weeks prior to the relevant Contractual Acceptance Date (or such later proposed date for Provisional Acceptance, if any, as the Manufacturer shall advise the Purchaser); and

(e) the Units shall be delivered to the Ilford A Maintenance Depot or the Willesden Depot (as applicable) by rail only and in an overall formation not exceeding 240 metres in length.

# Principles of Acceptance

- 15.2. (a) The Manufacturer shall first procure that each Unit achieves Pre-Provisional Acceptance, then shall procure that each Unit is Provisionally Accepted on to those elements of the LO Infrastructure which are Available Infrastructure at the time that such Unit is presented for Provisional Acceptance,
  - (b) If the GOB Infrastructure is Unavailable Infrastructure at the time of Provisional Acceptance (or Qualified Provisional Acceptance) of a Dual Voltage Unit, then when the GOB Infrastructure becomes Available Infrastructure, the Manufacturer shall ensure that all Dual Voltage Units which have already received a PAC or QPAC by the time the GOB Infrastructure becomes Available Infrastructure shall be Provisionally Accepted on to such infrastructure within four weeks of such infrastructure becoming Available Infrastructure. For the purposes of this clause 15.2(b), the Manufacturer shall only be required to repeat the requirements of clauses 15.6(b), 15.7(c), 15.7(f) and 15.7(i) on the newly Available Infrastructure in respect of Units which have already received a PAC or QPAC.
  - (c) Unless otherwise agreed, the first fourteen Units to be Provisionally Accepted shall be Provisionally Accepted as Dual Voltage Units.

# Pre-Provisional Acceptance Criteria

- 15.3. Prior to Provisional Acceptance of a Unit, the Manufacturer shall only be permitted to run that Unit on the LO Infrastructure for testing or movements between locations provided that the exterior aesthetic condition (including branding) of the Unit complies with such reasonable exterior aesthetic condition requirements as the Purchaser may notify to the Manufacturer,
- 15.4. No Pre-Provisional Acceptance of any Unit will occur, and the Purchaser shall not issue a Pre-Provisional Acceptance Certificate, until the requirements set out in each of clauses 15.4(a) to (g) in respect of the Unit presented for Pre-Provisional Acceptance have been satisfied:
  - (a) the Manufacturer has delivered to the Purchaser all relevant contract documents due to have been delivered by the date of the presentation of the Unit for Pre-Provisional Acceptance including Vehicle and Unit history records, the Configuration Database relating to that Unit, evidence of successful completion of all testing due to have been carried out by that date, the Manuals, the Maintenance Plan, and evidence that all actions that are due to have been completed by that date pursuant to the Assurance Regime 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 for Pre-Provisional Acceptance;

(b) all pre-on-track testing has been carried out pursuant to the Agreed Testing Programme and the Assurance Regime including all Type Testing and Factory Acceptance Testing and all relevant tests have been successfully completed and passed satisfactorily in accordance with the Agreed Testing Programme and the Assurance Regime;

- (c) all Relevant Approvals have been obtained and the Unit is in the requisite condition such that safe and meaningful on-track testing (on the LO Infrastructure) can be carried out in accordance with all Relevant Approvals and Applicable Laws and Standards;
- (d) the Simulator has been Accepted and is installed and fully functioning at the Simulator Initial Location;
- (e) the Technical Case has been granted Assurance Acceptance;
- (f) the Manufacturer has demonstrated successful completion of the Pre-Provisional Fault Free Running in respect of that Unit; and
- (g) the Manufacturer has demonstrated to the Purchaser that the Unit is in a state such that it can achieve Provisional Acceptance.
- 15.5. Where the conditions in clause 15.4 have been satisfied in respect of a Unit, the Purchaser will issue a Pre-Provisional Acceptance Certificate in respect of that Unit and the Unit may be made available for on-track testing and then be presented for Provisional Acceptance.

#### Provisional Acceptance Criteria

- 15.6. The Provisional Acceptance Criteria for each Unit are the following:
  - (a) the Pre-Provisional Acceptance Criteria have been satisfied;
  - (b) all Relevant Approvals (including the Statement of Compatibility (as applicable) demonstrating Route Acceptance and the relevant Infrastructure Manager's approval) to operate in Unrestricted Passenger Revenue-Earning Service on the Available Infrastructure have been obtained;
  - (c) the relevant Maintenance Facility has the capability to maintain, repair and modify the Units in accordance with all Applicable Laws and Standards, the Maintenance Plan, the Manuals and the Train Services Agreement;
  - (d) those items of Equipment which according to the Project Programme are due to have been Accepted on or before the date on which the Unit is to be presented for Provisional Acceptance have been Accepted; and
  - (e) the aesthetic condition (including branding) of the Unit complies:
    - (i) with the aesthetic condition requirements specified in schedule 1 (Maintenance Services) of the Train Services Agreement such that were any Unit to be assessed against the provisions of schedule 1

# REDACTED

(*Maintenance Services*) of the Train Services Agreement relating to external cleanliness, internal state of repair and external state of repair, that Unit would score the highest possible score; and

(ii) is such that internally, the Unit has no evidence of dirt or cleaning residue and is free of litter and detritus.

### **Provisional Acceptance**

- 15.7. The Manufacturer shall tender each Unit for Provisional Acceptance at the Designated Delivery Location on or immediately before its Contractual Provisional Acceptance Date and the Purchaser shall not be obliged to accept a Unit for Provisional Acceptance unless:
  - (a) Pre-Provisional Acceptance of such Unit has occurred;
  - (b) the Provisional Acceptance Criteria for the Unit being presented for Provisional Acceptance have been satisfied;
  - (c) the Manufacturer is otherwise in compliance with its obligations under clause 12 (*Training Services*) to provide the training required under and in accordance with the Training Programme as at the relevant date;
  - (d) such Unit has, at any time after its Pre-Provisional Acceptance and during the month before Provisional Acceptance, successfully completed 500 consecutive SAFFM in simulated passenger service operating in accordance with the Rule Book on the LO Infrastructure (each time a Service Affecting Failure occurs, the milometer shall be reset to zero and test running shall recommence until 500 consecutive SAFFM in simulated passenger service operating in accordance with the Rule Book are achieved by the Unit;
  - (e) such Unit is Fault Free and there are no Recurrent Defects;
  - (f) the Manufacturer has provided to the Purchaser, in a form satisfactory to the Purchaser, the Configuration Database and the Unit Log Book in respect of the relevant Unit 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;
  - (g) the performance and reliability of all the Units that have previously received a PAC or QPAC prior to the date that the Manufacturer is tendering the relevant Unit for Provisional Acceptance is at least:
    - (i) for the Provisional Acceptance of the eighth Unit, 15,000 miles Mean Distance Between Service Affecting Failures, measured for the 56day period ending the day before the Manufacturer tenders that Unit for Provisional Acceptance; and
    - (ii) for the Provisional Acceptance of the ninth Unit and each subsequent Unit, 15,000 miles Mean Distance Between Service Affecting Failures, measured for the 28-day period ending the day before the Manufacturer tenders that Unit for Provisional Acceptance;

- (h) all Taxes due from the Manufacturer in respect of the Unit relating to the period prior to Provisional Acceptance and all import duties in respect of the Unit have been paid by the Manufacturer; and
- (i) such Unit has been maintained in accordance with the Maintenance Plan.
- 15.8. Where the conditions specified in clause 15.7 have been fulfilled with respect to a Unit, the Purchaser shall issue a PAC with respect to such Unit.
- 15.9. If the conditions specified in clause 15.7 have not been satisfied, the Purchaser shall issue to the Manufacturer, on the day of the relevant Unit being tendered for Provisional Acceptance by the Manufacturer, either (i) a Purchaser Statement setting out which of the conditions specified in clause 15.7 have not been satisfied; or (ii) a QPAC in accordance with clause 15.12.
- 15.10. 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 Working Days after receipt of the Purchaser Statement and either Party may refer the matter as an Expert Dispute for resolution pursuant to Schedule 18 (Dispute Resolution Procedure).
- 15.11. Following Provisional Acceptance or Qualified Provisional Acceptance (as the case may be) of a Unit, the Purchaser may commence operation of such Unit 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 provisions of clause 15.15.

### **Qualified Provisional Acceptance**

- 15.12. If one or more of the conditions for Provisional Acceptance set out in clause 15.7 has not been satisfied in respect of a Unit when the Unit is tendered for Provisional Acceptance by the Manufacturer, and provided that the Unit 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 (but not obliged) nonetheless to issue a QPAC in respect of that Unit. 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 and Final Acceptance of the Unit 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 on or before the date on which Final Acceptance of the Unit is scheduled to occur pursuant to the Project Programme (*Preconditions Timetable*).
- 15.13. Where the Preconditions in a QPAC have been satisfied in respect of a Unit, the Purchaser shall issue a PAC to the Manufacturer with respect to such Unit.

#### **Final Acceptance**

15.14. The Manufacturer shall use all reasonable endeavours to achieve Final Acceptance of each Unit on the relevant Contractual Final Acceptance Date for that Unit, and the provisions of paragraph 2.5 of Schedule 6 (*Payment Mechanism*) of the TSA shall apply.

15.15. Final Acceptance of a Unit shall occur when:

- such Unit has met all of the requirements for Provisional Acceptance and all of the Provisional Acceptance Criteria have been met in full (including, if applicable, any such requirements under clause 15.2(b));
- (b) such Unit has completed 10,000 consecutive SAFFM on the LO Infrastructure (excluding any amount of SAFFM accumulated under clause 15.7) in Unrestricted Passenger Revenue-Earning Service (and without the intervention of on-board technical support by the Manufacturer). Each time a Service Affecting Failure occurs the milometer shall be reset to zero and Final Acceptance running shall recommence until 10,000 consecutive SAFFM are achieved (Unit Final Fault Free Running);
- (c) the Preconditions set out in any QPAC under clause 15.12 have been satisfied to the satisfaction of the Purchaser in respect of such Unit;
- (d) such Unit is Fault Free and there are no Recurrent Defects;
- (e) any Changes, Mandatory Modifications and Fault rectification due for completion prior to Final Acceptance of the relevant Unit have been completed;
- (f) the Manufacturer has updated all relevant Technical Documents to reflect any Modifications, Mandatory Modifications and Changes made to the Units; and
- (g) the Simulator has been Accepted and is installed and fully functioning at the Simulator Initial Location.
- 15.16. Where the conditions specified in clause 15.15 have been satisfied with respect to a Unit, the Purchaser shall issue a Final Acceptance Certificate to the Manufacturer with respect to such Unit.
- 15.17. If the GOB Infrastructure has not become Available Infrastructure by 22 August 2018, then in relation to any Dual Voltage Unit which has both:
  - (a) previously received a PAC or QPAC; and
  - (b) satisfied all of the Final Acceptance Criteria other than that under clause 15.15(a) in respect of the requirements under clause 15.2(b) only,

for the purposes of the Milestone Payment due under the Schedule of Milestones for achievement of Final Acceptance only, Final Acceptance of such Dual Voltage Unit shall be deemed to have occurred on the later of:

- (i) 22 August 2018; and
- (ii) the date on which the conditions in paragraphs (a) and (b) are both satisfied, unless the GOB Infrastructure has become Available Infrastructure before such date, in which case the Milestone Payment will not be payable until all of the Final Acceptance Criteria have been satisfied.

The payment of the Milestone Payment for Final Acceptance of a Dual Voltage Unit before issuance of the Final Acceptance Certificate in accordance with this clause 15.17 shall not affect the Manufacturer's obligation to comply with the provisions of clause 15.2(b) upon the GOB Infrastructure subsequently becoming Available Infrastructure, and the Purchaser shall in any case not issue a Final Acceptance Certificate until all of the Final Acceptance Criteria have been satisfied.

### Fleet Acceptance

- 15.18. The Manufacturer shall use all reasonable endeavours to achieve Fleet Acceptance by the Contractual Fleet Acceptance Date.
- 15.19. 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 Units with unconditional approval to operate from the relevant Competent Authority or such successor certificate which allows Unrestricted Passenger Revenue-Earning Service over all the LO Infrastructure;
  - (b) receipt by the Purchaser of all relevant up-to-date documentation in accordance with clause 15.7(f);
  - (c) the performance and reliability of the Fleet has reached a level of at least 48,000 miles Mean Distance Between Service Affecting Failure, based on a three Railway Period rolling average (*Fleet MDBSAF Target*); and
  - (d) all Units have achieved Final Acceptance.
- 15.20. Upon Fleet Acceptance being obtained in accordance with clause 15.19, the Purchaser shall issue a Fleet Acceptance Certificate to the Manufacturer.
- 15.21. If clause 15.17 applies in respect of the Dual Voltage Units, then, provided that all of the Fleet Acceptance Criteria have been satisfied save only to the extent they relate to the GOB Infrastructure, for the purposes of the Milestone Payment due under the Schedule of Milestones for achievement of Fleet Acceptance only, Fleet Acceptance shall be deemed to have occurred on the later of:
  - (a) 2 January 2020; and
  - (b) the first date on which Final Acceptance is deemed to have occurred for all of the Dual Voltage Units in accordance with clause 15.17.

The payment of the Milestone Payment for Fleet Acceptance before issuance of the Fleet Acceptance Certificate in accordance with this clause 15.21 shall not affect the manufacturer's obligations to comply with all of the provisions of clause 15.19 to the extent they relate to the GOB Infrastructure upon the GOB Infrastructure subsequently becoming Available Infrastructure, and the Purchaser shall in any case not issue a Fleet Acceptance Certificate until all of the Fleet Acceptance Criteria have been satisfied.

### **Equipment Acceptance**

- 15.22. The Manufacturer shall deliver and tender for Equipment Acceptance in accordance with the Project Programme at the Designated Delivery Location the Simulator, each Initial Spare, each Initial Special Tool and each Manufacturer Fit Out Asset which (where relevant) corresponds with the Unit to which that item of Equipment relates or with which it is being delivered and which has been notified by the Purchaser to the Manufacturer in accordance with clause 15.1(d) for that item of Equipment.
- 15.23. The Purchaser shall not be obliged to accept the tender of the Simulator, an Initial Spare, an Initial Special Tool or a Manufacturer Fit Out Asset for Equipment Acceptance, nor issue a Simulator Acceptance Certificate, a Spares Acceptance Certificate, a Special Tools Acceptance Certificate or a Manufacturer Fit Out Assets Acceptance Certificate respectively unless:
  - (a) the particular item of Equipment (other than any Manufacturer Fit Out Asset) conforms with the appropriate part of the Train Technical Requirements;
  - (b) the particular item of Equipment complies with all Applicable Laws and Standards, has all Relevant Approvals and is Fault Free;
  - (c) in the case of Initial Spares and Initial Special Tools, the number and specification of the relevant Spares and Special Tools corresponds with that required to be Accepted on the relevant date pursuant to Schedule 8 (Spares and Special Tools), the Project Programme and terms of this Agreement;
  - (d) in the case of Manufacturer Fit Out Assets, the number and specification of the relevant Manufacturer Fit Out Asset corresponds with that required to be Accepted on the relevant date pursuant to Appendix 1 (Manufacturer Fit Out Assets) of Schedule 9 (Maintenance Facilities and Chingford Stabling Site);
  - (e) the relevant Equipment Acceptance Tests for that item of Equipment have been successfully completed to the Purchaser's satisfaction;
  - (f) in the case of the Simulator, the Simulator has been properly installed at the Simulator Initial Location and all installation tests have been successfully completed to the satisfaction of the Purchaser; and
  - (g) any Manufacturer Fit Out Works at the relevant Maintenance Facility or the Chingford Stabling Site that should have been carried out by the Manufacturer by that date according to the Project Programme have been completed in accordance with this Agreement.
- 15.24. Where the conditions specified in clause 15.23 have been fulfilled, Equipment Acceptance of the relevant item of Equipment shall occur and the Purchaser shall issue to the Manufacturer a Simulator Acceptance Certificate, a Spares Acceptance Certificate, a Special Tools Acceptance Certificate or a Manufacturer Fit Out Assets Acceptance Certificate as the case may be, in respect of that item of Equipment.
- 15.25. If the conditions specified in clause 15.23 have not been satisfied, the Purchaser shall issue to the Manufacturer, on the day on which the relevant Equipment is tendered for

Acceptance by the Manufacturer, a Purchaser Statement setting out which of the conditions specified in clause 15.23 have not been satisfied.

