

Schedule 22
Technical Support and Spare Supply

Part A **TSSSA Services**

Appendix 1 Responsibility Table

Appendix 2 Price of Additional Spares

Part B **TSSSA Payment Mechanism**

Appendix 1 Periodic TSSSA Services Charge

Appendix 1A Additional Periodic TSSSA Services Charge

Appendix 2 Price of Additional Spares

Appendix 3 Mileage Period Table

Part C **TSSSA Performance Regime**

Part A TSSSA Services

1. Definitions

1.1 For the purposes of this Schedule 22, the following terms shall have the meanings given below:

Dedicated Store has the meaning given to such term in paragraph 3.2(b) of this Part A;

Extension has the meaning given to such term in paragraph 3.9(c) of this Part A;

Lead Time has the meaning given to such term in paragraph 3.5(b)(iii) of this Part A;

Lead Time Extension has the meaning given to such term in paragraph 3.9(b) of this Part A;

Maintenance and Overhaul Cycle means, in respect of any Unit, Vehicle or other item of Equipment, the periodicity and extent of maintenance and overhaul to which that Unit, Vehicle or item of Equipment is required to be subject throughout its life, as specified in the Manuals and the Maintenance Plan;

Scheduled Maintenance Requirements means the maintenance plan submitted by the Purchaser pursuant to paragraph 3.15(b) and the Maintenance Plan;

Spares List has the meaning given to such term in paragraph 3.5(b)(ii) of this Part A;

Spares Supply Services means the services, work and activities to be performed by the Maintainer in satisfaction of its obligations under paragraph 3 (*Spares Supply Services*) of this Part A;

Specified Damage means, in relation to any Overhaul Spare or Part made available by the Purchaser to the Maintainer pursuant to paragraph 3.9 of this Part A, that such Overhaul Spare or Part is:

- (a) incomplete;
- (b) in a damaged state where the Maintainer can demonstrate that such damage has been caused (i) by the Operator on removal from the relevant Unit on which it was installed, or (ii) after such removal and prior to it being made available to the Maintainer; or
- (c) in a damaged state where such damage is, or has occurred as a direct result of a Purchaser Fault;

Supply and Return Procedures means the procedure set out in paragraph 3.5(a) of this Part A;

TSSSA Initial Spares has the meaning given to such term in paragraph 3.4 of this Part A; and

TSSSA Performance Regime means the regime for monitoring the performance of the Maintainer in carrying out the Services under this Schedule 22, as set out in Part C (*TSSSA Performance Regime*).

2. General

- 2.1 From the TSSSA Commencement Date the Purchaser and Maintainer shall perform the services, work and activities as indicated in the relevant columns of the TSSSA Responsibility Table set out in Appendix 1 (*TSSSA Responsibility Table*) to this Part A below, and in paragraph 3 (*Spares Supply Services*) and paragraph 4 (*Technical Support Services*) of this Part A (or, as applicable, shall procure the performance and carrying out of the services, work and activities).
- 2.2 Where any service, work or activity is listed in the TSSSA Responsibility Table and also described in paragraph 3 (*Spares Supply Services*) and/or paragraph 4 (*Technical Support Services*) of this Part A, and there is any conflict between the entry in the TSSSA Responsibility Table (including any footnote) and the applicable other provision(s) in paragraph 3 and/or paragraph 4, the applicable other provision(s) shall have precedence.
- 2.3 The Purchaser may request (in writing) the Maintainer to perform or carry out additional services, work and/or activities, or may require the Maintainer to perform or carry out a reduced scope of services, work and/or activities, on terms to be agreed in accordance with the Change Procedure.
- 2.4 The Maintainer shall use the Dedicated Store solely in the performance of the obligations set out in this Schedule and any related obligations elsewhere in this Agreement, and in doing so the Maintainer shall comply with:
- (a) all reasonable instructions of the Purchaser;
 - (b) all relevant policies, guidelines and procedures relating to the Maintenance Facilities in place from time to time; and
 - (c) all Applicable Laws and Standards.
- 2.5 The Maintainer shall not cause any damage, destruction or loss to any part of the Maintenance Facilities.
- 2.6 The Purchaser shall procure that the Maintainer is granted such non-exclusive access to the Maintenance Facilities (excluding the Ilford A Maintenance Depot) as is necessary for the Maintainer to perform its obligations under this Agreement from the TSSSA Commencement Date.

