but is not limited to, detailed documentation describing, for example, the flaw with security impact, root cause, corrective actions.

20. **PROBLEM REPORTING**

20.1 **Requirements**

- (a) Up to the end of the Train Warranty Period, the Manufacturer shall provide a process to manage problem reports regarding cyber security in relation to the Trains, Applicable Systems and Equipment.
- (b) The process shall include tracking history and corrective action status reporting.
- (c) The Manufacturer shall review and report their initial action plan within 24 hours of submitted problem reports.
- (d) The Manufacturer shall protect problem reports regarding security vulnerabilities from public disclosure and notify the Purchaser of all problems and remediation steps, regardless of origin of discovery of the problem.
- (e) The Manufacturer shall inform the Purchaser in writing of flaws within applications and operating systems in a timely fashion, as long as the Manufacturer is aware of the issue. The Manufacturer shall provide guidance to the Purchaser about corrective actions, fixes, or means to monitor for vulnerability exploits associated with the flaw.
- (f) The Manufacturer shall provide an auditable history of flaws with the remediation steps taken for each.

21. **MALWARE DETECTION AND PREVENTION**

21.1 **Requirements**

- (a) When technically feasible, the Manufacturer shall provide one of the following two options:
 - (i) a host-based application white-listing malware detection scheme for the Trains, Applicable Systems and Equipment as applicable. If this option is selected, the Manufacturer shall verify adequate system performance for host-based malware detection and quarantine (instead of automatically deleting) suspected infected files. This is the Purchaser's preferred option to be met by the Manufacturer. The Manufacturer shall also test major updates to application white-listing malware detection applications and provide performance measurement data on the impact of using the malware detection applications in an active system. Measurements shall include, but not be limited to, network usage, CPU usage, memory usage and any other impact to normal communications processing; or
 - (ii) a host-based malware detection scheme for the Trains, Applicable Systems and Equipment as applicable. If this option is selected, the Manufacturer shall verify adequate system performance for host-based malware detection, quarantine (instead of automatically deleting) suspected infected files, and provide an updating scheme for the signatures. The Manufacturer shall also test major updates to malware detection applications and provide performance measurement data on the impact of using the malware

detection applications in an active system. Measurements shall include, but not be limited to, network usage, CPU usage, memory usage and any other impact to normal communications processing.

- (b) The Manufacturer shall update malware detection software as required to ensure the system is fit for purpose and effective for the most recent malware released (since these signatures are reactive).
- (c) The Purchaser will notify the Manufacturer of their preferred malware detection scheme. The Manufacturer shall implement this malware detection scheme on all systems. Exceptions must be raised where this is not possible.
- (d) The Purchaser may accept, at their discretion, a different malware detection scheme than originally specified. The Manufacturer shall provide documentation to justify this change.

21.2 **Type Test requirements**

The Manufacturer shall record system performance with measurements that include the system with and without malware detection. The Manufacturer shall verify all media and equipment is scanned under the most current malware detection versions available prior to installation on the Trains, Applicable Systems and Equipment.

22. **SECURE VIRTUAL PRIVATE NETWORKS**

This paragraph applies to any network that is external to the Trains and which communicates with the Trains.

22.1 **Requirements**

- (a) The Manufacturer shall provide physical and cyber security features, including, but not limited to, multifactor authentication (for example, security token, known key, and/or certificate), encryption, access control, event and communication logging, monitoring and alarming to protect the system and configuration computer from unauthorised modification or use.
- (b) The Manufacturer shall provide a DMZ outside of the control network for the VPN server to reside.
- (c) The Manufacturer shall use different authentication methods for establishing control network access and VPN connection.

22.2 **Type Test requirements**

The Manufacturer shall verify and provide documentation of physical and cyber security features, including but not limited to multi-factor authentication (for example, security token, known key, and/or certificate), encryption, access control, event and communication logging, monitoring, and alarming to protect the system and configuration computer from unauthorised modification or use.

23. **PHYSICAL ACCESS OF CYBER COMPONENTS**

23.1 **Requirements**

- (a) The Manufacturer shall provide a detailed plan for appropriate physical security mechanisms in the CSMP.

- (b) The Manufacturer shall provide lockable or locking enclosures for vulnerable components (for example, servers, clients, and networking hardware).

24. **INTRA PERIMETER COMMUNICATIONS**

24.1 **Requirements**

The Manufacturer shall verify and provide documentation that physical communication channels are secured from physical intrusion.

24.2 **Type Test requirements**

The Manufacturer shall verify and provide documentation that the physical intrusion of communication channels is detectable.

25. **NETWORK ARCHITECTURE**

25.1 **Requirements**

- (a) Where compatible with the other provisions of this Agreement, the Manufacturer shall provide and document secure network architecture where the higher-Security Zones originate communication to less-secure zones.
- (b) The Manufacturer shall provide and document the design for all communication paths between networks of different Security Zones through a suitable security gateway (such as a DMZ or uni-directional gateway).
- (c) The Manufacturer shall verify and document the fact that disconnection points are established between the network partitions and provide to the Purchaser the methods to isolate subnets to continue limited operations.
- (d) The Manufacturer shall provide and document tailored filtering and monitoring rules for all Security Zones and alarms for unexpected traffic.
- (e) The Manufacturer shall provide and document a suitable security gateway (such as a DMZ or uni-directional gateway) that is restricted to communications where all traffic is monitored, alarmed and filtered.
- (f) When technically feasible, the Manufacturer shall provide and document outbound filtering and alarms for unexpected traffic through Security Zones.
- (g) The Manufacturer shall define all sources and destinations with enforced communication origination even during restart conditions between Security Zones.
- (h) The Manufacturer shall provide and document suitable security gateway (such as a DMZ or uni-directional gateway) architectures.
- (i) The Manufacturer shall provide and document a mechanism for patching a suitable security gateway (such as a DMZ or uni-directional gateway) architecture running in a parallel configuration without disruption to the other suitable security gateway (such as a DMZ or uni-directional gateway) running in parallel.
- (j) As part of the Preliminary Design Submission, the Manufacturer shall provide network architecture documentation.

25.2 **Type Test requirements**

- (a) The Manufacturer shall validate and provide documentation that the higher-Security Zones originate communication to less-secure zones.

- (b) The Manufacturer shall document all communication paths, including filtering, monitoring, and staging zones.
- (c) The Manufacturer shall verify and provide documentation of disconnection points between the network partitions and validate the continuity of limited operations.
- (d) The Manufacturer shall verify and provide documentation of tailored filtering and monitoring rules for all Security Zones and validate alarms for unexpected traffic.
- (e) The Manufacturer shall verify and provide documentation of restricted communications through the suitable security gateway (such as a DMZ or uni-directional gateway) and verify that all traffic is monitored, alarmed, and filtered.
- (f) The Manufacturer shall verify and provide documentation of outbound filtering and alarms for unexpected traffic through Security Zones.
- (g) The Manufacturer shall verify and provide documentation of all sources and destinations with enforced communication origination even during restart conditions between Security Zones.
- (h) The Manufacturer shall verify and provide documentation of suitable security gateway (such as a DMZ or uni-directional gateway) architectures.
- (i) The Manufacturer shall verify and provide documentation of a mechanism for patching a single suitable security gateway (such as a DMZ or uni-directional gateway) architecture running in a parallel configuration without disruption to the other suitable security gateway (such as a DMZ or uni-directional gateway) running in parallel.