15.26. 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 Working Days of receipt of the Purchaser Statement and either Party may refer the matter as an Expert Dispute for resolution pursuant to Schedule 18 (*Dispute Resolution Procedure*).

### Certificates

15.27. The Parties agree that the issue of any certificate, document or notice under clause 14 (*Testing and Certification*), this clause 15 and 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 Units.

#### 16. Delivery Liquidated Damages

## Liquidated Damages for Delay to Units

16.1. Subject to clause 16.3, if the Manufacturer does not obtain a PAC or a QPAC in respect of any Unit on or prior to the Contractual Provisional Acceptance Date for that Unit, the Manufacturer shall pay liquidated damages to the Purchaser accruing from the Contractual Provisional Acceptance Date for that Unit until the actual date upon which a PAC or QPAC is issued in relation to that Unit by the Purchaser at the daily rate of £2,000 (exclusive of VAT) per Unit per day, and such liquidated damages shall (without prejudice to clause 30 (*Manufacturer Default*)) be the sole and exclusive remedy of the Purchaser in respect of such late delivery.

### Liquidated Damages for Delay to Simulator

16.2. 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 in accordance with the Project Programme, the Manufacturer shall pay liquidated damages to the Purchaser in the amount of £30,000 for each Railway Period or part thereof after the Simulator Acceptance Date until Acceptance of the Simulator has occurred and such liquidated damages shall (without prejudice to clause 30 (*Manufacturer Default*)) be the sole and exclusive remedy of the Purchaser in respect of such late delivery.

### Late Delivery Liquidated Damages Cap

16.3. Subject to clause 16.4, the maximum liability of the Manufacturer to make payment of liquidated damages incurred pursuant to clauses 16.1 and 16.2 shall not exceed per cent. of the Total Contract Price (exclusive of VAT).

#### Application of Late Delivery Liquidated Damages to Options

- 16.4. Where the Purchaser has served an Option Notice:
  - (a) the Purchaser shall promptly revise the Project Programme to take into account each of the Contractual Acceptance Dates for the Option Units and/or the Option Vehicles to be supplied by the Manufacturer in respect of that Option and notify the Manufacturer of the same;

- (b) upon receipt by the Manufacturer of a notice given pursuant to clause 16.4(a), the revised Project Programme attached to the notice shall supersede and replace the existing Project Programme and shall be incorporated in and form part of this Agreement; and
- (c) the maximum liability of the Manufacturer to make payment of liquidated damages incurred pursuant to clause 16.1 shall increase from the date of receipt by the Manufacturer of a revised Project Programme from the Purchaser or its nominee in accordance with clause 16.4(b) by an amount equivalent to per cent of the Option Price of the Option Unit Change (exclusive of VAT).

## Liquidated Damages for Excess Mass

16.5.

(a)

Where it is agreed or determined in accordance with this Agreement that the Actual Mass of a Unit exceeds the Contracted Design Mass, then the Purchaser may in its absolute discretion elect;

- subject to clause 16.5(b), to require the Manufacturer to pay to the Purchaser liquidated damages calculated in accordance with clause 16.6; or
- to refuse to issue a Qualified Provisional Acceptance Certificate or a Provisional Acceptance Certificate.
- (b) Where the Purchaser elects to require the Manufacturer to pay liquidated damages pursuant to clause 16.5(a)(i) and the Manufacturer does pay such liquidated damages in accordance with clause 16.8, such liquidated damages shall be the sole and exclusive remedy of the Purchaser in respect of the Units' non-compliance with the Contracted Design Mass, and each Unit shall be treated, for the purposes of whether such Unit is Fault Free, as complying with the Contracted Design Mass, but without prejudice to the Purchaser's right to refuse to issue a Provisional Acceptance Certificate if the relevant Unit does not comply with the Train Technical Specification or is otherwise not Fault Free for any other reason.

# Calculation of Excess Mass Liquidated Damages

16.6. If the Purchaser elects to require the Manufacturer to pay liquidated damages pursuant to clause 16.5(a)(i), the Manufacturer shall be liable for liquidated damages determined by the formula:

EMA = A x (B-C) x D

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 £12,000;

B means the average Actual Mass in tonnes of the first five Units to be Accepted by the Purchaser;

- C means the Contracted Design Mass in tonnes of the relevant Unit; and
- D means the number of Units forming part of the Initial Order.

### Application of Excess Mass Liquidated Damages to Option Unit Change

- 16.7. Where the Purchaser exercises an Option Unit Change in accordance with Schedule 12 (Change Procedure) in respect of Option Units and/or Option Vehicles, the Purchaser shall be entitled to calculate the amount of additional liquidated damages payable by the Manufacturer pursuant to clause 16.5 in respect of those Option Units and/or Option Vehicles and for the purposes of clause 16.6, the Purchaser and the Manufacturer agree that:
  - (a) in respect of Option Units:
    - (i) the definition of "A" shall be amended, such that the relevant amount is £12,000 (Indexed by RPI), calculated as at the date of the applicable Option Notice;
    - (ii) references in the definition of "D" to "the number of Units forming part of the Initial Order" shall be interpreted as meaning the number of Option Units the subject of the Option Unit Change that has been exercised by the Purchaser; and
    - (iii) the definition of "B" shall be replaced by the following wording:

"means:

- (A) where more than five Option Units have been ordered by the Purchaser, the average Actual Mass in tonnes of the first 5 Option Units Accepted by the Purchaser; and
- (B) where five or less Option Units have been ordered by the Purchaser, the average Actual Mass in tonnes of all of those Option Units Accepted by the Purchaser;"; and
- (b) in respect of Option Vehicles:
  - the definition of "A" shall be amended, such that the relevant amount is £12,000 (Indexed by RPI), calculated as at the date of the applicable Option Notice;
  - (ii) references in the definition of "C" to a "Unit" shall be interpreted as meaning an Option Vehicle;
  - (iii) the definition of "B" shall be replaced by the following wording:

"means:

(A) where more than 5 Option Vehicles have been ordered by the Purchaser, the average Actual Mass in tonnes of the first 5 Option Vehicles Accepted by the Purchaser; and

- (B) where 5 or less Option Vehicles have been ordered by the Purchaser the average Actual Mass in tonnes of all of those Option Vehicles Accepted by the Purchaser;"; and
- (iv) references in the definition of "D" to "the number of Units forming part of the Initial Order" shall be interpreted as meaning the quantity of Option Vehicles the subject of the Option Unit Change that has been exercised by the Purchaser.

### Determination and Payment of Liquidated Damages

- 16.8. (a) At any time after:
  - (i) in the case of liquidated damages for late delivery accrued under clause 16.1, clause 16.2 or clause 16.4, the last Working Day of a Railway Period in which such liquidated damages accrued; or
  - (ii) in the case of liquidated damages for excess mass incurred under clause 16.5 or clause 16.7, the date of Acceptance of the fifth Unit, Option Unit or Option Vehicle (as applicable) in respect of which the liquidated damages are incurred,

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 Manufacturer shall within 5 Working Days of receipt of an LD Notice notify the Purchaser whether it agrees or disagrees with the amount of liquidated damages specified in the LD Notice.
- (c) Where the Manufacturer agrees (or is deemed to agree pursuant to clause 16.8(e)) with the amount of liquidated damages specified in the LD Notice, the Purchaser shall be entitled to, at its discretion:
  - (i) deduct the amount of liquidated damages from any subsequent Milestone Payments to the Manufacturer; or
  - (ii) require the Manufacturer to pay such liquidated damages to the Purchaser within 10 Working Days of its receipt of such LD Notice,

and the Purchaser shall notify the Manufacturer of its election as soon as practicable after issue of the LD Notice.

(d) Where the Manufacturer disagrees with the amount of liquidated damages specified in the LD Notice, the Manufacturer shall, in the notice given to the Purchaser in accordance with clause 16.8(b), set out the amount of liquidated damages (if any) it considers that it has incurred in the relevant Railway Period or in respect of the relevant Unit (as applicable), together with sufficient information to enable the Purchaser acting reasonably to understand how such amount was calculated. If the Purchaser disagrees with

LON35510310/114 119070-0040

the amount of liquidated damages notified to it by the Manufacturer, either the Manufacturer or the Purchaser may refer the matter(s) in dispute to be determined in accordance with clause 40 (*Dispute Resolution*).

(e) If the Manufacturer fails to respond to an LD Notice within the timeframe specified in clause 16.8(b) the Manufacturer shall be deemed to have agreed with the amount of liquidated damages specified in the LD Notice.

### Genuine pre-estimate of loss

- 16.9. (a) The Manufacturer acknowledges and agrees that the liquidated damages specified in clauses 16.1, 16.2, 16.6, 16.7 and 20.3 in each case represent a genuine pre-estimate of the Purchaser's Losses arising from the failure to provide a Unit on the relevant Contractual Acceptance Date, the Simulator on the Simulator Acceptance Date, the Actual Mass of a Unit exceeding the Contracted Design Mass and the taking out of revenue earning service of a Unit referred to in clause 20.3 (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 clause 16.1, 16.2, 16.6, 16.7 or 20.3; 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 clause 16.1, 16.2, 16.6, 16.7 or 20.3.
  - (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 Unit on the relevant Contractual Acceptance Date, the Simulator on the Simulator Acceptance Date, the Actual Mass of a Unit exceeding the Contracted Design Mass or the taking out of revenue earning service of a Unit referred to in clause 20.3 (as applicable).

### **17.** Extensions of Time

### Permitted Delays

- 17.1. For the purposes of this Agreement, the occurrence of one or more of the following shall constitute a *Permitted Delay Event*:
  - (a) a Force Majeure Event which prevents the Manufacturer from performing its obligations under this Agreement;
  - (b) a Compensation Event;
  - (c) a Relief Event; or

(d) the Purchaser has not issued a Notice to Proceed in accordance with clause 4.1,

but in each case, only insofar as any of the events described in clauses 17.1(a) to 17.1(d) has a direct and adverse effect on the Manufacturer's ability to achieve Acceptance of a Unit and/or any other item of Purchased Equipment by the Contractual Acceptance Date in relation to such Unit and/or item of Purchased Equipment (as the case may be) and is not caused or contributed to by the act, omission or default of the Manufacturer or any of its Subcontractors.

## **Compensation Events**

17.2. Subject to clause 17.4, if and to the extent that a Compensation Event:

- (a) is a direct cause of a delay in achieving a Contractual Acceptance Date for a Unit or any other item of Purchased Equipment;
- (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 to obtain such relief and/or claim its Direct Losses the Manufacturer shall comply with the provisions of Part D (*Compensation Changes*) of Schedule 12 (*Change Procedure*) in place of clauses 17.5 to 17.8 and clause 17.10.

# **Relief Events**

17.3. Subject to clause 17.4, if and to the extent that a Relief Event is a direct cause of a delay in achieving a Contractual Acceptance Date for a Unit or any other item of Purchased Equipment then the Manufacturer is entitled to apply for an extension to the relevant Unit Longstop Date and relief from any right of the Purchaser to terminate this Agreement under clause 30 (*Manufacturer Default*) (other than pursuant to clause 30.1(j)) as a result of and to the extent of any failure by the Manufacturer arising from such Relief Event, but irrespective of such relief, the Manufacturer shall remain responsible for the payment of liquidated damages pursuant to clauses 16.1, 16.2, 16.6 and 20.3.

### Qualification to Permitted Delays

17.4. Where any delay in achieving a Contractual Acceptance Date for a Unit or any other item of Purchased Equipment arises or will arise, the Manufacturer shall, subject to and in accordance with the terms of this clause 17 be entitled to an extension to the Contractual Acceptance Date and/or Unit Longstop Date (as applicable) for that Unit or that item of Purchased Equipment (as the case may be), (and, in the case of a Compensation Event, to claim its Direct Losses) arising from such event, only to the extent that such delay (and/or Direct Losses) are directly caused by a Permitted Delay Event and provided that the Manufacturer:

- (a) notifies the Purchaser of the Permitted Delay Event in accordance with clause 17.5 (or, in the case of a Compensation Event, paragraph 1 of Part D (Compensation Changes) of Schedule 12 (Change Procedure)) and subsequently provides such further information as the Purchaser may reasonably require regarding the nature, likely duration and consequences of such event;
- (b) provides the Purchaser with reasonable access to the Manufacturer's facilities and/or the facilities of its Subcontractors for investigating the validity and consequences of the potential Permitted Delay Event;
- (c) in accordance with the standard expected of a competent contractor involved in designing and manufacturing rolling stock acting in accordance with Good Industry Practice, uses its reasonable endeavours to mitigate any adverse consequences of the relevant Permitted Delay Event, and the Manufacturer shall not be entitled to any relief or compensation under this clause 17 to the extent that the consequences of the Permitted Delay Event arise or are increased as a result of a failure by the Manufacturer to mitigate such consequences; and
- (d) shall not be entitled to an extension of time or to recover losses to the extent that the Permitted Delay Event was caused by or resulted from any act, neglect or default of the Manufacturer, its Subcontractors and/or employees and/or any breach of this Agreement by the Manufacturer, its Subcontractors and/or employees.

### Notification of Permitted Delay Event

- 17.5. As soon as practicable and in any event within 15 Working Days after the Manufacturer is aware that a Permitted Delay Event has caused or is likely to cause any of the consequences referred to in clause 17.4, the Manufacturer shall give to the Purchaser a notice of its claim (an *Initial PD Claim Appraisal*) which shall set out:
  - (a) the Permitted Delay Event upon which the claim for an extension of time is based;
  - (b) the Manufacturer's initial assessment of the cause and extent of the delay and the effect of the Permitted Delay Event on the Manufacturer's ability to comply with its obligations under this Agreement, including any of the dates and activities referred to in the Project Programme, the Contractual Provisional Acceptance Dates, the Contractual Final Acceptance Dates and the Contractual Fleet Acceptance Date; and
  - (c) a description of the measures which the Manufacturer has adopted and/or proposes to adopt to mitigate the consequences of the Permitted Delay Event.

# Purchaser Response to Initial PD Claim Appraisal

17.6. Within 15 Working Days after receipt of an Initial PD Claim Appraisal, the Purchaser may issue a PD Claim Confirmation Notice in accordance with clause 17.10 or issue an instruction for the Manufacturer to provide a PD Claim Appraisal in respect of the Permitted Delay Event (a **PD Claim Appraisal Instruction**).

# 17.7. A PD Claim Appraisal instruction provided by the Purchaser under clause 17.6 shall:

- (a) include any additional information in respect of the relevant Permitted Delay Event which the Purchaser requires the Manufacturer to consider when making the PD Claim Appraisal; and
- (b) specify any reporting format, breakdown of quotations or any other matters specifically required to be included in the PD Claim Appraisal.

# PD Claim Appraisal

- 17.8. As soon as practicable and in any event within 15 Working Days after its receipt of a PD Claim Appraisal Instruction, the Manufacturer shall deliver a written report (a **PD** Claim Appraisal) to the Purchaser, which shall set out:
  - (a) the Manufacturer's detailed assessment of the matters referred to in clauses 17.5(a) to 17.5(c) and any other impact of the Permitted Delay Event on the Manufacturer's ability to comply with its obligations under this Agreement;
  - (b) full and detailed particulars of the dates in the Project Programme that may be affected;
  - (c) details of the documents that will be relied upon to support any claim of the Manufacturer for an extension of time, other relief and/or compensation based on the Permitted Delay Event; and
  - (d) details of the measures which the Manufacturer has adopted and/or proposes to adopt to avoid or reduce the effects of the Permitted Delay Event on its ability to duly comply with its obligations under this Agreement.