26. CRYPTOGRAPHIC SYSTEMS USAGE

26.1 Requirements

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

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[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]

27. **CRYPTOGRAPHIC SYSTEMS OPERATION**

27.1 **Requirements**

- (a) The Manufacturer shall provide centralised tools and mechanisms to manage the cryptographic material (keys, hashes, certificates, etc.) covering: establishment (creation), deployment, ongoing validations and revocation. The tools and mechanisms shall protect the confidentiality, integrity and availability of the cryptographic material.
- (b) When technically feasible, the Manufacturer shall ensure that:
 - (i) the cryptographic system implementation includes the capability for configurable cryptoperiods (life span of cryptographic key usage) using the centralised tools and mechanisms;
 - (ii) the key update tools and mechanisms support remote periodic re-keying of all devices as part of normal system operations. Periods shall be configurable;
 - (iii) emergency re-keying of all devices can be remotely performed using the centralised tools and mechanisms; and
 - (iv) the centralised tools and mechanisms shall provide a method for updating cryptographic primitives or algorithms.
- (c) The Manufacturer shall provide adequate documentation describing the cryptographic systems implemented as well as the appropriate manuals for operations and maintenance.

28. **LOGGING MONITORING, AUDITING AND REPORTING**

28.1 **Requirements**

- (a) Logs generated by the Train, applicable Systems and Equipment shall be stored for a period of one year or for a period as required by law or regulation, whichever is longer.
- (b) When technically feasible (and to the extent that the cost to the Manufacturer of doing so is not significantly disproportionate to the benefit which would be gained by the Purchaser), the Manufacturer shall ensure that the Trains, Applicable Systems and Equipment shall have logging capabilities based on secure standard protocols.
- (c) As part of the Preliminary Design Submissions, the Manufacturer shall provide a specification list of all log management capabilities that the Trains, Applicable Systems and Equipment are capable of generating, and the format of the logs. This list shall identify which of those logs are enabled by default.

- (d) As part of the Train Technical Case submission, the Parties shall agree the logging capabilities to be enabled on the Train, Applicable Systems and Equipment.
- (e) As part of the Train Technical Case submission, the Manufacturer shall describe how the integrity, confidentiality and availability of the files is to be achieved.
- (f) The Manufacturer shall provide mechanisms to allow the extraction of log files in a secure manner.
- (g) The Manufacturer shall provide a centralised software tool to collect audit trails and log files generated by the Trains, Applicable Systems and Equipment, and provide mechanisms for their extraction in a secure manner.
- (h) If this feature is supported, the Manufacturer shall provide procedures to modify the logging setup on the Trains, Applicable Systems and Equipment.
- (i) Centralised software logging tools shall be segregated in a dedicated network zone following the principle of least privilege.
- (j) The centralised software logging tools shall include a graphical user interface which allows log filtering based on source and/or destination of the communications, communications protocols, dates, etc.

29. **AUTHORISED AND UNAUTHORISED DEVICES INVENTORY**

29.1 **Requirements**

- (a) The Manufacturer shall provide an asset inventory of the Trains, Applicable Systems and Equipment via communications discovery mechanisms.
- (b) The Manufacturer shall provide procedures to modify the inventory list and the assets categorisation for new classes of authorised and unauthorised device.

30. **SOFTWARE INVENTORY AND CONFIGURATION MANAGEMENT**

30.1 **Requirements**

In accordance with the Information Security Management Plan and when technically practicable (and to the extent that the cost to the Manufacturer of doing so is not material), the Manufacturer shall use reasonable endeavours in working towards:

- (a) implementing application white-listing technology that allows systems to run software only if it is included on a white-list, and prevent execution of all other unauthorised software on the Trains, Applicable Systems and Equipment. The application white-listing technology shall provide an alert when unauthorised software attempts to run;
- (b) providing a software tool to report the list of authorised software and versions that are on the Trains, Applicable Systems and Equipment;
- (c) providing procedures to modify the software included on the whitelist used by the software inventory and configuration management tools; and
- (d) implementing a process to manage and control any changes to software on the Trains, Applicable Systems and Equipment. This process shall be compatible with the application white-listing technology provided. This shall include:
 - (i) logging when authorised changes are undertaken;

- (ii) providing a record of the authorised changes; and
- (iii) providing a configuration back-up disc image in associated secure storage.

31. **SYSTEM BACKUP AND RESTORATION**

31.1 **Requirements**

- (a) The Manufacturer must provide backups of all Computer Based Engineering Assets. It must be possible to restore all the Computer Based Engineering Assets upon SAT completion using these backups.
- (b) Where security logs are stored centrally, the Manufacturer must provide processes for backup and restoration of this data.
- (c) Pre-backup, the Manufacturer must provide evidence that the Computer Based Engineering Assets are free of malware.
- (d) The backups must be created upon SAT completion and must contain all data and complete configuration details of the machine including, but not limited to, OS, firmware, network settings, applications, programs and security controls.
- (e) To verify the authentication of the backups, hashing techniques must be used. The Manufacturer must follow the directions of the Purchaser in providing the hashes to ensure their integrity.
- (f) The backups and procedures to rebuild a platform or device must be handed to the Asset Owner. Individual procedures must be provided for Computer Based Engineering Assets where appropriate. The procedures must contain clear instructions on how to restore each Computer Based Engineering Asset.
- (g) The Manufacturer must develop a procedure to demonstrate the absence of malware on platforms, upon their restoration, using the provided backups.
- (h) Any Approved change undertaken between the SAT and the project sign off shall require the creation of a new backup for the modified asset and the execution of the process to provide evidence that the Computer Based Engineering Assets are free of malware.
- (i) The Manufacturer must provide detailed documentation of the backups created to allow traceability during the systems restoration process.
- (j) The documentation must individually cover every type of Computer Based Engineering Asset procured, describing the specific details of the associated backups and listing all the configuration details, including, but not limited to, the OS, firmware, network settings, applications programs and security controls.
- (k) The Manufacturer must provide procedures for creating and storing backups.
- (l) The Manufacturer must provide procedures to verify the integrity of the backups created.
- (m) The Manufacturer must provide procedures to restore a backup. Where necessary an individual procedure must be developed for specific Computer Based Engineering Assets.
- (n) The Manufacturer must provide procedures to verify the absence of malware on Computer Based Engineering Assets upon their restoration.

32. **INFORMATION CLASSIFICATION**

The Manufacturer shall produce and adhere to an information security classification standard in alignment with the "TfL Standard "Information Security Classification".

33. **CYBER SECURITY LIFECYCLE MANAGEMENT**

The activities and deliverables for the project lifecycle shall be detailed within the Manufacturer CSMP. Evidence attained throughout the cyber security lifecycle shall be documented within the Manufacturer Cyber Security Case.

33.1 **Requirements**

(a) **General**

- (i) The Manufacturer shall implement a cyber-security programme to address and manage potential security vulnerabilities in each phase of the Works; and
- (ii) The cyber security programme shall include those vulnerabilities that could be exploited by accidental and/or deliberate attacks from either internal or external sources, and shall include those lifecycle phases other than operation and maintenance that might be vulnerable to attacks, such as design and implementation and product selection and procurement.

(b) **Risk Management during the project lifecycle**

- (i) The Manufacturer shall:
 - (A) support the Purchaser in undertaking cyber security risk assessments;
 - (B) consult with the Purchaser when executing any cyber security risk related activities;
 - (C) develop appropriate cyber security risk treatment plans containing a list of risks prioritised according to the cyber security risk management process principles and the controls to reduce, retain, avoid, or share the risks. The cyber security risk treatment plans shall be updated as a natural output of a risk assessment or discrete risk event; and
 - (D) develop the Statement of Applicability.

(c) **Secure Supply Chain (Hardware and Software)**

- (i) The Manufacturer shall establish a process to protect the supply chain. The process must contain adequate plans, policies, procedures and registers to continually demonstrate to the Purchaser the security of the supply chain.
- (ii) The Manufacturer shall ensure that the supply chain controls protect the systems during their physical or logical transport ensuring that the assets are not vulnerable to subversion, including malicious code insertion, counterfeit insertion, and tampering.
- (iii) The process shall demonstrate:
 - (A) chain of custody practises and updated documentation;

- (B) inventory management (including the location and protection of the physical and logical assets. This paragraph extends to spare parts);
 - (C) information protection;
 - (D) secure digital products delivery;
 - (E) trusted channels and controls to ship assets including tamper-proof packaging;
 - (F) controls to detect unauthorised access and/or alteration throughout the delivery process; and
 - (G) cascading these cyber security requirements to the entire supply chain.
- (d) **Secure Development & Testing Environments (Methodologies, Tools and Development & Testing Facilities)**
- (i) The Manufacturer shall:
 - (A) demonstrate that the Trains, Applicable Systems and Equipment are free of malware;
 - (B) carry out reasonable and suitable tests to identify vulnerabilities or weaknesses resulting from insecure product development and/or testing processes and: (i) resolve any material vulnerabilities and/or material weakness identified by such tests; and (ii) explain to the Purchaser in writing why any other vulnerabilities or weaknesses identified by such tests are reasonably not deemed to be material;
 - (C) establish a secure development and testing framework which shall demonstrate quality assurance;
 - (D) ensure that secure development and testing environments (including tools and development facilities) are established for Trains, Applicable Systems and Equipment development and testing;
 - (E) ensure that secure development and testing processes are established and applied to the Trains, Applicable Systems and Equipment development and testing;
 - (F) implement all the applicable controls set out in this schedule 27 providing evidence of their implementation; and
 - (G) state the countries of origin of the products and where the assembly, development & testing are undertaken.
- (e) **Incident Management**
- (i) The Manufacturer shall define a process to effectively manage cyber security events during the contract lifecycle with the objective of minimising impacts on it and maintaining or restoring normal operations.
 - (ii) Formal event reporting and escalation procedures shall be implemented.

- (iii) All the staff involved in the Works shall be trained in the procedures for reporting events that might have an impact on the security of the awarded contract, as well as the Purchaser's operations.
- (iv) The Manufacturer shall put procedures in place to identify cyber security events and respond to them.

(f) **Vulnerability Management**

- (i) In considering the detection and reporting of new vulnerabilities, the Manufacturer shall implement a technical vulnerability management process to ensure that the cyber security of the Trains, Applicable Systems and Equipment is maintained.
- (ii) The vulnerability management process shall define the methodology and procedures to transparently share the information about past, existing, and potential system vulnerabilities. The process applies to all the components procured including third party products.
- (iii) The Parties shall agree a vulnerability scoring schema to permit the Manufacturer to classify the criticality of new vulnerabilities.
- (iv) The Manufacturer shall routinely provide documentation covering the historical detail of the publicly and non-publicly disclosed vulnerabilities, security breaches of the procured assets, and its supply chain (including Subcontractors). The documentation shall include a description of the breach, its potential security impact, its root cause, and recommended corrective actions involving the procured product.
- (v) The Manufacturer shall routinely provide an independent assessment of the procured assets certifying the current security status of the products.
- (vi) The vulnerability management process shall continually ensure, during the contract lifecycle, that the Trains, Applicable Systems and Equipment are free of vulnerabilities (public and non-public). If vulnerabilities cannot be fixed, the Manufacturer shall implement the appropriate mitigating controls. The mitigating controls shall be validated by an independent party, or the Manufacturer shall otherwise demonstrate, to the Purchaser's reasonable satisfaction, the appropriateness of such mitigating controls (with supporting evidence as required). The time period to implement and test the mitigating controls shall be Approved by the Purchaser.

(g) **Professional Qualifications**

The Manufacturer shall employ at least one professional security engineer. Equivalent or superior experience could be accepted by the Purchaser in lieu of qualifications through the presentation of:

- (i) professional references; and
- (ii) research and development publications, white papers and conferences presentation in industrial control systems cyber security,

and the Manufacturer shall provide details of such qualified individuals, including their relevant qualifications, in the CSMP.

(h) **Cyber Security Case**

The Cyber Security Case shall:

- (i) document and validate the required cyber security design features in the Trains, Applicable Systems and Equipment; and
- (ii) justify interfaces in and between the Train, Applicable Systems and Equipment that are assigned to different Security Zones and domains of trust;
- (iii) confirm that the Interfaces within and between the Trains, Applicable Systems and Equipment (including the signalling system interface) do not result in an impairment of the cyber security; and
- (iv) confirm that the Interfaces between the Trains, Applicable Systems and Equipment and external domains of trust do not result in an impairment of the cyber security.

(i) **Type Testing**

- (i) The Manufacturer shall also appoint an independent party with the Approval of the Purchaser to undertake Penetration Testing of the Trains, Applicable Systems and Equipment during the Type Test. The validation shall consider the Trains, Applicable Systems and Equipment by itself as well as all the Interfaces. The independent party selected shall receive all the details of the Trains, Applicable Systems and Equipment under the Type Test. The electronic security tests and the report shall be compliant with "NIST Special Publication 800-115 (SP 800-115)". The reports shall be divided in three deliverables: executive report, summary report and technical report.
- (ii) The cyber security Type Test shall demonstrate the cyber security of the Trains, Applicable Systems and Equipment by proving the:
 - (A) absence of vulnerabilities or the effectiveness of the mitigating controls; and
 - (B) confirmation of the expected behaviour of the Trains, Applicable Systems and Equipment under cyber-attack scenarios in terms of:
 - (aa) safety;
 - (bb) functionality; and
 - (cc) performance.

(j) **Secure Installation or Works**

- (i) Prior to on-site installation or work, the security of the Manufacturers tools shall be assessed according to the Purchaser's policies, or by further testing controls defined at the discretion of the Purchaser.
- (ii) Infrastructure associated with Computer Based Engineering Assets shall be protected during installation activities. The CSMP shall highlight specific cyber security risks of the installation process and the actions taken to reduce them to tolerable levels.
- (iii) Method statements for installation shall address the cyber security risks, detailing in a step by step basis the actions to be undertaken and, if the plan cannot be completed in a secure way, the required actions to return the

Computer Based Engineering Assets to a state within Purchaser's tolerable cyber security risks levels.

(k) **Training**

The Training Programme shall include the entire cyber security program and cyber security procedures as well as the technical features and implementation details of the solutions developed/deployed during the contract lifecycle.

(l) **Documentation**

Prior to placing Computer Based Engineering Assets into service, the Manufacturer shall hand a complete set of documentation to the Purchaser encompassing the cyber security program, developed security plans and all the individual artefacts composing them and the Cyber Security Case.