# **Delay** in Notification

17.9. If the Manufacturer delivers an Initial PD Claim Appraisal, a PD Claim Appraisal or any other relevant information required by the Purchaser in relation to a Permitted Delay Event after the dates specified in this elause 17 then the Manufacturer shall not be entitled to an extension of time, other relief from its obligations under this Agreement and/or compensation to the extent that the amount of such extension, other relief and/or compensation has been increased as a result of the delay in providing such information.

### Grant of Extension of Time

- 17.10. Subject to the Manufacturer complying with the requirements of this clause 17 and the Purchaser, acting reasonably, being satisfied that a Permitted Delay Event has occurred the Purchaser shall, as soon as reasonably practicable, agree with the Manufacturer a reasonable extension of time to:
  - (a) in the case of a Force Majeure Event, the Contractual Acceptance Date (whether on an interim or final basis) of any affected Purchased Equipment and any such extension shall amend the Project Programme, and each relevant Contractual Acceptance Date and Unit Longstop Date accordingly; or
  - (b) in the case of a Relief Event, the Unit Longstop Date of any affected Unit,

and the Purchaser shall, within 14 days of the contents of the PD Claim Appraisal being agreed (or, if required, determined in accordance with clause 17.11), issue a notice in writing setting out the matters which have been agreed or determined (a PD Claim Confirmation Notice).

# Disputes

17.11. If the Purchaser disagrees that a Permitted Delay Event has occurred or the Parties cannot agree the extent of any extension of time, other relief and/or compensation required, either Party may refer the matter as an Expert Dispute for resolution pursuant to Schedule 18 (Dispute Resolution Procedure).

### Separate Claims

17.12. Any extension of time agreed by the Purchaser and the Manufacturer under this clause 17 to a particular Contractual Acceptance Date or Unit Longstop Date shall not of itself entitle the Manufacturer to any extension to any other Contractual Acceptance Date or Unit Longstop Date. The Manufacturer must make a claim under this clause 17 for an extension of time to each date or period to which it considers it is, or may become, entitled under this clause 17, so that the Manufacturer shall be in no better or no worse position than it would otherwise have been had the matter giving rise to the extension of time not occurred.

### Sole Remedy

17.13. (a)

.

Except as expressly provided elsewhere in this Agreement, any extension of time agreed between the Purchaser and the Manufacturer or determined pursuant to this clause 17 shall, together with any compensation agreed or determined pursuant to Part D (*Compensation Changes*) of Schedule 12 (*Change Procedure*) in relation to a Compensation Event, be the Manufacturer's sole remedy in respect of the relevant Permitted Delay Event.

(b) Nothing in this clause 17 shall affect any entitlement of the Purchaser to levy liquidated damages in accordance with clauses 16.1, 16.2, 16.6 and/or 20.3 during the period during which a Relief Event is subsisting.

### Amendment to Project Programme

17.14. Where an extension of time has been agreed in accordance with this clause 17 the Purchaser shall amend the Project Programme to reflect such extension of time.

### 18. Transfer of Title and Risk

#### Title to Items of Purchased Equipment

18.1. Where an item of Purchased Equipment (including a Unit) has been Accepted by the Purchaser, immediately thereupon the Manufacturer shall Deliver that item of Purchased Equipment to the Purchaser or, at the Purchaser's option, the Owner (where it is not the Purchaser). The title to such item of Purchased Equipment shall pass to the Purchaser or the Owner (where it is not the Purchaser) (as the case may be) immediately on Delivery of the item of Purchased Equipment and the Manufacturer warrants that such title shall be with full title guarantee free and clear of all Security Interests. Risk of loss, theft, damage or destruction of an item of Purchased Equipment shall pass to the Purchaser or the Owner (where it is not the Purchased Equipment and the Manufacturer warrants that such title shall be with full title guarantee free and clear of all Security Interests. Risk of loss, theft, damage or destruction of an item of Purchased Equipment shall pass to the Purchaser or the Owner (where it is not the Purchased Equipment shall pass to the Purchased Equipment shall pass to the Purchaser or the Owner (where it is not the Purchased Equipment shall pass to the Purchaser or the Owner (where it is not the Purchased Equipment shall pass to the Purchaser or the Owner (where it is not the Purchased Equipment shall pass to the Purchaser or the Owner (where it is not the Purchased Equipment shall pass to the Purchaser or the Owner (where it is not the Purchased Equipment shall pass to the Purchaser or the Owner (where it is not the Purchased Equipment shall pass to the Purchaser or the Owner (where it is not the Purchased Equipment shall pass to the Purchaser or the Owner (where it is not the Purchased Equipment shall pass to the Purchaser or the Owner (where it is not the Purchased Equipment shall pass to the Purchaser or the Owner (where it pass to the Purchased Equipment shall pass to the Purchaser or the Owner (where it pass to the Purchased Equipment shall pass to the Purchaser or the Owner (where it pass to the Pur

Purchaser) (as the case may be) at the time at which title to such item is transferred to the Purchaser or the Owner (where it is not the Purchaser) (as the case may be).

### **Prohibition on Creating Security**

18.2. The Manufacturer undertakes that it shall not, at any time, create, grant or purport to create or grant any Security Interest over any Unit and/or any other item of Purchased Equipment (including any Manual or other documentation) 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.

# **Ownership of Purchased Equipment**

18.3. Without prejudice to clause 44.1, any reference in this Agreement to items of Purchased Equipment or other assets being supplied to, delivered (whether by Delivery or otherwise) to and/or owned by the Purchaser shall, in the event that another person has become the Owner be construed as a reference to items of Purchased Equipment or other assets being supplied to, delivered to or owned by such person.

### 19. Insurance

The Manufacturer and the Purchaser shall comply with the requirements of the insurance regime set out in Schedule 13 (*Insurance*).

### 20. Warranties

### Design Life Warranty

20.1. The Manufacturer warrants to the Purchaser in respect of each Unit that, on the date of Provisional Acceptance or Qualified Provisional Acceptance of a Unit, such Unit is designed for a 35-year service life subject to operation and maintenance of such Unit in accordance with the Permitted Use, the Maintenance Plan and the Manuals (and clause 20.3 shall apply).

### Major Component Warranty

20.2. The Warranted Design Life shall commence on the date of Acceptance of the (a) relevant Unit. If a Manufacturer Fault arises on any of the Major Components during the Warranted Design Life of such Major Component at any time when the Maintainer is not responsible for maintaining the Units substantially on the basis set out in the Train Services Agreement (and/or there is a TSSSA Change), the Manufacturer warrants to the Purchaser that it shall remedy the Manufacturer Fault and undertake necessary rectification to such Unit and execute such work as may be required at its own cost in order to permit the Unit to continue in operation pending such rectification. Within twenty Working Days after having been notified of such Manufacturer Fault by the Purchaser, the Manufacturer shall submit to the Purchaser for approval, acting reasonably, a programme for rectification of such Manufacturer Fault as soon as is practicable and the Parties shall negotiate and agree such programme in good faith, within a period of ten Working Days after receipt of such programme.

Major Component	Warranted Design Life
Bodyshell (structural)	35 years
Couplers (mechanical components)	35 years
Traction (including all items in the power circuit, traction motors and associated transmission systems)	20 years
Mechanical and electrical brake systems	20 years
Train Management System (Unit and Vehicle equipment, including intercommunication data- bus for train control and subsystem condition monitoring)	35 years
Paint system	10 years
Interior fixtures	15 years
Seats (frames)	15 years
HVAC	15 years
Door system complete	15 years
Bogie Frames	35 years

- (b)
- If a Manufacturer Fault in any of the Major Components becomes a Recurrent Defect during the Warranted Design Life, the Manufacturer warrants to the Purchaser that it shall remedy such Manufacturer Fault and undertake necessary rectification on all Units and such work as may be required in order to permit those Units to continue in operation pending such rectification. Within 20 Working Days of having been notified of such Manufacturer Fault by the Purchaser, the Manufacturer shall submit to the Purchaser for approval, acting reasonably, a programme of rectification of such Manufacturer Fault on all Units as soon as is practicable and the Parties shall negotiate and agree such programme in good faith, within a period of 28 Working Days after receipt of such programme.
- (c) If any Manufacturer Fault in any of the Major Components is not remedied in accordance with this clause 20.2, the Purchaser may remedy the Manufacturer Fault, or procure the remedy of the Manufacturer Fault and the Manufacturer shall indemnify the Purchaser in respect of any costs incurred by the Purchaser in remedying the Manufacturer Fault.
- (d) In respect of any Major Component which is replaced as part of the remedy of a Manufacturer Fault in accordance with this clause 20.2 or a Refurbishment (as defined in the Train Services Agreement), the

LON35510310/114 119070-0040

Manufacturer shall (to the extent available in the market from third Parties) provide the Purchaser with a new warranty in respect of such Major Component which shall commence on the date of completion of such remedy or Refurbishment (as the case may be) and run for a further period equal to the full Warranted Design Life of such Major Component. The provisions of this clause 20.2 shall apply to such replacement Major Component and Major Component warranty.

(e) All conditions and warranties which are to be implied by statute or otherwise by general law into this Agreement are hereby excluded to the maximum extent permissible by law.

## Liquidated Damages for warranty work

- 20.3. Without prejudice to the Manufacturer's other obligations under this Agreement, if a Unit is taken out of revenue-earning service as a result of, or to rectify a Manufacturer Fault (including a Recurrent Defect) that the Manufacturer is obliged to remedy in accordance with this clause 20 at any time when the Maintainer is not responsible for maintaining the Units substantially on the basis set out in the Train Services Agreement (and/or there is a TSSSA Change):
  - (a) the Manufacturer shall pay the Purchaser liquidated damages at the rate of £2,500 for each day or part thereof commencing on the date upon which the Unit is removed from revenue-earning service up to and including the date upon which that Unit (or Vehicle or Part) the subject of the relevant warranty work is returned to the Purchaser (or the Operator) in a condition which enables the Purchaser or the Operator to operate the Unit in revenue-earning service; and
  - (b) the Manufacturer shall arrange and pay for the necessary movement of a Unit or Vehicle to and from its own or any third party site necessary to undertake warranty work; and
  - (c) amounts payable under this clause 20.3 shall be invoiced by the Purchaser on the last Working Day of each calendar month and paid by the Manufacturer at the end of the Railway Period following the Railway Period in which the invoice is received.
- 20.4. The Manufacturer's liability to pay liquidated damages pursuant to clause 20.3 shall be in full and final settlement of any losses suffered by the Purchaser or the Operator as a result of the Purchaser or the Operator being unable to operate the Unit (as the case may be) 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 the Manufacturer Fault. The Manufacturer acknowledges and agrees that the liquidated damages specified in clause 20.3 represent a genuine pre-estimate of the Purchaser's loss arising from the default to which they relate.

### **Reduction in Passenger Services**

20.5. The Manufacturer acknowledges and agrees that when it wishes to take a Unit out of revenue-earning service to rectify a Manufacturer Fault under this clause 20, then unless the Manufacturer is able to demonstrate to the Purchaser that any work

required to rectify such Manufacturer Fault can be carried out without the Operator having to cancel or reschedule any revenue-earning passenger services, no work shall be undertaken on the Unit to remedy the Manufacturer Fault unless:

- (a) at least 2 weeks' notice has been given to the Purchaser in writing of the date on which such work is to begin; and
- (b) the Purchaser has agreed the timetable for the work to remedy the Manufacturer Fault including the maximum downtime for each Unit that will be unavailable for revenue earning service.

### **Recurrent Defects**

20.6. If, during the Recurrent Defect Period, the Purchaser notifies the Manufacturer that a Recurrent Defect has occurred, the Manufacturer warrants to the Purchaser that it shall remedy such Recurrent Defect and undertake necessary rectification on all Units, Vehicles, Spares, the Simulator and Parts (as appropriate), and undertake such work as may be feasible in order to enable such Units, Vehicles, Spares, the Simulator and Parts (as the case may be) to continue in operation in compliance with the terms of this Agreement pending such rectification. Within 20 Working Days after having been notified of such Recurrent Defect by the Purchaser, the Manufacturer shall submit to the Purchaser a programme for rectification of such Recurrent Defect and any necessary rectification required on any Unit, Vehicle, Spare, the Simulator or Part (as the case may be) as soon as is practicable and the Parties shall negotiate and agree such programme.

### Interface with Train Services Agreement

20.7. The provisions of this clause 20 shall not apply to the extent the Maintainer is obliged to rectify and does rectify any Manufacturer Fault or Recurrent Defect under the Train Services Agreement and performs its obligations in accordance with the requirements of the Train Services Agreement in this respect.

#### Limitation on liability under warranties

20.8. 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 and/or is not the subject of a Change Confirmation Notice.

#### Survival

20.9. The provisions of this clause 20 shall survive the expiry and termination of this Agreement.

#### 21. Right of the Purchaser to Authorise Work by Others

### **Right of the Purchaser to Perform Work**

21.1. Without prejudice to any other right or remedy of the Purchaser under this Agreement, if the Manufacturer fails to provide any item of Purchased Equipment 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 item of Purchased Equipment or carry out the relevant obligation within 30 days of the date of the notice. If the Manufacturer fails to supply the item of Purchased Equipment or carry out the relevant obligation the Purchaser may procure (providing he is acting reasonably) the supply of that item of Purchased Equipment or perform such obligation using its own or third party personnel and resources.

### **Recovery of Costs**

21.2. All costs and expenses properly and reasonably incurred (including labour at the Purchaser's hourly rate of f (Indexed by RPI), by the Purchaser pursuant to clause 21.1, together with VAT chargeable thereon, shall be recoverable by the Purchaser from the Manufacturer within 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.

### **Relationship with Fault Rectification Obligations**

21.3. 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, provided that the Manufacturer shall have the right to supervise any Fault rectification work subject to the Purchaser's reasonable requirements.

### 22. Total and Partial Loss of Unit

#### Consequence of an Event of Loss

- 22.1. Without prejudice to clause 40 (*Dispute Resolution*), in the event that any Unit suffers an Event of Loss at any time prior to Acceptance (a *Lost Unit*), 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 Unit in accordance with clause 22.2; or
    - (ii) stop performing its obligations under this Agreement with respect to the Lost Unit, in which case the provisions of clause 22.5 shall apply.

### Replacement

- 22.2. If the Purchaser elects to require the replacement of a Lost Unit 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 Unit (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.

#### **Relief from obligations**

22.3. 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 Delivery Liquidated Damages in respect of the Lost Unit 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 Delivery Liquidated Damages under clauses 16.1 to 16.4 (inclusive) in respect of the Lost Unit until the Acceptance of the replacement.

#### No Compensation

- 22.4. 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 Unit the subject of the Event of Loss;
    - (ii) the Total Contract Price or the Contract Price for any other item of Purchased 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.

# Cancellation

- 22.5. If the Purchaser elects to cancel this Agreement in respect of a Lost Unit 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 Unit; and
  - (b) the Manufacturer shall, on the date of any cancellation of this Agreement under this clause 22.5(a), 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 Unit, 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).
  - (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 Unit that has been cancelled in accordance with this clause 22.5.

## **Consequence of partial Loss**

22.6. In the event that a Unit 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 Permitted Delay Event in respect of which an extension of time has been granted pursuant to clause 17 (*Extensions of Time*)) for such Unit).

### 23. Manufacturing Tooling and Free Issue Materials

### Notification of Manufacturing Tooling

23.1. Within 28 days of the date of Final Acceptance of the last Unit, the Manufacturer shall provide to the Purchaser a list of all Manufacturing Tooling used in the manufacture of the Units and the Equipment.