(m) **Tools and Development**

Tools, development facilities, and processes to be used for maintenance of Trains, Applicable Systems and Equipment shall have documented evidence provided by the Manufacturer to show that potential security vulnerabilities have been considered by the Manufacturer and shall adhere to the applicable controls of this schedule 27. This shall be detailed in the Cyber Security Case.

(n) **Disposal and Decommissioning**

Procedures shall be put in place by the Manufacturer to address proper retirement of the Trains, Applicable Systems and Equipment and the disposal or re-use of media in a controlled manner to avoid disclosure of any sensitive information.

APPENDIX 2

Secure Network Engineering

1. POLICY STATEMENTS

- 1.1 During the detailed design stage the full network schema shall be documented, including the following details of all communication flows:
 - (a) name of the service this communication is supporting;
 - (b) source IP;
 - (c) destination IP and port;
 - (d) directionality (1-way or bidirectional); and
 - (e) protocol.
- 1.2 During the detailed design stage, the capability security levels for all security zones and sub-zones shall be established and agreed with the Purchaser.
- 1.3 Firewalls shall be deployed at, but not limited to, all network perimeters and internal network boundaries.
- 1.4 Network taps shall be deployed at, but not limited to, all network perimeters and internal network boundaries.
- 1.5 Network taps shall be positioned in a way that all traffic can be monitored.
- 1.6 Network Intrusion Detection Systems (NIDS) shall be able to:
 - (a) detect anomalous network traffic and signature attacks;
 - (b) detect misuse or suspicious network activity; and
 - (c) detect unauthorized connected networks or network devices.
- 1.7 Wireless Intrusion Detection Systems (WIDS) or other compensating controls shall be deployed:
 - (a) on all wireless networks; and
 - (b) in such a way that all wireless access points and client stations within the network are covered.
- 1.8 [Not used.]
- 1.9 Networks for Computer Based Engineering Assets shall form part of, as a minimum, a three-tier architecture, comprising the Enterprise Security Zone, the Manufacturing Security Zone, and the Cell Security Zone, as defined in Appendix A-1: Three-tier Network Architecture.
- 1.10 Networks for Computer Based Engineering Assets shall be implemented within the Manufacturing Security Zone or the Cell Security Zone or both, of the three-tier architecture.
- 1.11 Networks for Computer Based Engineering Assets shall implement physical segmentation of the Enterprise Security Zone from the Manufacturing Security Zone, using a DMZ or

Data Diode, as defined in Appendix A-2: Physical Segmentation – DMZ and Appendix A-3: Physical Segmentation – Data Diode.

- 1.12 Networks for Computer Based Engineering Assets shall be classified according to BS EN 50159:2010. The classification shall be determined at an early stage of the design and shall be categorised as follows:

- (a) Category 1 - consisting of network infrastructure which is under the control of the designer and fixed during the lifetime of the system;
- (b) Category 2 - consisting of network infrastructure which is partly unknown or not fixed, however unauthorised access can be excluded during the lifetime of the system; and
- (c) Category 3 - consisting of network infrastructure which is not under the control of the designer, and where unauthorised access has to be considered.

The categorisation shall be detailed within the CSMP and Approved by the Purchaser. This categorisation shall be recorded and used to aid the security risk assessment of the combined system comprising network infrastructure and connected assets.

- 1.13 Networks for Computer Based Engineering Assets within the Manufacturing Security Zone, or the Cell Security Zone, may be further segmented into additional Security Zones (security sub-zones) based upon connected asset functions, communication flows and interfaces, security controls to be implemented, locations, responsible organisations, etc. and the results of a security risk assessment.

- 1.14 During the Preliminary Design Phase, Target Security Levels for each Security Zone (or security sub-zone) shall be established. The Target Security Levels shall be Approved by the Purchaser.

- 1.15 Prior to Network Testing, the Achieved Security Levels for each Security Zone (or sub-zone) shall have been established and detailed within the Cyber Security Case. The Achieved Security Levels shall be Approved by the Purchaser.

- 1.16 The physical segmentation of the Enterprise Security Zone from the Manufacturing Security Zone shall be enforced through the implementation of dedicated security sub-zones.

- 1.17 The choice of DMZ or Data Diode shall be governed by:

- (a) the "**Safety Integrity Level**" of the assets located in the Manufacturing Security Zone;
- (b) the certification of SIL allocated assets to use open transmission systems; and
- (c) the necessity for bidirectional communications between the Enterprise Security Zone and the Manufacturing Security Zone.

Refer to the table in Appendix A-4: Choice DMZ or Data Diode for details.

- 1.18 Communications between and within Control Hierarchy Levels ("**Levels**") in the same Security Zone, shall only be within the same Level or between adjacent Levels (e.g. Level 0 to Level 1 or Level 2 to Level 3). The skipping of one Level is not encouraged but is permitted based on cyber security engineering judgement (e.g. Level 0 to Level 2) and upon the next conditions:

- (a) lower Level initiating the communication;

- (b) upper Level initiating the communication with the application of the appropriate security controls to enforce the "Least Privilege principle" in the interfaces design and implementation between the Computer Based Engineering Assets; and
- (c) the Purchaser Approves the proposed communications model.

Refer to Appendix A-1: Three-tier Network Architecture for a description of the Levels within Computer Based Engineering Assets network.

1.19 Communications between and within Levels in different Security Zones, with different Achieved Security Levels, shall only be within the same level or between adjacent Levels (e.g. Level 0 to Level 1 or Level 2 to Level 3) upon the next conditions:

- (a) justifying where the interface is required for safety, functionality and performance purposes and cannot be implemented in a different way;
- (b) implementing the appropriate security controls to compensate the Achieved Security Levels gap between Security Zones.

The skipping of one level is not encouraged but is permitted based on cyber security engineering judgement (e.g. Level 0 to Level 2) and upon the next conditions:

- (i) lower level initiating the communication;
- (ii) upper Level initiating the communication with the application of the appropriate security controls to enforce the "Least Privilege principle" in the interfaces design and implementation between the Computer Based Engineering Assets; and
- (iii) the Purchaser Approves the proposed communications model.

1.20 Networks for Computer Based Engineering Assets shall not be directly connected to the internet. Computer Based Engineering Assets requiring connectivity to external networks shall implement a hierarchical architecture with layered security controls.

1.21 Remote maintenance of networks for Computer Based Engineering Assets shall be via the Enterprise Network (Level 5) and a dedicated security sub-zone hosted at the DMZ.

1.22 Network traffic from the enterprise and Manufacturing Security Zones shall terminate in the DMZ security sub-zones. Where architectures based on Data Diodes are in place, this statement does not apply.

1.23 Communications between the enterprise and the Manufacturing Security Zones shall be established through the DMZ security sub-zones. Where architectures based on Data Diodes are in place, this statement does not apply.

1.24 "Control Protocols" utilised by the Computer Based Engineering Assets shall not transverse the DMZ security sub-zones Where architectures based on Data Diodes are in place, this statement does not apply.

1.25 Networks for Computer Based Engineering Assets shall be comprised of managed devices only, with local and remote logging capabilities based on standard protocols.

1.26 Networks for Computer Based Engineering Assets shall, where practicable, be managed from the Manufacturing Security Zone. Where this is not practical, within an isolated Cell Security Zone for example, local management from within the Cell Security Zone shall be employed.

1.27 Networks for Computer Based Engineering Assets shall have their associated infrastructure housed in secure rooms and within locked cabinets. Physical cabling encompassing the entire network (devices, backbone communications, etc.) shall implement appropriate security controls to protect from different threats scenarios such as injection, eavesdropping and denial of service.

1.28 Access Layer security controls shall include but are not limited to:

- (a) administratively disabling unused ports;
- (b) isolation of unused ports configuring them as access ports with non-valid network configuration (i.e. assignment to unused VLANs);
- (c) blockout devices shall be used to physically disable unused ports;
- (d) MAC address filtering and port security for used ports;
- (e) dynamic ARP inspection;
- (f) ARP protection;
- (g) automatic discovery protocols hardening and secure configuration;
- (h) quality of service configuration for resiliency purposes;
- (i) multicast traffic management for resiliency purposes; and
- (j) VLAN hardening and secure configuration.

Exclusions may apply based on the specific details of the combined system comprising network infrastructure and connected assets.

1.29 Distribution Layer security controls shall include but are not limited to:

- (a) administratively disabling unused ports;
- (b) isolation of unused ports configuring them as access ports with non-valid network configuration (i.e. assignment to unused VLANs);
- (c) blockout devices shall be used to physically disable unused ports;
- (d) MAC address filtering and port security for used ports;
- (e) dynamic ARP inspection;
- (f) ARP and Proxy ARP Protection;
- (g) FHRPs Hardening and Secure configuration;
- (h) automatic discovery protocols hardening and secure configuration;
- (i) quality of service configuration for resiliency purposes;
- (j) multicast traffic management for resiliency purposes;
- (k) Access Control Lists;
- (l) routing protocols hardening and secure configuration;

- (m) unknown unicast and multicast flood control; and
- (n) VLAN hardening and secure configuration.

Exclusions may apply based on the specific details of the combined system comprising network infrastructure and connected assets

1.30 Core Layer security controls shall include but are not limited to:

- (a) administratively disabling unused ports;
- (b) isolation of unused ports configuring them as access ports with non-valid network configuration (i.e. assignment to unused VLANs);
- (c) blockout devices shall be used to physically disable unused ports;
- (d) MAC address filtering and port security for used ports;
- (e) dynamic ARP inspection;
- (f) Access Control Lists;
- (g) routing protocols hardening and secure configuration;
- (h) source routing protection;
- (i) unknown unicast and multicast flood control;
- (j) ARP and Proxy ARP Protection;
- (k) FHRPs hardening and secure configuration;
- (l) automatic discovery protocols hardening and secure configuration; and
- (m) VLAN Hardening and secure configuration.

Exclusions may apply based on the specific details of the combined system comprising network infrastructure and connected assets

1.31 Management plane security controls shall include but are not limited to:

- (a) secure access – login and password;
- (b) secure management access reporting;
- (c) role based access control;
- (d) role base authorisation of actions;
- (e) data confidentiality and secure protocols usage (e.g. SSHv2);
- (f) "Network Time Protocol" hardening and secure configuration;
- (g) session timeouts and keep alives;
- (h) legal notification and banners;
- (i) SNMP v3.0; and

(j) unused services shall be disabled.

1.32 "Network Intrusion Detection" shall be deployed:

- (a) between the Enterprise Security Zone and the Manufacturing Security Zone;
- (b) at boundaries between wired and wireless networks; and
- (c) where applicable and practicable, as a compensating control, between Security Zones with different Achieved Security Levels (i.e. communication between manufacturing and Cell Security Zone or communication between Cell Security Zones).

1.33 A network management system ("**NMS**") shall be used to locally manage the network. Remote management of the NMS shall only be permitted if the policies within this document are adhered to.

2. **RELATED DOCUMENTS**

Document	Description
PERA – ISA-95	Enterprise Control System Integration
BS EN 62264-1:2013	Enterprise-control system integration. Part 1: Models and Terminology
BS IEC 62443 Series (ANSI/ISA-99)	Security for Industrial Automation and Control Systems

Appendix A-1: Three-tier Network Architecture

Figure 1 – PERA – ISA95 reference architecture for IACS showing the boundaries and contents of each of the three-tiers, the Enterprise Security Zone, the Manufacturing Security Zone, and the Cell Security Zone.

Appendix A-2: Physical Segmentation - DMZ

Figure 2 – PERA – ISA95 reference architecture for IACS showing physical segmentation of the Enterprise Security Zone, from the Manufacturing Security Zone and the Cell Security Zone using a DMZ.

Appendix A-3: Physical Segmentation – Data Diode

Figure 3 – PERA – ISA95 reference architecture for IACS showing physical segmentation of the Enterprise Security Zone, from the Manufacturing Security Zone and the Cell Security Zone using a Data Diode.

Appendix A-4: Choice DMZ or Data Diode

[illegible]

Table 1 – Choice DMZ or Data Diode Architecture

SCHEDULE 28

Technical Information

1. TECHNICAL DOCUMENTATION – GENERAL

- 1.1 Documentation and technical data shall be provided to enable the maintenance, operation and "technical support" of the Trains and Equipment, including all associated staff training, over the whole life of the Trains and Equipment, and shall include:
- (a) modification development;
 - (b) reliability improvements;
 - (c) maintenance optimisation;
 - (d) ability to respond to safety related incidents;
 - (e) upgrade;
 - (f) refurbishment; and
 - (g) repairs.
- 1.2 The Technical Documents shall enable the Purchaser to achieve safe operation, maintain and technically support the Trains and Equipment throughout their design life.
- 1.3 The maintenance information shall enable the Trains and Equipment to be maintained such that they continue to meet all of the Train Technical Requirements.
- 1.4 Maintenance documentation provided to the Purchaser by the Manufacturer shall use the component and system indexing in accordance with DLR-ENG-STD-ES104 – BIM Standard.
- 1.5 The Technical Documents shall describe how to adjust all of the configurable parameters stated in the Train Technical Specification.
- 1.6 The Manufacturer shall prepare a principles document describing the content format and level of detail for each type of Technical Document deliverable (the **"Technical Principles Document"**).
- 1.7 The Technical Principles Document shall be agreed with the Purchaser before the preparation of the Technical Documents begins.
- 1.8 The Technical Principles Document shall be kept updated by the Manufacturer as issues arise and any changes are agreed.
- 1.9 Operational documentation shall be provided by the Manufacturer to support the Train and Equipment service provision and this shall include the following:
- (a) Operating manual; and
 - (b) Emergency recovery manual.
- 1.10 The Manufacturer shall provide an additional set of documentation in an open format to enable the Purchaser to make changes to the Approved Technical Documents.
- 1.11 All Technical Documents shall be:

- (a) hyperlinked, include an indexing menu structure, searchable by topic and key words;
- (b) provided in a format and style suited to the intended end user(s);
- (c) version controlled; and
- (d) include version and issue date details on each page.