### **Disposal of Manufacturing Tooling**

- 23.2. The Manufacturer shall not dispose and shall use reasonable endeavours to procure that no Key Subcontractor shall dispose of any Manufacturing Tooling (other than where obsolete, defunct, damaged beyond repair, worn out or faulty and 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 (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 and/or Special Tools of a type or types comprising the Initial Spares and/or Initial Special Tools specified by the Purchaser using such Manufacturing Tooling and offer to sell such Spares and/or Special Tools to the Purchaser; or

(b) request the Manufacturer to sell the relevant Manufacturing Tooling to the Purchaser.

### Final Run of Spares and/or Special Tools

- 23.3. (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 and/or Special Tools of the same type as pursuant to clause 23.2(a), the Manufacturer shall not be entitled to dispose of the relevant Manufacturing Tooling until the relevant quantity of Initial Spares and/or Initial Special Tools has been produced.
  - (b) The Manufacturer shall supply the specified quantity of Spare(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:
    - the price for each Spare (by reference to the relevant price set out in Part A (*Initial Spares*) of Schedule 8 (*Spares and Special Tools*) ordered by the Purchaser multiplied by the quantity of that Initial Spare specified by the Purchaser; and
    - (ii) the price for each Special Tool (by reference to the relevant price as set out in Part B (*Initial Special Tools*) of Schedule 8 ordered by the Purchaser multiplied by the quantity of that Initial Special Tool specified by the Purchaser,

immediately following the Delivery of such Spares and/or Special Tools.

(d) Legal and beneficial title to the Spares and/or the Special Tools supplied by the Manufacturer pursuant to this clause 23 shall pass to the Purchaser by Delivery, free from any Security Interest and with full title guarantee.

#### Sale and Purchase of Manufacturing Tooling

- 23.4. (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 f, or such higher amount 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 immediately deliver 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, free from any Security Interest and with full title guarantee.

### Free Issue Materials/third party provided equipment

- 23.5. (a) The Manufacturer acknowledges that the Purchaser shall be entitled to fit Free Issue Materials on to the Units either (i) through the Manufacturer; or (ii) 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 Unit to which they are to be fitted, shall be dealt with under the Change Procedure.
  - (c) Without prejudice to clause 16.4(a), the Purchaser shall be entitled to invoke a Purchaser Change under the Change Procedure if it requires the installation in any Unit of any Free Issue Materials.
  - (d) The Purchaser shall give reasonable notice to the Manufacturer in the event that the Purchaser contracts with a third party to provide equipment (including advertising services) to be installed in the Units before Acceptance of the last Unit and the Manufacturer shall act reasonably to provide the necessary access to and co-operate with such third party (in accordance with the Purchaser Change).
  - (e) The Manufacturer acknowledges that all advertising on the Units shall be the responsibility and domain of the Purchaser, and the Manufacturer shall not have any right to place any advertising on to the Units other than at the specific request of the Purchaser (or the Purchaser's nominee). Any revenue from any advertising placed on the Units shall be for the benefit of the Purchaser.

# 24. Milestones and Security

The Purchaser and the Manufacturer shall comply with the provisions of Schedule 10 (*Milestones and Security*).

### 25. Payments and VAT

# Payments - Method of Payment

- 25.1. (a) Milestone Payments and all other payments required to be made under this Agreement will be made for value prior to the final date for payment in cleared funds to such account at a bank in the United Kingdom as the payee shall have notified to the payer by not less than three Working Days' notice, free and clear of any deduction, withholding, set-off or counterelaim whatsoever, except to the extent any deduction is required by any Applicable Laws and Standards, or is in accordance with the express provisions of this Agreement.
  - (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.

VAT

25.2. (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.
- (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).

# Default Interest

25.3. 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.

### Payments free and clear

- 25.4. (a) If any Party is required by law to make any deduction or withholding from any payment hereunder (such Party referred to herein as the *Payer*), it shall do so and the sum due from the Payer in respect of such payment shall be increased to the extent necessary to ensure that, after the making of such deduction or withholding, the Party to whom such payment is due (such Party referred to herein as the *Payee*) receives and retaius (free of any liability in respect of any such deduction or withholding) a net sum equal to the sum it would have received and retained had no deduction or withholding been required to be made.
  - (b) If following the making of any deduction or withholding in respect of sums payable hereunder and the payment by the Payer of any increased amount in accordance with the provisions of clause 25.4(a), the Payee receives or is granted a credit against, remission for or repayment of any Tax payable by it, which credit, remission or repayment the Payee is able to realise, utilise and retain and is referable to that increased amount so paid by the Payer, the Payee shall, to the extent that it is satisfied that it can do so without prejudice to the retention of such credit, remission or repayment, reimburse the Payer

with such amount as the Payee shall certify to be the proportion of such credit, remission or repayment as will leave the Payee (after such reimbursement and taking into account the time any Taxation was payable and any such credit, remission or repayment was received by the Payee) in no worse or no better position (after Taxation) than it would have been in had there been no such deduction or withholding from the said sums payable by the Payer hereunder. Such reimbursement shall be made as soon as possible upon such credit or remission or repayment having, in the reasonable opinion of the Payee, been received or granted.

(c) All payments under this Agreement are denominated in, and shall be made in, Sterling.

### 26. Guarantee

The performance of the Manufacturer's obligations under this Agreement shall be guaranteed by the Guarantor pursuant to the Guarantee.

### 27. Change Procedure

# Purchaser Changes

27,1. The provisions of Part A (*General*) and Part B (*Purchaser Changes*) of Schedule 12 (*Change Procedure*) shall apply in respect of Purchaser Changes, including an Option Unit Change.

# Manufacturer Changes

27.2. The provisions of Part A (General) and Part C (Manufacturer Changes) of Schedule 12 (Change Procedure) shall apply in respect of Manufacturer Changes.

#### 28. Change in Law

#### Change in Law

28.1. 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.

### Necessary Steps

28.2. The Manufacturer shall take all steps necessary to ensure that all of its obligations under this Agreement are performed in accordance with the terms of this Agreement following any Change in Law.

#### Consequences of a Qualifying Change in Law

- 28.3. The Manufacturer shall only be entitled to compensation and/or to an extension of time or other relief from its obligations for a Change in Law to the extent:
  - (a) it is a Qualifying Change in Law; and
  - (b) that the Manufacturer has complied with the provisions of Part D (Compensation Changes) of Schedule 12 (Change Procedure) which shall

apply in respect of any compensation and/or relief for the Manufacturer arising from a Qualifying Change in Law.

### Risk Allocation in respect of a Qualifying Change in Law

28.4. Any compensation or relief agreed or determined under this clause 28 and/or Part D (*Compensation Changes*) of Schedule 12 (*Change Procedure*) shall be the Manufacturer's sole remedy in respect of a Qualifying Change in Law and any associated Modification or other Change (or the consequence of either), and the provisions of this Agreement shall be construed accordingly.

#### **Requirement for Manufacturer Change**

28.5. 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 27 (*Change Procedure*) and Part C (*Manufacturer Changes*) of Schedule 12 (*Change Procedure*).

### Payment of Irrecoverable VAT

28.6. 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 28.6, *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.

# Mitigation

- 28.7. 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.

#### 29. Intellectual Property Rights

#### **Ownership of IPR**

29.1. 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.

29.2. 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.

### Licence granted by the Manufacturer during term of this Agreement

- 29.3. The Manufacturer hereby grants to the Purchaser an irrevocable, perpetual, cost-free, assignable (provided that such assignment is permitted only to any person to whom the Purchaser's rights and/or obligations under this Agreement are assigned in accordance with clause 44 (Assignment and Novation or granting of Security by the Purchaser)) 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 and the Third Party IPR, in each case for the purposes of:
  - (a) the testing, commissioning, use, operation, maintenance, modification, refurbishment and any related activity, of the Units and the Equipment and any related equipment, and permitting the Purchaser and the Operator to operate the Units and use the Equipment and/or any other item to be supplied pursuant to this Agreement for the purpose of operating the LO Services and any activity related to the delivery of and integration with the LO Infrastructure generally including interfaces between the Units and the LO Infrastructure and its systems;
  - (b) modifying (including changing the number of Vehicles which comprise a Unit), refurbishing, repairing, maintaining and overhauling the Units and/or any other item of Equipment supplied, or any related activity (including Fault rectification or other works pursuant to clauses 20 (*Warranties*) and 21 (*Right* of the Purchaser to Authorise Work by Others)), in each case to the extent the Purchaser is entitled to carry out such activities or procure a third party to do so in accordance with this Agreement and/or the TSA;
  - (c) complying with all Applicable Laws and Standards and all Relevant Approvals and with any requests of a Competent Authority;
  - (d) complying or co-operating with any enquiries made or carried out by the British Transport Police, Network Rail, the RAIB, HMRI or the Regulator (or any successor to any of their respective functions), or any other person carrying out any judicial or quasi-judicial function;
  - (e) using and copying the Technical Documents to the extent necessary to perform any of the purposes specified in this clause 29.3 including accessing any software used for using or accessing such documents;
  - (f) training personnel to carry out any of the activities described in clause 29.3(a) or clause 29.3(b);
  - (g) allowing the Operator to perform, manage and operate the LO Concession and all related activities;
  - (h) inviting tenders for any of the activities described in clauses 29.3(a) to 29.3(f) (inclusive);

- (i) the undertaking by a contractor of the upgrade, renewal and extension to the Railway Infrastructure on the LO Infrastructure including designing, specifying, constructing, testing, commissioning, repairing, reconstructing, demolishing and/or modifying the GOB Infrastructure and/or the Maintenance Facilities; and
- (j) the Purchaser and/or the Operator pursuant to clause 5 (*Relationship with the Operator and Representatives*) performing the Purchaser's obligations or exercising the Purchaser's rights under this Agreement.

### Licence granted by the Manufacturer with effect from termination or expiry

- 29.4. If either:
  - (a) this Agreement is terminated as a result of the occurrence of a Manufacturer Event of Default (or the occurrence of a Prohibited Act) and the Manufacturer is not performing the Services under the TSA; or
  - (b) the TSA terminates for any reason or a TSSSA Change occurs,

with effect from the termination or expiry of this Agreement or the TSA or implementation of the TSSSA Change (as applicable), the Manufacturer hereby grants to the Purchaser an irrevocable, perpetual, cost-free, assignable (provided that such assignment is permitted only to any person to whom the Purchaser's rights and/or obligations under this Agreement are assigned in accordance with clause 45 (*Assignment and Novation or granting of Security by the Purchaser*)) 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 and the Third Party IPR, in each case for the purposes set out in clause 29.5, except to the extent that nothing in this clause 29.4 shall place the Manufacturer under any higher obligation than to use reasonable endeavours to procure rights in any Third Party IPR for the purposes of the manufacture of Spares.

#### Licence purposes

- 29.5. The purposes referred to in clause 29.4 are procuring the fulfilment and performance of what were the Manufacturer's obligations under this Agreement and the Maintainer's obligations under the TSA, in each case while it was in force, including:
  - (a) the manufacture of Spares;
  - (b) the carrying out of any Modification;
  - (c) the manufacture of any Equipment or any item of equipment for use in connection with the Units;
  - (d) modifications to the Units and manufacture of any parts, spares or additional equipment that might interface with the Units where the termination of this Agreement has occurred after the Minimum Fleet has been reached but before Acceptance of the last Unit in order to ensure compatibility between the Units and other units to be acquired or operated to perform the LO Infrastructure Services;

LON35510310/I14 119070-0040

- (e) those operational, management and maintenance obligations relating to the Maintenance Facilities;
- (f) performing any other of the Manufacturer's obligations under this Agreement and the Maintainer's obligations under the TSA generally, including accessing the Manufacturer's web-based applications for the Manuals; and
- (g) the sale or scrapping of the Units and any Equipment,

in each case whether by the Purchaser itself or by any person appointed by the Purchaser to carry out these obligations, but in each case excluding the manufacture of entire Units.

#### Documentation

29.6. 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 29, at no cost to the Purchaser.

# Distinctive features

- 29.7. (a) The Manufacturer acknowledges that the Interior Features and the Exterior Features will be designed and fitted out in accordance with the Train Technical Requirements and any further requirements of this Agreement including the Schedule of Finishes and that all Interior Features IPR and Exterior Features IPR shall be licensed by the Manufacturer either on behalf of itself or its Subcontractors (as appropriate) to the Purchaser in accordance with clause 29.3 and clause 29.4 (as appropriate).
  - (b) Without prejudice to clause 29.18, neither the Manufacturer nor any of its Subcontractors shall replicate the Interior Features and/or Exterior Features in the course of providing services or units, equipment or train services to a third party without the prior written consent of the Purchaser not to be unreasonably withheld.
  - (c) The Purchaser shall have the right, without further charge, to use and to allow any member of the TfL Group and its employees, agents, advisors and consultants to use the Interior Features IPR and the Exterior Features IPR for the purposes of developing and implementing other TfL Group transport projects.
  - (d) Without prejudice to clauses 29.3 and 29.4, the Manufacturer hereby grants to the Purchaser an irrevocable, perpetual, cost-free, assignable, and nonexclusive licence (or sub-licence, as applicable) with the right to grant sublicences to any number of tiers of the Interior Features IPR and the Exterior Features IPR for the purposes set out in clause 29.7(c) above.

### Manufacturer representation and warranty

29.8. The Manufacturer represents and warrants to the Purchaser that:

- in doing any of those things referred to in clause 29.3, clause 29.4, clause 29.5, clause 29.7 and clause 29.17, neither the Purchaser nor any of its sub-licensees, of whatever tier; and
- (b) in performing its obligations under this Agreement, neither the Manufacturer nor any Subcontractor,

will infringe or make unauthorised use of any IPR of any person.

# Manufacturer indemnity

29.9. Without prejudice to:

- (a) clause 29.8; 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 29.8 proves to be untrue or misleading or is breached (as the case may be),

and subject to clause 29.14, 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.

### Purchaser representation and warranty

29.10. The Purchaser represents and warrants to the Manufacturer that in doing any of those things referred to in clause 29.7, provided that the Manufacturer complies, and procures that its Subcontractors comply strictly with the requirements of this Agreement, neither the Manufacturer nor any of its Subcontractors will infringe or make unauthorised use of any IPR of any person.

### Purchaser indemnity

29.11. Without prejudice to clause 29.10 and subject to clause 29.14, the Purchaser shall indemnify and pay the Manufacturer, on demand, the amount necessary to put the Manufacturer and each of its Subcontractors into the position which would have existed if the representations and warranties in clause 29.10 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.

#### Notification and handling of claims

- 29.12. Without prejudice to clauses 29.8, 29.9, 29.10 and 29.11, if either Party (which, in the case of the Purchaser, shall include the Indemnified Parties) becomes aware of a matter which might give rise to liability. for the other under clause 29.9 or clause 29.11 (an *IPR Claim*):
  - (a) that Party shall, to the extent known to it, notify the Indemnifying Party promptly of the scope and nature of the proposed IPR Claim and the grounds on which it is based;

- (b) to the extent that such IPR Claim involves, or may involve, a claim against the other Party (*Other Party*), the Other Party shall, at the Indemnifying Party's cost:
  - take such action as the Indemnifying Party may reasonably request to dispute, resist, appeal, compromise, defend, remedy or mitigate that claim; and
  - subject to clauses 29.12(d) and 29.12(e), in connection with proceedings related to that claim, if the Indemnifying Party so requests, allow the Indemnifying Party exclusive conduct of those proceedings,

provided that in each case the Indemnifying Party shall indemnify the Other Party against any Losses incurred by the other Party as a result and the provisions of clause 37 (*Indemnities and Limitations on Liability*) shall apply to such indemnity;

- (c) the Other Party shall not admit liability in respect of, nor settle, any such claim without first obtaining the Indemnifying Party's prior written consent, such consent not to be unreasonably withheld;
- (d) where the Indemnifying Party exercises its right pursuant to clause 29.12(b)(ii) to exclusive conduct of proceedings, the Indemnifying Party shall keep the Other Party informed of the progress of the relevant claim, and the Other Party shall be entitled to be consulted by the Indemnifying Party and given a reasonable opportunity to express its opinions prior to the Indemnifying Party taking any decision material to the conduct of that claim, including any admission of liability by the Indemnifying Party or the settlement or compromise by the Indemnifying Party of that claim;
- (e) where the Indemnifying Party does not exercise its right pursuant to clause 29.12(b)(ii) to exclusive conduct of any proceedings within 30 days of the date of the notification referred to in clause 29.12(a), the Indemnifying Party shall, at its own cost, provide any assistance required by the Other Party to dispute, resist, appeal, compromise, defend, remedy or mitigate that claim; and
- (f) the Manufacturer agrees not to take any action pursuant to this clause 29.12 which may have an adverse impact on the business dealings, public authority duties or position of the Purchaser or any member of the TfL Group.

### **Remedy for infringement**

- 29.13. Without prejudice to clause 29.8, if in the reasonable opinion of the Purchaser the carrying out of any of the activities in clause 29.3, clause 29.4, clause 29.5, clause 29.7 and clause 29.17 might infringe the IPR of a third party (*Infringement*) the Manufacturer shall, at its 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 Manufacturer's election, either:
  - (i) modify such Unit, Equipment or other IPR Asset as may be applicable to remove the risk of such Infringement arising; or
  - (ii) replace such Unit, Equipment or other IPR Asset 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.

### Exclusion

- 29.14. The provisions of clauses 29.8, 29.9, 29.10 and 29.11 shall not apply to the extent that any infringement, or claim for any infringement, of IPR is caused by:
  - (a) the use by the Other Party (as defined in clause 29.12(b)) (or any of their sublicensees) of any Unit, item of Equipment or Technical Document otherwise than in accordance with the licences granted to them pursuant to this clause 29, or any other breach by the Other Party (or its sub-licensees) of, or noncompliance by the Other Party (or its sub-licensees) with, those licences; and
  - (h) in respect of any obligation or liability of the Purchaser only, any modification or adaptation of any Unit, item of Equipment or Technical Document other than by the Manufacturer, a Key Subcontractor or any of their Affiliates, subcontractors or licensees other than (i) as authorised by the Change Procedure; or (ii) pursuant to any right in this Agreement for the Purchaser to carry out work or services or engage a third party to do so; or (iii) following termination of this Agreement.

### Software

- 29.15. (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 or refurbishment of any Unit, Equipment and/or any Part or Major Component forming part of a Unit 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 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 Requirements or the Manufacturer Train Proposal, it is designed and documented following a nationally or internationally recognised standard using recognised quality control methods.

- (b) The Manufacturer shall in respect of Software owned by the Manufacturer or any Subcontractor, at all times during the period from the Commencement Date until the end of the 35-year economic life of each Unit:
  - (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 29.17, keep copies of the materials referred to in this clause 29.15 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 any Key Subcontractor; and
  - (v) allow the Purchaser reasonable access to the Software (excluding the Source Code) and all relevant documentation.

## **Cessation of Software Support**

29.16. If the Manufacturer or any Subcontractor (including any tier of subcontractor to a Subcontractor relating to the matters concerning the Manufacturer's obligations under this Agreement) 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 Units 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.

### **Escrow Agreement**

- 29.17. (a) The Manufacturer and the Purchaser shall have executed the Manufacturer Escrow Agreement with respect to the Manufacturer Escrow Material in the form contained in Part A (*Manufacturer Escrow Agreement*) of Schedule 22 (*Software Escrow Agreements*) and shall have procured that the Escrow Agent has also signed such Manufacturer Escrow Agreement prior to the date of this Agreement.
  - (b) The Manufacturer shall duly enter into the Subcontracts with the Escrow Subcontractors in accordance with the Project Programme (save as otherwise notified by the Manufacturer to the Purchaser in advance) and in each case shall, to the extent that the Purchaser has not otherwise received a copy of the relevant signed Subcontract in accordance with the terms of this Agreement, provide evidence thereof to the Purchaser promptly following execution of the relevant Subcontract, together with reasonable details of any payment obligations of the Manufacturer to the relevant Escrow Subcontractor under the relevant Subcontract.

- (c) As soon as reasonably practicable following the date of this Agreement, and in any event no later than the date of execution of the relevant Subcontract with any Escrow Subcontractor, the Manufacturer and the Purchaser shall execute and the Manufacturer shall procure that the relevant Escrow Subcontractor executes the relevant Subcontractor Escrow Agreement with respect to the relevant Subcontractor Escrow Agreement) of Schedule 22 (Software Escrow Agreements). In the event of any breach by the Manufacturer of this clause 29.17(c), the Purchaser shall be entitled to deduct and withhold from monies due to the Manufacturer under this Agreement a sum equal to any amount which is or becomes due to be paid by the Manufacturer to the relevant Escrow Agreement is executed by all parties.
- (d) The Manufacturer and the Purchaser shall comply with each Escrow Agreement that is executed in accordance with this clause 29.17.
- (e) The Manufacturer shall place the Manufacturer Escrow Material, and shall procure that each Escrow Subcontractor shall place the Subcontractor Escrow Material in escrow with the Escrow Agent on the terms set out in the relevant Escrow Agreement as soon as reasonably possible after its completion and in any event within 28 days of the commencement of the Agreed Testing Programme. Thereafter the Manufacturer shall update the version of the Manufacturer Escrow Material and procure the update of the Subcontractor Escrow Material, in escrow:
  - (i) immediately after the close out meeting following Assurance Acceptance of the Detailed Unit Design Submission as set out in paragraph 11.7(b) of Schedule 6 (Assurance Acceptance);
  - (ii) on Provisional Acceptance of the first Unit to be Provisionally Accepted;
  - (iii) at the point that the Minimum Fleet has been Provisionally Accepted;
  - (iv) on Final Acceptance of the final Unit to be Finally Accepted; and
  - (v) on Fleet Acceptance,

unless any Escrow Agreement states more frequently in which case the Manufacturer shall update it (or, in the case of Subcontractor Escrow Material, procure the update of it) in accordance with this clause 29.17(e) and the respective Escrow Agreement.

Thereafter the Manufacturer shall effect (or, in the case of Subcontractor Escrow Material, procure) updates at regular, frequent intervals of no more than six months and the Source Codes shall be up to date on any termination of this Agreement.

(f) Subject to clause 29.17(k), the Manufacturer and the Purchaser shall pay the fees of the Escrow Agent in connection with the placement, storage and

Page 116
release of the relevant Escrow Material in the proportions set out in each Escrow Agreement.

- (g) Without prejudice to clause 29.3 and clause 29.4, 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. The Purchaser shall be entitled to grant sublicences and to assign this licence provided that the licence granted under this clause 29.17(g) shall only become effective if the Purchaser becomes entitled to obtain access to the Source Code pursuant to the terms of each Escrow Agreement.
- (h) The Manufacturer Escrow Material shall be released to the Purchaser on the occurrence of a Manufacturer Escrow Release Event pursuant to the Manufacturer Escrow Agreement.
- (i) The Subcontractor Escrow Material shall be released to the Manufacturer on the occurrence of a Subcontractor Manufacturer Escrow Release Event pursuant to each relevant Subcontractor Escrow Agreement.
- (j) The Subcontractor Escrow Material shall be released to the Purchaser on the occurrence of a Subcontractor Purchaser Escrow Release Event pursuant to each relevant Subcontractor Escrow Agreement.
- (k) The terms of the Escrow Agreements provide that annual fees, certain release or additional fees are paid by the Purchaser to the Escrow Agent. Notwithstanding those terms:
  - (i) the Manufacturer accepts and acknowledges that the Purchaser shall not he liable for any such annual fees or release fees in respect of any Subcontractor Escrow Agreements apart from the first twenty in number. If the number of Subcontractor Escrow Agreements exceeds twenty, the Purchaser shall be entitled to set off, in accordance with clause 55 (*Set-off*) of this Agreement, against monies due to the Manufacturer under this Agreement any amounts which it is liable to pay to the Escrow Agent in respect of annual fees or release fees for such excess Subcontractor Escrow Agreements; and
  - (ii) the Manufacturer accepts and acknowledges that any escrow storage fees for deposits in excess of 1 cubic foot (physical deposits), uploads of more than 10 files (electronic deposits), any novation or replacement of the relevant Subcontractor Escrow Agreement at the request of the Manufacturer or the relevant Subcontractor and any integrity testing fee for deposits consisting of more than 5 physical media items or 10 electronic files, in each case payable to the Escrow Agent in respect of any Subcontractor Escrow Agreement, shall be paid by the Manufacturer.

## Branding and advertising

- 29.18. Once a Unit is Accepted, the Manufacturer shall not, and shall procure that the Maintainer and other third Parties (except the Operator and any other third party approved in writing by the Purchaser) shall not:
  - (a) use:
    - any of their trade marks, service marks, symbols, logos, company names, trade names, domain names, designs, get-up, livery, taglines, advertising or other indicators of origin; or
    - (ii) 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 that Unit that is visible to passengers during normal operation; or

(b) authorise, permit, procure, assist or enable any third party to do any of the acts referred to in clause 29.18(a)(i),

other than (A) applying the Manufacturer's logo on the footplate of each Vehicle; and (B) as otherwise agreed in writing by the Purchaser.

## Language

29.19. 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.

## Survival

29.20. Other than clause 29.7, this clause 29 and/or any liability howsoever arising in connection under it, shall survive the termination of this Agreement.

# 30. Manufacturer Default

## Manufacturer Events of Default

- 30.1. 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 factors (Indexed by RPI), 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 30.1;
- (d) the occurrence of a Persistent Breach;
- (e) a Change of Control occurs in relation to the Manufacturer without the written approval of the Purchaser being required and given under clause 46 (save where the Purchaser's consent to the Change of Control is deemed under clause 46.2(d));
- (f) the Manufacturer provides the first body shell as required by the Train Technical Specification more than six months after the relevant date set out in the Project Programme, and the Manufacturer is delayed such that there is no reasonable prospect of a Unit being Provisionally Accepted prior to the first Unit Longstop Date;
- (g) acceptance of any Unit has not occurred on or before the Unit Longstop Date for that Unit;
- (h) the Manufacturer abandons, without any intention to resume, the Works or any material part thereof;
- (i) there is a breach by the Manufacturer of its obligations under clause 43 (Assignment, Transfer and Sub-Contracting by the Manufacturer) or clause 44 (Assignment and Novation or granting of Security by the Purchaser);
- (j) the maximum amount of liquidated damages payable by the Manufacturer in respect of the late delivery of Units and the Simulator pursuant to clause 16.3 shall have accrued unless by mutual agreement the Parties agree to increase such maximum amount;
- (k) the Manufacturer commits a breach of clause 9.1;
- (1) the Manufacturer fails to take out and/or maintain the Required Insurances as specified in Schedule 13 (*Insurance*);
- (m) 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 Working Days of such Guarantee Event;
- (n) 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 unless, in the case of an Advance Payment Bond in any of the circumstances described in paragraph 3 (Defect in an Advance Payment Bond) of Part A (Advance Payment Bond) of Schedule 10 (Milestones and Security), the Manufacturer has taken action to extend or replace the relevant Advance Payment Bond or provide alternative security in accordance with the requirements of this Agreement;

- (o) 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
- (p) before the last Unit is Accepted, the TSA is terminated as a result of the occurrence of any of the Maintainer Events of Default specified in clause 30.1 of the TSA.

## Persistent breach

- 30.2. (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 in any twelve (12) month period, 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) 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 30.2.
  - (b) If, following service of such a warning notice pursuant to clause 30.2, the breach 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 30.2(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 30.2(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 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 months has elapsed since the date of the previous warning notice.
- 30.3. 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 30.2(b)(iv) shall constitute a *Persistent Breach* for the purposes of clause 30.1(d).

## Notification of a Manufacturer Event of Default

30.4. The Manufacturer shall notify the Purchaser promptly on the Manufacturer becoming aware of the occurrence of a Manufacturer Event of Default.

## Deemed Rectification of a Manufacturer Event of Default

30.5. Where a Manufacturer Event of Default listed in clause 30.1(g) has occurred and the relevant delayed Unit 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.

#### Minimum Fleet Handback Notice

- 30.6. 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 the Agreement shall terminate in respect of the Units;
  - (c) if different from the date specified in clause 30.6(b), the date on which the Purchaser shall deliver to the Manufacturer the Units and other Equipment that it has Accepted on or prior to the date of termination of the Agreement (the *Minimum Fleet Handback Date*);
  - (d) the proposed location where the delivery of the Units 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 Units and Equipment the subject of the Minimum Fleet Handback Notice; and
  - (f) the painted number of each of the Units to be delivered to the Manufacturer on the Minimum Fleet Handback Date.

# Termination Notice for a Manufacturer Event of Default after Minimum Fleet

- 30.7. 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 Equipment 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 other than one to which clause 30.7(b) applies, 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 30.1(c) which is capable of remcdy, 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 paragraph (i) (such periods to run concurrently with the 28-day period in paragraph (i)).

## **Rectification Plan**

- 30.8. Where the Purchaser serves a Purchaser Termination Notice in accordance with clause 30.7(b) and the Manufacturer either:
  - (a) rectifies the Manufacturer Event of Default within the 60-day period specified in 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.

- 30.9. Where the Purchaser serves a Purchaser Termination Notice in accordance with clause 30.7(b) and the Manufacturer fails either to:
  - (a) rectify the Manufacturer Event of Default within the 60-day period specified in the Purchaser Termination Notice; or
  - (b) 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 otherwise.

## Termination where Rectification not permitted

30.10. Where the Purchaser serves a Purchaser Termination Notice in accordance with clause 30.7(a), this Agreement will terminate on the date set out in that Purchaser Termination Notice.

# Additional Remedies

- 30.11. Without prejudice to clause 47 (*Notices*), where this Agreement has been terminated pursuant to clause 30.7 or clause 34.1 the Purchaser shall be entitled to require the Manufacturer:
  - (a) to assign the benefit of any assignable warranties which have been given by a third party or Subcontractor to the Manufacturer in respect of the Purchased Equipment; or
  - (b) to provide (i) all drawings of all Parts and/or Major Components (ii) all design, technical and maintenance records relating to the Purchased Equipment including all Manuals relating to the Purchased Equipment in each case such as to enable the performance of activities referred to in clauses 29.3 and 29.5, 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.

## 31. Purchaser Default

## Purchaser Event of Default

31.1. 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 either singly or in aggregate exceeds family (Indexed by RPI), when due and payable to the Manufacturer in accordance with this Agreement and which remains unpaid thirty (30) days following a subsequent written demand for payment;
- (b) an Insolvency Event occurs in relation to the Purchaser; or
- (c) the circumstances identified in clause 45.1(g) occur.

### Notification of a Purchaser Event of Default

31.2. 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.

### Procedures in relation to Termination for a Purchaser Event of Default

31.3. 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 of 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.

31.4. 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.

#### 32. Force Majeure and Voluntary Termination

#### **Relief from obligations**

32.1. Neither Party shall be entitled to bring a claim for a breach of an obligation (other than a payment obligation) under this Agreement by the other Party or 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 it is prevented from performing that obligation in whole or in part by that Force Majeure Event or its consequences.

#### Notification of Force Majeure

- 32.2. 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 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 32.5.
- 32.3. As soon as practicable and no later than three Working Days following a notification under clause 32.2, 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.
- 32.4. 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.

# Mitigation

32.5. 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, complying with the requests of the Purchaser's Contract

Manager and, in relation to the Maintenance Facility, using all reasonable endeavours to find alternative facilities at which to carry out its obligations) and to continue to perform its obligations under this Agreement and to resume performance as soon as possible.

32.6. 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 32.5.

## Extensions of Time for Force Majeure

32.7. Subject to clauses 32.5 and 32.8 the occurrence of a Force Majeure Event which directly causes delay to the supply of a Unit and/or any other item of Purchased Equipment will entitle the Manufacturer to an extension of time as set out in clause 17 (*Extensions of Time*).