2. MAINTENANCE DOCUMENTATION SCOPE AND CONTENT

2.1 The maintenance documentation, which is provided to support the Train Maintenance Regime, shall include the following:

- (a) A Train Maintenance Plan;
- (b) Routine maintenance instructions;
- (c) Component removal and replacement instructions;
- (d) Fault finding guides, for operational and maintenance staff;
- (e) Illustrated list of parts (ILOP);
- (f) "As built" drawings;
- (g) Electrical, pneumatic and software schematics;
- (h) Train and Equipment wiring search tool;
- (i) Equipment overhaul manuals;
- (j) Minimum Acceptable Condition Standards (MACs);
- (k) Defective In Service Instruction (DISI);
- (l) Technical data summaries;
- (m) Technical descriptions for tools and test equipment;
- (n) Operating instructions for tools and test equipment;
- (o) Maintenance instructions for tools and test equipment;
- (p) Storage Instructions
- (q) Any supplementary information, as required to complete the documentation for the Train Maintenance Regime;
- (r) Emergency breakdown manual;
- (s) Cleaning manuals; and
- (t) Train and Equipment Design documentation.

2.2 Each element of the maintenance documentation shall be submitted by the Manufacturer to the Purchaser for Approval following Approval of the Train Maintenance Regime.

- 2.3 The maintenance manual shall detail the tests and checks necessary to prescribe corrective actions or verify fitness for service, following a minor collision incident.

3. **TRAIN MAINTENANCE PLAN**

- 3.1 The Train Maintenance Plan shall list the intervals of all routine maintenance activities required for the life of the Trains and Equipment. It shall detail:

- (a) title of activity and breakdown of sub-tasks;
- (b) interval at which activity shall be carried out (e.g. service hours, distance run (km), time or number of operations);
- (c) the tolerance limit on the interval for each activity after which the Train and Equipment shall be withdrawn from service until the maintenance has been completed;
- (d) number of staff and staffing level requirements;
- (e) intended location of activity;
- (f) time to complete activity and each sub-task; and
- (g) reference to individual detailed procedure(s).

- 3.2 It shall include all planned activities including tests, inspections, calibrations, component replacement, component overhaul, condition monitoring activities and any other activities necessary to maintain the Train and Equipment.

4. **DETAILED ROUTINE MAINTENANCE INSTRUCTIONS**

- 4.1 Instructions shall be provided by the Manufacturer to the Purchaser which describe the individual routine maintenance tasks. Each routine maintenance instruction shall state:

- (a) any safety instructions;
- (b) what constitutes an acceptable condition;
- (c) all values for all settings and adjustments including torque settings for fastenings;
- (d) the process needed to carry out the task;
- (e) all tools and materials needed to complete an instruction;
- (f) methods for using special tools or gauges;
- (g) references to any relevant data about materials (for example handling instructions, potential hazards, storage and disposal);
- (h) the testing needed to confirm that the Train and Equipment are working correctly following the maintenance intervention; and
- (i) warnings to prevent incorrect fitment of similar items of equipment.

5. **COMPONENT REMOVAL AND REPLACEMENT INSTRUCTIONS**

- 5.1 Instructions shall be provided by the Manufacturer to the Purchaser which describe the replacement and refitting of each Line Replaceable Unit. These shall state:

- (a) any safety instructions;
 - (b) the conditions which constitute an acceptable state;
 - (c) all tools and materials needed to complete an instruction;
 - (d) any methods of using special tools or gauges;
 - (e) all values for all settings and adjustments;
 - (f) the process needed to carry out the task;
 - (g) references to any relevant data about the materials (for example handling instructions, potential hazards); and
 - (h) testing needed to confirm that the Train and Equipment are working correctly following the maintenance intervention.
- 5.2 Instructions shall be provided by the Manufacturer to the Purchaser which describe the replacement and refitting of all components and assemblies that may need to be replaced to rectify a defect on the Train and Equipment or to rectify damage caused by accident or vandalism. These shall state:
- (a) any safety instructions;
 - (b) the conditions which constitute an acceptable state;
 - (c) all tools and materials needed to complete an instruction;
 - (d) any methods of using special tools or gauges;
 - (e) all values for all settings and adjustments;
 - (f) the process needed to carry out the task;
 - (g) all materials needed to complete an instruction;
 - (h) references to any relevant data about the materials (for example handling instructions, potential hazards); and
 - (i) testing needed to confirm that the Train and Equipment are working correctly following the maintenance intervention.
- 5.3 Repair procedures shall be provided for Train and Equipment wiring, including the processes needed to repair all plugs and sockets and wiring terminations.
- 5.4 Replacement procedures shall be provided for pipework.
6. **MAINTENANCE FAULT FINDING GUIDES**
- 6.1 Fault finding guides shall be provided by the Manufacturer to the Purchaser to assist maintenance staff to identify faults on Train and Equipment systems and components.
- 6.2 The fault finding guides shall describe the analysis process to identify possible root causes and describe the potential remedial actions and repairs to overcome the defect.
- 6.3 Fault finding guides shall form a logical approach to identifying the fault by adopting a step by step elimination of possible causes.

- 6.4 The fault finding guides shall identify faults down to a level of component exchange which can be carried out by maintenance staff without recourse to a remote overhaul facility.

7. EQUIPMENT REPAIR AND OVERHAUL MANUALS

- 7.1 The Manufacturer shall provide information and an equipment overhaul manual to enable organisations other than the OEM to overhaul all Parts.

- 7.2 The Manufacturer shall provide an equipment repair manual to enable organisations other than the OEM to repair all Parts.

- 7.3 The equipment overhaul manuals shall contain sufficient data to enable the Purchaser to specify the complete technical requirements for the overhaul of all equipment undergoing periodic overhaul. The following specific details are required:

- (a) step by step instructions for undertaking the overhaul with remove and refit documentation to detail fully the process and tooling required;
- (b) full parts list for the item, including Bills of Materials detailing all items required to complete the overhaul;
- (c) details of any mandatory component replacement and any mandatory component reconditioning;
- (d) cautions, warnings and notes;
- (e) technical drawings of the item to show how to carry out the overhaul instructions including dimensional checks and any reconditioning tasks;
- (f) any unique methodology requirements (e.g. specific sequence of actions to ensure the safety of the person undertaking the overhaul);
- (g) details of all tools required; and
- (h) test pass or fail criteria and procedures.

- 7.4 The equipment repair manuals shall contain sufficient data to enable the Purchaser to specify the complete technical requirements for the repair of all equipment based on predicted failure modes. The following specific details are required:

- (a) step by step instructions for undertaking the repair with remove and refit documentation to detail fully the process and tooling required;
- (b) a full parts list for the item, including Bills of Materials detailing all items required to complete the overhaul;
- (c) details of any component replacement and any component reconditioning;
- (d) cautions, warnings and notes;
- (e) technical drawings of the item to show how to carry out the instructions including dimensional checks and any reconditioning tasks;
- (f) any unique methodology requirements (for example, specific sequence of actions to ensure the safety of the person undertaking the overhaul);
- (g) details of all tools required;
- (h) test pass or fail criteria and procedures.

- 7.5 Maintenance documentation provided by the Manufacturer shall, without need for recourse to the OEM, include sufficient information to enable all replacement parts or components to be procured, including details of settings and tolerances.

8. SPECIAL TOOLS AND TEST EQUIPMENT DOCUMENTATION

- 8.1 For every Special Tool and item of test equipment in schedule 8 (Spares and Special Tools), the Manufacturer shall provide details of the tooling manufacturer's name, address and any applicable reference or part numbers.
- 8.2 Technical descriptions shall be provided for all Special Tools and test equipment.
- 8.3 Maintenance instructions shall be provided for the upkeep of Special Tools and test equipment including details of any calibrations, tests and any other activities.
- 8.4 Operating instructions shall be provided for all Special Tools and test equipment.
- 8.5 The Manufacturer shall include the specification of the Special Tools in the Technical Documents.
- 8.6 The Manufacturer shall provide a full set of manufacturing drawings for all Special Tools.