# **Termination for Force Majeure**

32.8. Notwithstanding the provisions of clause 32.7 entitling the Manufacturer to an extension of time, the Purchaser shall nevertheless be entitled to terminate this Agreement (in whole or in part) by notice in writing (an *FM Termination Notice*) to the Manufacturer in respect of any Units or other items of Purchased Equipment the Acceptance of which has been delayed as the sole and exclusive result of a Force Majeure Event for more than a total of 180 days following the relevant Contractual Acceptance Date which applied immediately prior to the occurrence of the Force Majeure Event in question, and the provisions of clause 35.1(c) and clauses 35.3 to 35.8 (inclusive) shall apply in respect of such termination.

### Effect on payments

32.9. If a Force Majeure Event results in the Manufacturer being unable to carry out its obligations, the Purchaser shall cease to be liable to make any payment which would otherwise have been due on fulfilment of that obligation until, and to the extent that, the Manufacturer performs the obligation.

#### **Cessation of Force Majeure**

32.10. 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 the Agreement has not been terminated or varied in accordance with clause 32.8 or 32.11.

#### **Continuing Obligations**

32.11. The Parties shall not be released from any of their obligations under this Agreement as a result of a Force Majeure Event, and this Agreement shall, subject to clause 32.8, remain in effect for the duration of a Force Majeure Event.

### Voluntary Termination

32.12. The Purchaser may terminate this Agreement without cause at any time after the issue of the Notice to Proceed under clause 4 (*Notice to Proceed and Voluntary Cancellation*) by giving notice to the Manufacturer of such termination and the date when such termination shall become effective.

## 33. Declaration of Ineffectiveness

- 33.1. 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.
- 33.2. Where the Purchaser is served with any third party proceedings in relation to the subject matter of this clause 33, 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 33.1.

# 34. Corrupt Gifts Termination

### **Prohibited Act**

- 34.1. 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 shall be entitled to act in accordance with clauses 34.3 to 34.7.
- 34.2. For the purposes of this clause 34, 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.

## Party committing the Prohibited Act

- 34.3. Notwithstanding clauses 34.1 and 34.2, 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 not terminate this Agreement unless, acting reasonably, it considers termination of the Agreement to be in the best interests of the Project.
- 34.4. If the Prohibited Act is committed by an employee of the Manufacturer acting independently of the Manufacturer, then the Purchaser may give notice to the Manufacturer of termination 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.
- 34.5. 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 to the Manufacturer of termination and this Agreement will terminate, unless within 28 days of receipt of such notice the Manufacturer terminates the relevant Subcontract and 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 not terminate this Agreement unless, acting reasonably, it considers termination of the Agreement to be in the best interests of the Project.

- 34.6. If the Prohibited Act is committed by an employee of a Subcontractor acting independently of that Subcontractor, then the Purchaser may give notice to the Manufacturer of termination 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.
- 34.7. If the Prohibited Act is committed by another person not specified in clauses 34.3 to 34.6 including by subcontractors of any tier, then the Purchaser may give notice to the Manufacturer of termination and the 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 or her employee) and (if necessary) 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 not terminate the Agreement unless, acting reasonably, it considers termination of the Agreement to be in the best interests of the Project.
- 34.8. 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.

#### Termination notice

- 34.9. Any notice of termination under this clause 34 shall specify:
  - (a) the nature of the Prohibited Act;
  - (b) the identity of the Party whom the Purchaser believes has committed the Prohibited Act; and
  - (c) the date on which the Agreement will terminate, in accordance with the applicable provision of this clause 34.

### 35. Consequences of Termination

#### Payment

35.1. If this Agreement is terminated:

- (a) as a result of a Manufacturer Event of Default in accordance with clause 30 (Manufacturer Default), paragraph 1 or 2 (as applicable) and paragraph 3 of Schedule 19 (Termination Payments) shall apply;
- (b) as a result of a Purchaser Event of Default in accordance with clause 31 (*Purchaser Default*), paragraph 4 of Schedule 19 shall apply;
- (c) as a result of a Force Majeure Event pursuant to clause 32.8, paragraph 4 of Schedule 19 shall apply;
- (d) as a result of a Voluntary Termination in accordance with clause 32.12, paragraph 4 of Schedule 19 shall apply;

- (e) as a result of a Prohibited Act pursuant to clause 34 (*Corrupt Gifts Termination*), the Manufacturer shall pay to the Purchaser, paragraph 1 or 2 (as applicable) and paragraph 3 of Schedule 19 shall apply;
- (f) as a result of Ineffectiveness under clause 33 (*Declaration of Ineffectiveness*), paragraph 5 of Schedule 19 shall apply,

and for each of paragraphs (a) to (f) paragraphs 6 and 7 (inclusive) of Schedule 19 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.

### **Termination and Change**

- 35.2. 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 30 (*Manufacturer Default*) or as a result of a Prohibited Act pursuant to clause 34 (*Corrupt Gifts Termination*), any termination of this Agreement shall only have effect with regard to any Units 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:
  - (a) shall continue in relation to all Units and other Equipment in relation to which the Works are not so terminated; and
  - (b) shall be deemed to be varied in accordance with clause 27 (*Change Procedure*), to the extent of the Units and other Equipment that are so terminated upon the applicable Termination Date.

# Saving Provisions

- 35.3. 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 or accruing after termination in respect of those clauses referred to in clause 35.8 and any right to claim damages or other relief in relation thereto but subject, in the case of the Manufacturer, to clause 35.1.
- 35.4. Subject to clause 35.6, 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.
- 35.5. Save as set out in this clause 35 and in Schedule 19 (*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.
- 35.6. Termination of this Agreement shall not affect the continuing rights and obligations of the Parties under any clause which is expressed to survive termination or which is required to give effect to such termination or the consequences of such termination and, without prejudice to the foregoing, clause 35.8 shall apply.

35.7. Neither Party shall be entitled to terminate this Agreement except as expressly set out in this Agreement.

## Survival

- 35.8. Upon termination or expiry of this Agreement, whether in respect of any one item of Purchased Equipment or all Purchased Equipment, the obligations of the Parties under this Agreement in respect of the terminated Purchased Equipment 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, 3, 4.6 and 4.7, 9.3 to 9.8 inclusive, 20, 25, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 59, 60, 61, 62 and 63, and Schedule 19 (*Termination Payments*) and the related clauses and Schedules required to give effect to those clauses in relation to such termination or the consequences of such termination.

## 36. Title and General Obligations following Termination

## Title in the Units and Equipment

36.1. Upon termination of this Agreement, title in the Units and Equipment shall transfer, if applicable, in accordance with Schedule 19 (*Termination Payments*).

#### Assignment of warranties and guarantees

- 36.2. The Manufacturer shall procure that all warranties and guarantees in respect of the Works, Units 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, assign to the Purchaser the benefit free from any Security Interest of all such warranties and guarantees in relation to any Units or Equipment to which the Purchaser retains or will acquire title upon or following such termination in accordance with the terms of this Agreement.
- 36.3. Upon termination of this Agreement, clauses 29.4 and 29.5 shall apply and each of the items specified in clauses 36.3(a) and (b) shall vest in the Purchaser (or such other person as the Purchaser shall nominate), free from any Security Interest and without charge and otherwise on the basis set out in the relevant clause :
  - (a) the benefit of the rights, obligations, undertakings, guarantees, warranties or other commitments given by the Subcontractors and, insofar as it is legally able to do so, by any subcontractors and suppliers of any tier in relation to any Units or Equipment to which the Purchaser retains or will acquire title upon or following such termination in accordance with the terms of this Agreement; and
  - (b) the benefit of the agreements, licences and other instruments in respect of any Units or Equipment to which the Purchaser retains or will acquire title upon

or following such termination in accordance with the terms of this Agreement.

# Handover of documentation

36.4. The Manufacturer shall ensure that:

- (a) all Technical Documents relating to any Units or Equipment to which the Purchaser retains or will acquire title upon or following the relevant termination of this Agreement; and
- (b) the rights to use and copy such documentation,

in each case required to enable the carrying out of heavy and light maintenance and to maintain safety standards for operating such Units or Equipment in Unrestricted Passenger Revenue-Earning Service in accordance with Good Industry Practice shall be up to date and, to the extent the same have not otherwise been provided in accordance with this Agreement, handed over to the Purchaser upon termination of this Agreement.

# 37. Indemnities and Limitations on Liability

#### Indemnity by Manufacturer

37.1. (a) The Manufacturer shall, subject to clause 37.1(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 out of, or in consequence of:

- (A) the design, construction, manufacture testing or commissioning of the Units, the Equipment and/or any Subsystem, part or Major Component forming Part of any Unit;
- (B) the operation and use of the Units 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 this Agreement; 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 this Agreement.

- (b) The Manufacturer shall, subject to clause 37.1(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 this Agreement by,

the Manufacturer, a Subcontractor of the Manufacturer or its or their respective servants, their employees or agents.

- (c) The Manufacturer shall not be responsible or be obliged to indemnify the Indemnified Parties:
  - pursuant to clauses 37.1(a) or (b) for any of the matters referred to in clauses 37.1(a)(i) to (iv) inclusive or 37.1(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 injury 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 37.1(a) or (b), for any injury 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, pursuant to clause 37.1(a)(iv) for any Uninsured Losses incurred in excess of f million (Indexed by RPI) in aggregate;
  - (v) in respect of any claims made pursuant to clause 37.1(a)(ii) that relate to Relevant Property against which the Manufacturer is required by this Agreement to insure where the amount of any such claim is in excess of the level of cover required by this Agreement (provided that the indemnity shall always extend to liability for any excess or deductible under any policy of insurance); and
  - (vi) save in respect of any IPR Claims pursuant to clause 29.9, for any loss of revenue suffered by any of the Indemnified Parties,

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 to be taken out by the Manufacturer in accordance with clause 19 (*Insurance*).

## No Double Recovery

37.2. 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 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 in this Agreement other than this clause 37 shall be disregarded in determining any limitation on liability under this clause 37.

#### Mitigation

37.3. 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.

#### **Resistance of claims**

- 37.4. (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*);
  - (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 all reasonable co-operation, access and assistance, technical or otherwise for the purpose of resisting such a claim, subject as provided in clause 37.4(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 the said notice to the Indemnifying Party.

### Limitation on Manufacturer's liability

- 37.5. Subject to clause 37.6, 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 Delivery Liquidated Damages), shall not exceed an aggregate amount equal to the Total Contract Price (the Maximum Liability).
- 37.6. The Maximum Liability shall not apply to:
  - (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 Manufacturer Party; or
    - (iii) wilful default or abandonment;
  - (b) any costs or expenses which the Manufacturer is obliged or does expend during the term of the 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 Units 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 clause 22 (Total and Partial Loss of Unit) or Schedule 19 (Termination Payments);

## REDACTED

- (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*), including any related liquidated damages payments;
- (g) the Manufacturer's liability for any IPR Claims pursuant to clause 29.9;
- (h) (except to the extent already provided for under clause 37.6(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;
- (i) the Manufacturer's liability to pay any Taxes as expressly provided by this Agreement or as required by Applicable Laws and Standards; or
- (j) any interest payable under this Agreement.

### Purchaser Indemnities

37.7. The Purchaser shall not be liable for the Manufacturer's loss of revenue under any indemnity in this Agreement save for the indemnities in clause 29.11.

CAHA

- 37.8. (a) The Manufacturer shall become a Party to CAHA within two months of the Commencement Date.
  - (b) Clause 16 of CAHA (or any reiteration of the principles of such provision) shall not apply as between the Manufacturer on the one hand and the Indemnified Parties on the other in respect of matters relating to the subject matter of this Agreement.
  - (c) Clause 17 of CAHA (or any reiteration of the principles of such provision) shall apply between the Manufacturer and the Indemnified Parties in respect of matters relating to the subject matter of this Agreement but only to the extent that the recovery of the relevant loss would not otherwise be recoverable under this Agreement.

### Survival

37.9. This clause 37 shall survive the expiry or termination of this Agreement.

## 38. Confidentiality

#### Manufacturer's Obligations of Confidentiality

38.1. Subject to clause 38.4 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.

## Purchaser's Obligations of Confidentiality

- 38.2. Subject to clause 38.4, the Purchaser shall have the same obligations as those imposed on the Manufacturer under clause 38.1 in respect of those items of confidential and commercially sensitive information set out in Schedule 17 (*Manufacturer Confidential Information*) until such time as is indicated in column 2 of the same table. Without prejudice to the foregoing and clause 38.4, 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 valid FOI Information Request; and
  - (e) publish any Contract Information to the general public pursuant to the requirements of the Transparency Commitment.
- 38.3. For the purposes of clause 38.2(e), the Purchaser may in its absolute discretion prior to publication:
  - (a) redact all or part of the Contract Information 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 the Contract Information to be published,

provided that in all cases the Purchaser shall make the final decision regarding publication and/or redaction of the Contract Information.

### Permitted Disclosures

- 38.4. Clauses 38.1 and 38.2 shall not apply to:
  - (a) any disclosure of information that is reasonably required by persons engaged in the performance of obligations set out in the 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 38;
  - (c) for the purposes of exercising its obligations under the Train Services Agreement or to the Maintainer (or its successors and/or assigns);
  - (d) any disclosure to enable a determination to be made under Schedule 18 (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 Units (including to the Operator) 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(s) and its/their advisers, should the Purchaser decide to retender the Agreement and/or the TSA;
- (i) any registration or recording of any consents and property registration required;
- (j) any disclosure of information by the Purchaser in accordance with clause 38.7;
- (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;
- (1) 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 in relation to the Insurances.
- 38.5. Where disclosure is permitted under clause 38.4, other than clauses (e), (f), (i), (j) and (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.
- 38.6. For the purposes of the National Audit Act 1983, the C&AG may examine such documents as he may reasonably require which are owned, held or otherwise within the control of the Manufacturer and any Subcontractor and may require the Manufacturer and any Subcontractor to produce such oral or written explanations as he considers necessary. For the avoidance of doubt it is hereby declared that the

carrying out of an examination under section 6(3)(d) of the National Audit Act 1983 in relation to the Manufacturer is not a function exercisable under this Agreement.

- 38.7. 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.
- 38.8. 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, except with the written consent of the Purchaser.
- 38.9. Where the Manufacturer, in carrying out its obligations under this Agreement, is provided with information relating to users of the Purchased Equipment, 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 sought the prior written consent of the user and has obtained the prior written consent of the Purchaser.

## LO Concession Bidding Procedure

- 38.10. The Manufacturer shall, if and to the extent so reasonably requested by the Purchaser, TfL or an Affiliate of TfL, at the Manufacturer's own cost provide such person and its representatives and advisers with information extracted from the Project Documents to which the Manufacturer is party and other information which the Manufacturer is required to provide under the Project Documents and which those representatives and advisers reasonably believe that a potential successor Operator would require in order to tender for the right and obligation to provide or operate all or any LO Services under the then applicable LO Concession, for the purpose of such representatives and advisers preparing any reports or other documents in connection with any invitation to potential successor Operators to tender for such right and obligation. The Manufacturer will permit such information to be included in documents relating to the invitation to tender for the relevant concession or franchise agreement, including any pre-qualifying document and any associated information memorandum (whether preliminary or final).
- 38.11. Any information provided to the Purchaser, TfL or an Affiliate of TfL and its representatives and advisers pursuant to clause 38.10 may be disclosed by the Purchaser, TfL or Affiliate of TfL (as applicable) to persons who have expressed an interest in becoming the relevant franchisee, provided that such persons have provided an undertaking regarding the confidentiality and use of such information for the benefit of the Purchaser, TfL or Affiliate of TfL (as applicable) and the party who provided such information to the Purchaser, TfL or Affiliate of TfL (as applicable) and the party who provided such information to the Purchaser, TfL or Affiliate of TfL (as applicable), in substantially the same form as this clause 38. Such disclosure of any such information by the Purchaser, TfL or Affiliate of TfL (as applicable) will be limited to the extent the Purchaser, TfL or Affiliate of TfL (as applicable) considers reasonably necessary for the relevant stage of the tender process and full disclosure of

LON35510310/114 119070-0040

the terms of any Project Document, including detailed financial information, will, subject to any legal requirement to which the Purchaser, TfL or Affiliate of TfL (as applicable) is or may become subject, only be made available to the successful successor Operator.

# Restrictions on publicity and public relations

- 38.12. 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 or any Purchased Equipment without the prior written approval of the Purchaser.
- 38.13. No facilities to photograph or film in or upon any property used in relation to the manufacture and delivery of the Units or Equipment under this Agreement shall be given or permitted by the Manufacturer unless the Purchaser has given its prior written approval.
- 38.14. Notwithstanding any other provision of this Agreement, including, without limitation, clauses 19 (*Insurance*) and 37 (*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 Equipment.
- 38.15. The Manufacturer shall co-operate with the Purchaser in relation to the Purchaser's publicity of any aspect relating to this Agreement or the Purchased Equipment.

## Data protection

- 38.16. (a) In relation to all Personal Data, the Manufacturer shall at all times comply (to the extent that the same is applicable) with the DPA as a data controller if necessary, including maintaining a valid and up-to-date registration or notification under the DPA covering the data processing to be performed in connection with this Agreement.
  - (b) The Manufacturer shall, and shall procure that all of its Subcontractors shall, only undertake fair and lawful processing of Personal Data reasonably required in connection with this Agreement and shall not transfer any Personal Data to any country or territory outside the European Economic Area.
  - (c) The Manufacturer shall not disclose Personal Data to any third Parties other than:
    - (i) to employees and Subcontractors to whom such disclosure is reasonably necessary in order for the Manufacturer to carry out its obligations under this Agreement; or
    - (ii) to the extent required under a court order,

provided that disclosure under clause 38.16(c)(i) is made subject to written terms substantially the same as, and no less stringent than, the terms contained in this clause 38.16 and that the Manufacturer shall give notice in writing to the Purchaser of any disclosure of Personal Data it or a

Page 138

Subcontractor is required to make under clause 38.16(c)(ii) immediately it is aware of such a requirement.

- (d) The Manufacturer shall bring into effect and maintain all technical and organisational measures to prevent unauthorised or unlawful processing of or access to Personal Data and accidental loss or destruction of, or damage to, Personal Data including but not limited to taking reasonable steps to ensure the reliability of staff having access to the Personal Data.
- (e) 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, it is compliant with the DPA.
- (f) 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 38 by the Manufacturer and/or any Subcontractor.

#### **Return of Confidential Information**

38,17. Save to the extent that the same may reasonably be required in respect of any current or anticipated litigation, on termination of the 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 38.1 shall continue to apply to such information).

#### Continuing obligation following termination of Agreement

38.18. The obligations of the Parties under this clause 38 shall continue in full force and effect notwithstanding termination of the Agreement.

## 39. Freedom of Information

- 39.1. 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.
- 39.2. 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 their obligations under the FOI Legislation. The foregoing shall not preclude the Manufacturer from objecting to a disclosure of Information.
- 39.3. Without prejudice to the generality of clause 39.2, 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 that they receive as soon as practicable and in any event within two Working Days of receiving an FOI Information Request; and

(b) in relation to Information held by the Manufacturer on behalf of the Purchaser, provide the Purchaser with details about and/or a copy of all such Information that the Purchaser requests, and such Information shall be provided within five 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.

- 39.4. Where the Purchaser receives an FOI Information Request relating to the Purchased Equipment the Purchaser shall, as soon as practicable, and in any event within five Working Days, send a copy of such FOI Information Request to the Manufacturer and shall consult the Manufacturer on how disclosure under the FOI Legislation would affect the Manufacturer's and/or any of the Key Subcontractors' commercial interests.
- 39.5. 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.
- 39.6. The Manufacturer acknowledges that the Purchaser may be obliged under the FOI Legislation to disclose Information without consulting or obtaining consent from the Manufacturer.

# 40. Dispute Resolution

- 40.1. Except where expressly designated as an Expert Dispute, any Dispute shall be resolved in accordance with the procedures for Disputes set out in Schedule 18 (Dispute Resolution Procedure).
- 40.2. Nothing in this Agreement shall prevent either Party from seeking injunctive relief, specific performance or other equitable relief.

#### 41. Responsible Procurement, Equality and Anti-Bribery

- 41.1. The Manufacturer shall comply with the provisions of Schedule 14 (*Responsible Procurement*).
- 41.2. The Mauufacturer 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.

- 41.3. 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.
- 41.4. The Manufacturer shall:
  - (a) promptly inform the Purchaser where formal proceedings have been issued or commenced against it in relation to a genuine 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 41.4(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 41.4(a) to (c).
- 41.5. 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 41.4 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.

### 42. Safety, Quality and Environment

## Health and safety

42.1. The Manufacturer shall be responsible for occupational health and safety management in accordance with its certified occupational health and safety management systems pursuant to the requirements of Schedule 16 (*Health and Safety*).

#### Quality

42.2. The Manufacturer shall establish, implement and maintain the Quality Management Plans in accordance with paragraph 10 (*Quality Management Plan*) of Schedule 5 (*Contract Management*) and be responsible for quality management until Fleet Acceptance and shall ensure that its Subcontractors have similarly certified quality management systems in place.

LON35510310/114 119070-0040

#### Environment

- 42.3. The Manufacturer shall develop and implement an environmental management system (*Environmental Management System*) which shall be certified to BS EN ISO14001 by a UKAS (or equivalent) accredited certification body and consistent with the HSE principles set out in Appendix 2 (*HSE Principles*) of Schedule 16 (*Health and Safety*).
- 42.4. The Manufacturer shall ensure that the scope of certification covers the Works. If any proposed or actual changes to the status of the certification occur the Manufacturer shall immediately inform the Purchaser.
- 42.5. The Manufacturer shall, promptly upon request by the Purchaser provide evidence satisfactory of the Environmental Management System and relevant certification.
- 42.6. The Manufacturer shall ensure that Subcontractors either:
  - (a) comply with the Environmental Management System; or
  - (b) comply with their own Environmental Management System that shall be consistent with the principles of BS EN ISO 14001 or equivalent standard.

## 43. Assignment, Transfer and Sub-Contracting by the Manufacturer

#### Subcontracting

- 43.1. Subject to clauses 43.2 to 43.4, 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 their subcontractors of any tier, and shall procure that such Subcontractors and their subcontractors of any tier, 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 and in subcontracting any such obligations the Manufacturer shall comply with the provisions of clause 9.1.
- 43.2. The Manufacturer shall obtain prior written consent from the Purchaser in relation to the identity of each Key Subcontractor and any replacement of the same and in executing this Agreement, the Purchaser hereby provides its prior written consent to each of the Approved Subcontractors listed in Schedule 11 (Subcontracts).
- 43.3. The Purchaser shall be deemed to have approved any amendment to the Key Subcontracts or the identity of the Key Subcontractors 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 made correspond in all material respects with the change made to this Agreement).
- 43.4. For the avoidance of doubt, neither the giving of consent by the Purchaser to the identity of the Key Subcontractors shall relieve the Manufacturer of any of its obligations under this Agreement, 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.

## Assignment

43.5. Without prejudice to clause 43.1, the Manufacturer shall not:

- (a) assign (whether absolutely or by way of security and whether in whole or in part), transfer, mortgage, charge, declare itself a trustee for a third party of, or otherwise dispose of (in any manner whatsoever) this Agreement or any of its rights and/or obligations arising or under this Agreement or any benefit or interest therein:
  - 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 Units 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 43.5 shall be ineffective.

## Indemnity

43.6. 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 43.5.

## 44. Assignment and Novation or granting of Security by the Purchaser

## Purchaser Refinancing

- 44.1. 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;
    - (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

(b) subject to the prior written consent of the Manufacturer (such consent not to be unreasonably withheld) to a third party.

## Implementation of Transfers

44.2. 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 44.1, 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.

#### Purchaser Novation

- 44.3. (a) Without prejudice to clause 44.1 and 44.2, 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 44.3, 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 44.3(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 20 (*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.

#### Indemnity

44.4. The Purchaser shall indemnify the Manufacturer 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 clauses 44.1, 44.2 or 44.3.

## 45. Change of Control of the Purchaser

## **Restriction on Change of Control**

45.1. (a) For the purposes of this clause 45.1, a *Change of Control of the Purchaser* means the Purchaser (which, for the purposes of this clause 45.1 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 45.1(a)(i) or (ii).
- (b) For the purposes of this clause 45.1, the expression *owned and controlled* shall mean possessing:
  - 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 45.1, 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 45.1, 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 45.1(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 the 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 31.1(c).

(g) If the Manufacturer and Purchaser are not able to agree as to alternative arrangements set out in clause 45.1(f), a Purchaser Event of Default shall be

deemed to have occurred as of the Relevant Date in accordance with clause 31.1(c).

(h) The Parties acknowledge that the provisions of this clause 45.1 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 45.1 in a reasonable manner so as to give effect to the intention of the Parties as set out in this clause 45.1(h).

## 46. Change of Control of the Manufacturer

### **Restriction on Change of Control**

46.1. (a)

Subject to clauses 46.1(b) and (c) the Manufacturer shall procure that at any time prior to Fleet Acceptance no Change of Control occurs in respect of the Manufacturer without the prior consent to such Change of Control being given by the Purchaser in writing.

- (b) The provisions of clause 46.1(a) shall not apply to any Change of Control that arises as a consequence of any change in legal or beneficial ownership of any equity securities or securities convertible into equity securities that are listed on a Recognised Investment Exchange.
- (c) The provisions of clause 46.1(a) shall not apply to any Change of Control:
  - that arises as a consequence of any change in legal or beneficial ownership of any equity securities or securities convertible into equity securities where the transferee is an Affiliate of the transferor; or
  - (ii) following which the Manufacturer's ultimate parent company as it was prior to the Change of Control directly or indirectly controls the Manufacturer.

# Procedure for Approving Change of Control

- 46.2. (a) In the event that a Change of Control that requires the Purchaser's consent under clause 46.1(a) is proposed in respect of the Manufacturer 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 sixty (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) Except in circumstances where there is a deemed consent under clause 46.2(d), if the Purchaser does not consent to the proposed Change of Control the Manufacturer 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 sixty (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.
- (d) The Purchaser shall, within 20 Working Days of receipt of the written notice of the proposed Change of Control as described in clause 46.2(a) or clause 46.2(c), give the Manufacturer written notice of its determination of whether or not to consent to the Change in Control in accordance with clause 46.3, and in the event that the Purchaser fails to give the Manufacturer any such written notice of the Purchaser's determination within 20 Working Days of receipt of the written notice of the proposed Change of Control as described in clause 46.2(a) or clause 46.2(c), then it shall be deemed that the Purchaser has consented to the proposed Change in Control and the Purchaser shall have no rights to object to the proposed Change in Control.

#### **Grounds of Objection**

- 46.3. It shall be reasonable for the Purchaser to withhold its consent to a proposed Change of Control (and the Purchaser acknowledges its rights to withhold its consent to a Change of Control are limited to those described in this clause 46.3) where:
  - (a) the person (or persons acting in concert) obtaining directly or indirectly control of the Manufacturer is an Undesirable Transferee;
  - (b) the Change of Control would result in a breach of the terms of any Relevant Approval;
  - (c) 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 Railway and Other Guided Transport Systems (Safety) Regulations 2006;
    - (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;
    - (v) cease to be able to provide the requisite stability of service delivery to enable it to perform its obligations under this Agreement; and/or
    - (vi) seek to replace any Advance Payment Bond or Guarantee then in force, and any of the replacement Advance Payment Bond or Guarantee, or the proposed provider of such replacement Advance

Payment Bond or Guarantee would not satisfy the requirements of this Agreement,

provided that the Purchaser shall not withhold its consent to a proposed Change of Control on the basis of this paragraph (c), if, following the Change of Control, the Manufacturer continues to be part of the Bombardier Transportation Rolling Stock Group.

### Unapproved Change of Control

- 46.4. Save where the Purchaser's consent to the Change of Control is deemed under clause 46.2(d), if a Change of Control occurs without the written approval of the Purchaser being required and given under this clause 46, a Manufacturer Event of Default shall be deemed to have occurred in accordance with clause 30.1(e) of this Agreement.
- 46.5. The Purchaser agrees that in case of a breach of this Agreement or an anticipated breach of this Agreement by the Manufacturer which entitles the Purchaser to terminate the Agreement whether at common law or in accordance with clause 30.1(e) as described at clause 46.4, the Purchaser shall not seek the application before any competent court of an order the effect of which is to restrain any Change in Control of the Manufacturer including without limitation an interlocutory or final injunction. This provision shall be without prejudice to (i) the Purchaser's right to terminate this Agreement in accordance with the terms hereof, in particular clauses 30.1, 30.7 and 46.4 of this Agreement, (ii) the additional remedies granted to the Purchaser according to clause 30.11 of this Agreement and (iii) any rights of the Purchaser under Schedule 19 of the MSA or otherwise to seek compensation of damages and/or payment of indemnities.

## 47. Notices

#### **Requirement for notice in writing**

- 47.1. Any notice, consent, 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.
- 47.2. The Parties shall comply with the requirements of paragraph 5 (*Communications and Document Control*) of Schedule 5 (*Contract Management*) in respect of the form of communications to be served under this Agreement.

#### Service of notices

- 47.3. Subject to clause 47.4, 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 47.
- 47.4. 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 47.3 (including as a scan of the original signed document attached to an email) except in the body of an email.

47.5. The relevant details of each Party at the date of this Agreement are:

Purchaser	
Address:	Rail for London Limited Overgronnd House 125 Finchley Road Swiss Cottage London NW3 6HY
Email:	
Attention:	Rolling Stock Project Manager (currently and the date of this Agreement)
Manufacture	r
Address:	Bombardier Transportation UK Limited Litchurch Lane Derby DE24 8AD
Email:	
Attention:	Company Secretary

## Time of service

47.6. 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 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 47.6, all times are to be read as local time in the place of deemed receipt.

## Change of details

- 47.7. 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 47.5 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 Working Days after the date on which notice is given, the date falling five Working Days after notice of any such change has been given.

## 48. 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.

## 49. **Priority of Documents**

Without prejudice to clauses 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 the Agreement shall take precedence over the schedules.

## 50. 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.

## 51. Statutory Notices

- 51.1. 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 or suppliers, the Manufacturer shall immediately (or in the case of a statutory notice served on a Subcontractor or supplier, 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 or suppliers forward any such statutory notices to the Manufacturer) inform the Purchaser and provide the Purchaser with a copy of such statutory notice.
- 51.2. 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.
- 51.3. 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.

# 52. Form of Documents

The Manufacturer shall supply documents and drawings to the Purchaser in the manner and format specified in paragraph 5 (*Communications and Document Control*) of Schedule 5 (*Contract Management*).

#### 53. Sole Remedy and Disclaimer

#### Rights of the Manufacturer

53.1. 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 see 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.

#### Disclaimer

53.2. 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 Invitation to Negotiate.

## No liability for review and approval by the Purchaser

- 53.3. 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 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 disputed then any undisputed element of that amount shall be paid and the disputed element shall be dealt with in accordance with Schedule 18 (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.
REDACTED

## 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. Currency and Exchange Rate

All payments under this Agreement 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 Manufacturer.

## 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 40 (*Dispute Resolution*), shall be subject to the exclusive jurisdiction of the English Courts.

### Manufacture and Supply Agreement EXECUTION VERSION REDACTED

## EXECUTED for and on behalf of BOMBARDIER TRANSPORTATION UK LIMITED

# EXECUTED for and on behalf of RAIL FOR LONDON LIMITED

.

. .