9. STORAGE INSTRUCTIONS

Storage Instructions shall provide details of any storage instructions for Parts to prevent any deterioration whilst in a storage area. The Storage Instructions shall state the interval for actions to be taken to prevent degradation.

10. TECHNICAL DATA SUMMARIES

- 10.1 A summary of the Train's and Equipment's lubrication requirements shall be provided by the Manufacturer.
- 10.2 A list of the gauges and other specialised tooling required to maintain the Trains and Equipment shall be provided by the Manufacturer.
- 10.3 A list of any materials or chemicals used in the Train and Equipment which are 'substances hazardous to health' as defined in Reference Document 'COSHH Regulations 2002', including their locations and a summary of any special precautions required when dealing with them shall be provided by the Manufacturer.
- 10.4 A list of all equipment settings and characteristics (including tolerances) shall be provided by the Manufacturer, including:
- (a) air pressure settings;
 - (b) electrical settings;
 - (c) timings for equipment (such as door opening and closing);
 - (d) mechanical settings for example bogie frame, solebar and coupler heights above rail level (both following maintenance and absolute values which determine whether or not Train and Equipment will foul the loading gauge);
 - (e) Train heights - minimum and maximum above the running rail at both solebar and coupler positions, bogie heights;
 - (f) audibility settings, for example maximum and minimum volumes of public address equipment;

- (g) any circuit breaker settings and fuse ratings;
 - (h) torque chart for fixings and fastenings; and
 - (i) adjustment range for configurable parameters.
- 10.5 A diagram showing car types and the numbering system used for the cars shall be provided by the Manufacturer.
- 10.6 A diagram showing positions of principal items of equipment, such as wheels, bogies, traction motors shoe gear, doors and large equipment such as compressors, shall be provided by the Manufacturer.
- 10.7 A diagram showing the numbering system used on any Train and Equipment components, such as door positions, bogie positions shall be provided by the Manufacturer.
- 10.8 A list of all Train and Equipment parts shall be provided by the Manufacturer, including the part number, location(s), number per Train, number per item of Equipment and details of their associated fixings and their part numbers.
11. **ELECTRICAL, PNEUMATIC AND SOFTWARE SCHEMATICS**
- 11.1 A full set of Train and Equipment system electrical schematics shall be provided by the Manufacturer.
- 11.2 A full set of Train and Equipment system pneumatic schematics shall be provided by the Manufacturer.
- 11.3 Drawings (colloquially called "car examiners") shall be provided by the Manufacturer which show individual circuits (e.g. safety circuit, lighting circuits). Each drawing shall consist of a single circuit or system for a complete Train and Equipment and for a complete car as applicable. It shall show interfaces with other circuits as appropriate. These are intended to assist understanding and diagnosis of circuit functions.
- 11.4 Software schematics for equipment and systems shall be provided by the Manufacturer (in accordance with paragraphs (a) and (b) below) to enable the Purchaser to fully understand the parameters and logic of LRU and system functional operation and diagnosis documentation to assist the Purchaser in fault finding in accordance with paragraph 6.1. Where such information is owned by:
- (a) the Manufacturer, the Manufacturer shall provide the information to the Purchaser; and
 - (b) any Subcontractor, the Manufacturer shall use all reasonable endeavours to provide the information to the Purchaser.
12. **AS BUILT DRAWINGS**
- 12.1 The Manufacturer shall provide complete 3-Dimensional (3D) computer aided design (CAD) models compliant with DLR-ENG-STD-ES104 – BIM Standard of the as-built top-level Train assembly and all of its component sub-assemblies and Parts, including electrical wiring and conduits, and pneumatic and hydraulic piping.
- 12.2 The Manufacturer shall provide the 3D design model data files in the following formats:
- (a) ISO 10303-242 (STEP AP242) format; and

- (b) the native format(s) of the programme with which the 3D model or drawing was created.
- 12.3 The Manufacturer shall ensure that the 3D modelling enables the user to identify critical dimensions and available space for physical interfaces and modifications.
- 12.4 The Manufacturer shall provide complete and detailed arrangement and assembly drawings of the Train in the following formats:
 - (a) ISO 10303-242 (STEP AP242) format;
 - (b) the native format(s) of the programme with which the drawing was created; and
 - (c) ISO 19005-1 PDF/A-1 format.
- 12.5 The Manufacturer shall provide complete and detailed wiring diagrams which show the geographical layout and connection of all electrical equipment installed on the Train in the following formats:
 - (a) ISO 10303-210 (STEP AP210) format;
 - (b) the native format of the programme with which the diagram was created; and
 - (c) ISO 19005-1 PDF/A-1 format.
- 12.6 The Manufacturer shall provide a full index of all models and drawings in the following formats:
 - (a) ISO 10303-242 (STEP AP242) business object model XML format;
 - (b) the native product data management format of the programme with which the design data was created; and
 - (c) ISO/IEC 26300-1 spreadsheet format.
- 12.7 The Manufacturer shall ensure that the drawings and 3D models formally issued to the Purchaser shall comply with DLR-ENG-STD-ES104 – BIM Standard.
- 13. **ILLUSTRATED PARTS LIST**
- 13.1 The illustrated list of parts ("**ILOP**") shall graphically define the parts that constitute the Train and Equipment, and how they are assembled to create a Train or item of Equipment. As a minimum, it shall define and detail all Line Replacement Units and consumables which are removed from the Train and/or Equipment.
- 13.2 To identify any item, all part numbers shall be accompanied with an illustration which demonstrates how and where the part is fitted on the Train and/or Equipment or fitted as part of a larger LRU. These may be a mixture of exploded, sectional, cut away or perspective views.
- 13.3 The description of each part in an ILOP shall include sufficient information to enable a maintainer to identify a replacement component.
- 13.4 The identification of proprietary items within the ILOP such as fixings and fastenings shall provide enough detail to avoid the use of an incorrect but apparently identical part.
- 13.5 The description of each part within the ILOP shall include full details of the original component specifications in English.

13.6 Manufacturer and OEM part numbers:

- (a) owned or supplied by the Manufacturer or any Subcontractor which is an Affiliate of CAF shall be provided in the ILOP;
- (b) owned or supplied by any Subcontractor which is not an Affiliate of CAF shall be provided in the ILOP provided that the Manufacturer shall only be required to use all reasonable endeavours in order to obtain Subcontractor consent to do so.

13.7 The quantity for each installation and for the Train and Equipment shall be included in the ILOP.

13.8 Each ILOP shall include a link which enables the user to reference to a higher level and, if applicable, lower level within the breakdown of LRUs within the vehicle.

14. **MINIMUM ACCEPTABLE CONDITION STANDARDS (MACS)**

Minimum Acceptable Condition Standards shall be produced to define acceptable and unacceptable levels of degradation of asset components and systems to determine whether an asset is safe for service. The scope of the MACS shall cover every system and major component for the asset concerned and shall define the minimum acceptable condition, most likely unacceptable conditions, related to wear or functionality, hazardous consequences of any unacceptable condition, category of defect, action to be taken, timescales for the actions.