LON35510310/114 119070-0040



Page 154

•

Manufacture and Supply Agreement EXECUTION VERSION

## Schedule 1 Train Technical Specification

LON35510310/114 119070-0040



Revision:	Date:	Prepared by:	Checked by:	Authorised by:	Reason for Issue:
Issue 01	18 August 2014	S.A.Stretch J.M.Baker	P.R.Holder	J.Matthews	Final issue for Tender Evaluation
lssue 01 Rev A	28 November 2014	Z. David	P. Heath	J. Matthews	Draft revision to reflect changes resulting from BCQ process
Issue 02	26 May 2015	J. Matthews	P. Heath	P.R.Holder	Revision to reflect changes from negotiation process

This document contains proprietary information. No part of this document may be reproduced without the prior written consent of Rail for London.

Document History:

1	OVE	RVIEW	4
2	DEF	INITIONS	5
3	ROL	LING STOCK TECHNICAL REQUIREMENTS	15
3	3.1	UNIT LENGTHS AND CONFIGURATIONS	15
-	3.2	UNIT PERFORMANCE AND JOURNEY TIMES	16
3	3.3	UNIT CONFIGURATION TIMES	21
3	3.4	ENERGY CONSUMPTION	22
-	3.5	UNIT WEIGHT TARGETS	
-	3.6	ENVIRONMENTAL OPERATING CONDITIONS	
-	3.7	GAUGING, ROUTES AND STEPPING DISTANCE	
_	3.8	TRACK INTERACTION, WEAR AND T-GAMMA (Τγ)	
-	3.9 3.10	RIDE AND STABILITY	
-	5.10 5.11	FIRE PERFORMANCE	
-	3.12	TRACTION POWER SUPPLY	
	3.13	TRACTION SYSTEM	
-	3.14	PANTOGRAPHS	
	3.15	DC CURRENT COLLECTION, SLEET BRUSHES AND DE-ICING EQUIPMENT	
3	3.16	AUXILIARY POWER SYSTEMS	
-	3.17	UNIT CONSTRUCTION	
-	8.18	EXTERIOR APPEARANCE AND LIVERY	
-	8.19	BRAKING SYSTEM	
-	3.20	WHEEL SLIP / SLIDE PROTECTION SYSTEM	
-	3.21 3.22	LUBRICATION SYSTEM	42
-	3.23	COUPLERS	
-	3.24	RESCUE PERFORMANCE AND FUNCTIONALITY	
-	3.25	INTER-VEHICLE GANGWAYS	
3	3.26	EXTERNAL FEATURES (LIGHTING / HORNS / GRAB RAILS / FOOTSTEPS)	
3	3.27	DOO AND CREW OPERATION	47
-	3.28	PASSENGER BODYSIDE DOOR SYSTEMS	
	3.29	TRAIN CONTROL AND PROTECTION	
	3.30	RADIO SYSTEMS	
	3.31 3.32	OTMR	
-	3.32 3.33	PASSENGER ENVIRONMENT	
	3.33 3.34	PASSENGER LOADWEIGH MONITORING SYSTEMS	
-	3.35	INTERIOR LIGHTING	
-	3.36	HEATING, VENTILATION AND AIR CONDITIONING SYSTEM	76
3	3.37	PASSENGER INFORMATION SYSTEM	78
3	3.38	DRIVING CAB	
-	3.39	TRAIN MANAGEMENT SYSTEM	
-	3.40	DATA COMMUNICATION SYSTEM	
	3.41	RELIABILITY AND RESILIENCE	
_	3.42 3.43	EMC AND COMPATIBILITY WITH RAILWAY INFRASTRUCTURE SYSTEMS	
	3.44	STANDARDS	
-	3.45	Design Life	
_	3.46	OTHER SYSTEMS	
3	3.47	PASSENGER COMMUNICATION FACILITIES	97
4	PLA	NS, DOCUMENTATION AND SOFT DELIVERABLES	
4	4.1	SIMULATOR	
4	4.2	SPECIAL TOOLS AND SOFTWARE	105
	4.3	MOCK-UPS.	
	pendix		
	pendix	B Data Communication Requirements	110
ADI	pendix	C Unit Infrastructure Monitoring Requirements	

Appendix D	Emergency and Safety Equipment117
	Unit Exterior and Interior Design Requirements

1	Overview	TTS- 1163
	The following Train Technical Specification (TTS) sets out the rolling stock technical requirements for the programmes defined in the main contract documents:	
	<ul> <li>Manufacture Supply Agreement (MSA); and</li> </ul>	TTS- 1162
	Train Service Agreement (TSA).	

2	Definitions	<b>⊤⊺S-</b> 1
2.1.1.1	The defined terms used in this technical specification shall have the meaning defined in the head contract documents (MSA and TSA) unless specifically defined below.	TTS- 2597
2.1.1.2	AC Only Unit:	
	Means a configuration of Unit with the Traction System equipment installed such that the Unit is only capable of operation from a 25kV AC Traction Power Supply.	T∏S-2
2.1.1.3	Airwave:	
	Means the TETRA based mobile communications network dedicated for use by the emergency services on the London Underground Network.	TTS-3
2.1.1.4	Any Loading Condition: Means all payloads up to and including Exceptional Payload.	TTS-4
2.1.1.5	Approach Announcement:	
2.1.1.0	Means an audio announcement including:	
	<ul> <li>the name of the next station at which the Unit will stop; and</li> </ul>	TTS-6
	<ul> <li>key information about connecting services (adapted to reflect the current operational status of the specific connecting service).</li> </ul>	
2.1.1.6	Approach Message:	
	Means a visual message including:	
	• the name of the next station at which the Unit will stop; and	ττ <b>s-7</b>
	<ul> <li>key information about connecting services (adapted to reflect the current operational status of the specific connecting service).</li> </ul>	
2.1.1.7	Arrival Announcement:	
	Means an audio announcement including:	TTS-8
	<ul> <li>the name of the station at which the Unit has stopped; and the Unit's final destination.</li> </ul>	
2.1.1.8	Arrival Message:	
	Means a visual message including:	TTS-9
	<ul> <li>the name of the station at which the Unit has stopped.</li> </ul>	
2.1.1.9	Authorised Person:	
	Means the driver, a member of train crew, platform or maintenance staff authorised by the Purchaser to access or operate a specific item of Unit equipment.	TTS-10
2.1.1.10	Automatic Selective Door Operation (ASDO):	
	Means a system that automatically determines the Unit's location and hence the doors to enable for opening at a given station platform. The role of the train crew is limited to correctly positioning the Unit within the platform and then operating the door release buttons, confirming from Selective Door Operation (SDO) system indications that the correct doors are being selected. Manual override is permitted under abnormal or fault conditions.	TTS-11
2.1.1.11	Automatic Warning System (AWS):	TTS-12
	Means a system to visually and audibly warn the driver of the status of a	

	signal on approach.	
2.1.1.12	AVI:	TTS-13
	Means Automatic Vehicle Identification.	
2.1.1.13	Body End Datum (BED):	TTS-14
	Means a longitudinal reference datum located at the outer physical end of the Vehicle body.	113-14
2.1.1.14	Bodyside Indicator Lights (BIL):	TTS-15
	Means as defined in GM/RT2473.	
2.1.1.15	Call For Aid (CFA):	TTS-16
	Means a passenger operated alarm device fitted at a wheelchair space as defined in section 4.2.2.3 of the PRM-TSI.	
2.1.1.16	CCS-TSI:	
· •	Means the technical specification for interoperability relating to the control- command and signalling subsystem of the trans-European conventional rail system.	TTS-17
2.1.1.17	CCTV:	TTS-18
	Means closed-circuit television.	
2.1.1.18	CGI:	TTS-20
	Means computer-generated imagery.	
2.1.1.19	Correct Side Door Enable (CSDE):	
	Means a function of the passenger bodyside door system that provides confirmation that the passenger bodyside doors have been enabled for opening on the correct side of the Unit.	TTS-21
2.1.1.20	CR-TSI:	
	Means the technical specifications for interoperability relating to the rolling stock subsystem of the trans-European conventional rail system.	TTS-22
2.1.1.21	Not Used.	TTS-23
2.1.1.22	Departure Announcement:	
	Means an audio announcement including:	TTS-24
	the Unit's final destination.	
2.1.1.23	Departure Message:	
	Means a visual message including:	TTS-25
	the Unit's final destination.	
2.1.1.24	Design Mass:	TTS-26
•	Means as defined within BS EN 15663:2009 Railway applications - Definition of vehicle reference masses.	110 20
2.1.1.25	DOO CCTV:	
	Means camera based closed-circuit television system to enable Driver Only Operation of the Unit.	TTS-27
2.1.1.26	DRA:	TTS-28
	Means the driver reminder appliance as defined in GM/RT2491.	-
2.1.1.27	Driver Machine Interface (DMI):	TTS-29
	Means an in-cab display, located in a prime position on the driver's desk, as	

Page 6 of 124

	defined in clause 3.3.5 of GE/GN8605.	
2.1.1.28	Driver Only Operation (DOO):	
	Means where the Unit is operated by a driver without requiring any other train crew.	TTS-30
2.1.1.29	Driving Vehicle:	
	Means any Vehicle having a driver's cab and is the Vehicle positioned at either end of a Unit.	TTS-31
2.1.1.30	DSD:	
·	Means driver's safety device, a device in the driver's cab providing a means to monitor the driver's activity and to automatically stop the Unit when a lack of driver's activity is detected.	TT <b>S</b> -32
2.1.1.31	Dwell Time:	
	Means the time measured from Unit stopped at a station to Unit able to start following completion of all station duties and train dispatch activities.	TTS-33
2.1.1.32	Dual Voltage Units:	
	Means a configuration of Unit with all the Traction System equipment installed so that the Unit is capable of operation from either a 25kV AC Traction Power Supply or a third rail DC Traction Power Supply.	TTS-34
2.1.1.33	East London Line (ELL) Route:	
	Means a section of the LO Infrastructure that operates from West Croydon, Crystal Palace and New Cross through to Highbury and Islington.	TT <b>S</b> -35
2.1.1.34	EMC:	TTS-36
	Means Electromagnetic Compatibility.	
2.1.1.35	EMI:	TTS-37
	Means Electromagnetic Interference.	
2.1.1.36	Empty Coaching Stock (ECS):	<del></del>
	Means a Unit operating condition in which the Unit is not in passenger revenue service and in which there are no passengers on the Unit.	TTS-38
2.1.1.37	Energy-TSI:	<del></del> 0
	Means the technical specification for interoperability relating to the 'energy' sub-system of the trans-European conventional rail system.	TTS-39
2.1.1.38	Not Used.	TTS-40
2.1.1.39	ETCS:	TTS-41
	Means European Train Control System, as defined by the CCS-TSI.	
2.1.1.40	Eurobalise:	TTS-42
	Means as defined in the CCS-TSI.	
2.1.1.41	Event Trigger:	
	Means the occurrence of any of the following events on the Unit:	
	<ul> <li>passenger communication device activation;</li> <li>fire detection;</li> </ul>	TTS-43
	<ul> <li>fire detection;</li> <li>passanger beducide deer blockage when the deer has returned to</li> </ul>	113-43
	<ul> <li>passenger bodyside door blockage when the door has returned to the fully open state;</li> </ul>	
	door egress device activation; or	

5

Page 7 of 124

	<ul> <li>loss of local door interlock when the passenger bodyside doors are not released.</li> </ul>	
2.1.1.42	Exceptional Payload: Means as defined within BS EN 15663:2009 Railway applications - Definition of vehicle reference masses Table 4. The standing passenger loading shall be calculated at 500kg/m <sup>2</sup> .	<b>⊤TS-44</b>
2.1.1.43	FFCCTV: Means forward and rear facing CCTV as defined in GM/GN2606 and includes the pantograph monitoring CCTV equipment.	TTS-45
2.1.1.44	Full Duplex: Means the ability for two parties to communicate with each other simultaneously.	TTS-46
2.1.1.45	Full Service: Means as defined in GM/RT2045.	TTS-47
2.1.1.46	GSM-P: Means any mobile phone system available for use by the general public, including Global System for Mobile Communications (GSM) systems and subsequently developed systems including Universal Mobile Telecommunications System (UMTS) and Long Term Evolution (LTE) operating on the frequencies on which they are currently licensed in the UK.	TTS-49
2.1. <b>1.4</b> 7	GSM-R: Means Global System for Mobile communications - Railway.	TTS-50
2.1.1.48	HFIP: Means Human Factors Integration Plan.	TTS-51
<b>2.1.1.49</b>	Human Machine Interface (HMI): Means any control interface between train crew and the Unit.	TTS-52
2.1 <i>.</i> 1.50	HVAC: Means Heating Ventilation and Air Conditioning.	TTS-53
2.1.1.51	Intermediate Vehicle: Means any Vehicle not having a driver's cab at either end and which is positioned between Driving Vehicles in a Unit.	TTS-54
2.1.1.52	Journey Time: Means the time measured from traction application at the journey start location to Unit stopped at the journey completion location. The Journey Times shall include the station stopping pattern for the journey and associated total station Dwell Times.	<b>⊤⊤S-</b> 56
2.1.1.53	Juridical Recorder: Means as defined in the CCS-TSI.	<b>⊤TS</b> -57
2.1.1.54	LAN: Means Local Area Network.	TTS-58
2.1.1.55	Level Boarding: Means where the gap between the edge of the external passenger doorway footstep and the edge of the platform is not more than 75mm measured horizontally and not more than 50mm measured vertically.	TTS-59

2.1.1.56	Mean Comfort Index:	TTO OA
	Means as defined within BS EN 12299:2009 Railway Application Ride Comfort for Passengers; Measurement and Evaluation.	TTS-61
2.1.1.57	Multiple Unit:	TTS-63
	Means an operating formation of more than one Unit coupled together.	
2.1.1.58	NNTR: Magna Natified National Technical Dula and has the magning given to it in	TTS-65
	Means Notified National Technical Rule and has the meaning given to it in section 2 of the Interoperability Regulations.	
2.1.1.59	Noise-TSI:	
	Means the technical specification for interoperability relating to the subsystem 'rolling stock noise' of the trans-European conventional rail system.	TTS-66
2.1.1.60	Non-occupied Cab:	_
	Means any cab of the Unit or Multiple Unit in which a driver's key is not inserted and the cab is not active and the direction switch is in off.	TT <b>S</b> -67
2.1.1.61	Normal Operation:	<b>TTD</b> 66
	Means a Unit operating in compliance with this specification, without restriction on Unit performance or functionality.	TTS-68
2.1.1.62	Normal Payload:	
	Means as defined within BS EN 15663:2009 Railway applications - Definition of vehicle reference masses Table 4.	TTS-69
2.1.1.63	Occupied Cab:	
	Means the cab of the Unit or Multiple Unit where the driver's key is inserted and the driver has made the cab active by moving the direction switch away from off.	TTS-70
2.1.1.64	OHL:	TTS-71
	Means Overhead Line 25kV Equipment.	
2.1.1.65	On-Train Monitoring and Recording Equipment (OTMR):	
	Means equipment provided on the Unit to record data about the operation of its controls and the Unit performance in response to those controls and other train control systems.	TT <b>S-7</b> 2
2.1.1.66	Operational State:	
	Means a Unit state in which the Unit is ready to enter passenger service with an Occupied Cab and all Subsystems switched on and available for operational service, including having configured any operational data entered either from the Wayside or by the driver. In this state the Unit shall have:	TT <b>S-7</b> 3
	<ul> <li>the pantograph raised and in contact with the 25kV or the DC shoegear lowered and in contact with the third rail; and</li> </ul>	
	<ul> <li>the corresponding AC or DC main circuit breaker closed.</li> </ul>	
2.1.1.67	OWG:	TT <b>S-7</b> 4
	Means Open Wide Gangway.	110-14
2.1.1.68	Passenger Emergency Alarm (PEA):	TT <b>S-7</b> 5
	Means a passenger operated alarm device as defined in section 4.2.5.3 of	