Grade	Hazard Definition	State of Asset that Grade Represents	Action Required if Hazard Found
A	General observation.	As new or condition just following overhaul.	Record during routine condition inspections.
B	Minor observation, not likely to cause a service affecting problem.	Acceptable condition after intrusive preventative maintenance.	Fix on next scheduled heavy maintenance activity.
C	Minor defect.	Minimum acceptable condition for the equipment to remain in service.	Fix on next scheduled heavy maintenance activity.
D	Serious defect, but not a major hazard.	Below minimum condition required for asset to enter service.	Train and Equipment can remain in passenger service until the end of the service day. It cannot be re-offered for passenger service unless it is impractical to rectify the defect immediately. Continued use of asset may be acceptable for a limited period, providing the Purchaser grants Approval and the substandard condition is monitored.
E	Major defect, asset unfit to	Below minimum condition required for asset to	Remove asset from service until defect has been

Grade	Hazard Definition	State of Asset that Grade Represents	Action Required if Hazard Found
	use.	remain in service.	rectified.
F	Major Safety Hazard, asset unfit to use. Circumstances which allowed this fault to develop to be investigated in depth. The investigation shall include checking a sample of other assets of similar design or with similar Maintenance Regime to determine whether the fault is a one-off incident or exists elsewhere.	A major breakdown in asset integrity, either through design deficiencies or ineffective maintenance.	Remove asset from service. Record in detail the defect. Formally record on the Notifiable Incident Report. Asset not to return to service until defect has been rectified. Report as for E Grade defect and in addition to the Purchaser.

15. **DEFECTIVE IN SERVICE INSTRUCTIONS**

- 15.1 A Defective In Service Instruction (DISI) shall be supplied by the Manufacturer.
- 15.2 The DISI shall describe what action should be taken when an individual Train becomes defective in service.

16. **OPERATING MANUAL**

- 16.1 An operating manual ("**Operating Manual**") shall be supplied by the Manufacturer.
- 16.2 The operating information included in the Operating Manual shall enable:
- (a) the Trains and Equipment to be operated safely, within the design criteria;
 - (b) operating staff to be trained to operate the Trains and Equipment;
 - (c) staff to be assessed to ensure they are competent to operate the Trains and Equipment as required;
 - (d) operating staff to carry out limited fault identification and understand degraded operating modes.

17. **OPERATIONAL FAULT FINDING GUIDES**

- 17.1 Fault finding guides shall be provided by the Manufacturer to assist the Train and Equipment operational staff to identify faults on Train and Equipment systems, where the Train and/or Equipment has not taken safe corrective action.

- 17.2 The fault finding guides shall identify possible faults that may occur, consequences of the fault, identify a path to recognise possible causes and give a method of overcoming the defect. Fault finding guides shall form a logical approach to identifying the fault by adopting a step by step elimination of possible causes.

18. **EMERGENCY BREAKDOWN MANUAL**

- 18.1 A breakdown manual shall be provided by the Manufacturer for use by the ERU and any other parties which the Purchaser may consider necessary including Docklands Light Railway frontline response and emergency services.

- 18.2 The breakdown manual shall include procedures for recovery from derailment, crashes, or following resultant significant damage which means that the Train cannot be moved by routine operational staff. It shall include all credible failure modes identified in the Train design process.

- 18.3 The breakdown manual shall include:

- (a) a description of Train systems, including a description of isolations used during recovery;
- (b) location of jacking points;
- (c) procedure for assessing damage and its consequences and potential influence on recovery;
- (d) procedure for re-railing;
- (e) procedure for securing damaged equipment, e.g. couplings;
- (f) procedure for the use of recovery equipment such as skates, airbags, jacks and any limitations on their use;
- (g) system defect flow charts; and
- (h) detrainment techniques.

19. **DESIGN DOCUMENTATION**

- 19.1 Design information shall be provided to enable a full understanding of the original functional and non-functional requirements of the Train and Equipment and how these have been achieved.

- 19.2 The technical information shall include:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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SCHEDULE 29

Disposals

1. **VEHICLE DISPOSAL PLAN**

- 1.1 The Manufacturer shall produce a vehicle disposal plan which shall be submitted to the Purchaser for Approval (the "**Vehicle Disposal Plan**"). The Manufacturer shall ensure that the Vehicle Disposal Plan has been approved by the Purchaser prior to the Acceptance of the 11th Train in the Base Order.
- 1.2 The Manufacturer shall ensure that the Vehicle Disposal Plan includes the Manufacturer's plan and methodology for the disposal of up to [REDACTED] of the Purchaser's existing fleet of Class B92 light rail vehicles (the "**Existing Fleet**") by way of scrapping (and which shall not in any event permit reuse of the Existing Fleet in any capacity relating to railway operations) and shall:
 - (a) be based on and developed from the draft Vehicle Disposal Plan in appendix 1 of this schedule 29;
 - (b) detail the Manufacturer's proposals for the commencement of disposal of the Existing Fleet from the date of Acceptance of the 11th Train in the Base Order;
 - (c) include the Manufacturer's proposals for the disposal of the Existing Fleet:
 - (i) at a rate of no more than [REDACTED] and no less than [REDACTED] Class B92 light rail vehicles per month; and
 - (ii) which shall be subject to the Purchaser's depot berthing capacity as impacted by the Acceptance of Trains and as indicated by the Purchaser to the Manufacturer from time to time; and
 - (d) detail the Manufacturer's proposals for the removal of TfL Group branding on each Class B92 light rail vehicle which shall take place prior to the disposal of such Class B92 light rail vehicle.
- 1.3 Following Approval of the Vehicle Disposal Plan, the Manufacturer shall at its own cost comply with and dispose of the Existing Fleet in accordance with the Vehicle Disposal Plan.

2. **VEHICLE DISPOSAL**

- 2.1 The Purchaser may remove any equipment from each Class B92 light rail vehicle prior to the disposal of such Class B92 light rail vehicle by the Manufacturer pursuant to this schedule 29.
- 2.2 The Manufacturer shall ensure that the disposal of the Existing Fleet pursuant to this schedule 29 is in accordance with Applicable Laws and Standards, including all Environmental Laws.
- 2.3 The Manufacturer shall ensure that the disposal of the Existing Fleet pursuant to this schedule 29 achieves full market value for the Existing Fleet (including all benefits and payments associated with scrapping the Existing Fleet) and the Manufacturer shall provide to the Purchaser:
 - (a) details of the Manufacturer's Subcontractors engaged in relation to the disposal of the Existing Fleet including but not limited to their subcontracting arrangements; and

- (b) any other evidence as requested by the Purchaser (acting reasonably) from time to time to demonstrate that the Manufacturer's disposal of the Existing Fleet is achieving market value.

3. **DISPOSAL CHARGE**

3.1 The Manufacturer shall pay to the Purchaser:

- (a) any amounts received by the Manufacturer in relation to the disposal of the Existing Fleet until such payments (when taken cumulatively) are equal to [REDACTED]; and
- (b) subject to paragraph 3.1(a), [REDACTED] per cent of any further amounts received in relation to the disposal of the Existing Fleet,

in each instance within 30 Working Days of receipt of such amounts by the Manufacturer.

APPENDIX 1

Draft Vehicle Disposal Plan

SCHEDULE 30

Foreseeable Changes in Law

None.