3. Spares Supply Services

General Obligations

- 3.1 (a) The Maintainer shall at its own risk and expense be responsible for all necessary Relevant Approvals (including safety approvals) required under any Applicable Laws and Standards to be obtained by a supplier of rolling stock spares.
- (b) Unless otherwise agreed by the Maintainer and the Purchaser, the Maintainer shall supply Spares, including Overhaul Spares and Consumable Spares, to the Purchaser by issuing them to the Purchaser from the relevant Designated

Store in accordance with the provisions of this paragraph 3, and shall be responsible for procuring, replacing and managing the Spares in order to perform its obligations under this Schedule 22.

- (c) Subject to the detail of the other provisions of this paragraph 3, the Maintainer shall be responsible for:
- (i) making all payments to the suppliers of Spares;
 - (ii) the storage, safety, maintenance and insurance (in accordance with Schedule 11 (*Insurance*)) of the Spares;
 - (iii) ensuring the suitability and quality of the Spares for the undertaking of maintenance and overhaul services in accordance with the Scheduled Maintenance Requirements and the Maintenance and Overhaul Cycle and the rectification of Specified Damage and the availability and readiness of the Spares to be used straight away;
 - (iv) the transit of any Spares between any supplier and the Maintainer, and the transit of any Spares that are taken to a location to be overhauled and/or Repaired;
 - (v) managing any warranty claims arising in relation to the Spares; and
 - (vi) ensuring that the Spares are kept up to date and compatible in all respects (including Software) with the Units.

Dedicated Store

- 3.2 (a) The Maintainer shall not use any Spares which are stored in the Dedicated Store or otherwise intended to be available for the purposes of performance of this Schedule 22 for any purpose other than performing its obligations under this Agreement.
- (b) The Purchaser shall make available to the Maintainer a dedicated area of sufficient dimensions fit for the purpose of storing and supplying Spares at each Maintenance Facility or such other location as may be agreed from time to time by the Parties (the *Dedicated Store*). The Maintainer acknowledges that the Purchaser will have satisfied this obligation if it makes available the storage facility at the Maintenance Facility which the Maintainer has been using as such during the Maintenance Period subject to any additional segregation of the storage facility reasonably requested by the Maintainer.
- (c) The Maintainer shall protect Spares which are stored at the Dedicated Store from theft, injury, breakage or damage by exposure to the weather and take every reasonable precaution against theft, accident, injury or breakage or damage from any cause.
- (d) The Maintainer shall not, without the prior written consent of the Purchaser store any Spare (other than those Spares which are temporarily being overhauled and/or Repaired) on any land or premises other than:
- (i) at the Willesden Depot; or

REDACTED

- (ii) at any other location which is agreed between the Parties in connection with the provision of the TSSSA Services.
- (e) The Purchaser shall ensure that a member of its staff is present at the Dedicated Store at all times (24 hours a day, 7 days a week) for the supply of Spares and acceptance of Overhaul Spares for repair and/or overhaul.
- (f) The Maintainer will operate the Dedicated Store and, in particular, shall:
 - (i) inspect Overhaul Spares at the point of delivery to the Dedicated Store and determine whether they may be faulty or damaged and whether they should therefore be accepted or rejected;
 - (ii) monitor Spares consumption and/or predict future Spares consumption; and
 - (iii) prepare and check all documentation necessary for the return of Overhaul Spares to the Maintainer for work to be performed on the same, whether for purposes of Repair, overhaul, refurbishment or otherwise.

Adequacy and Management of Spares

3.3 (a) During the TSSSA Period, the Maintainer shall at its own risk be responsible for:

- (i) maintaining adequate stocks of Spares and other materials to enable it to perform its obligations under this Schedule 22 in relation to the supply of Spares required for:
 - (A) the Scheduled Maintenance Requirements; and
 - (B) any warranty work pursuant to the MSA or clause 11.7 of this Agreement,

except in the case of either (I) a failure by the Purchaser to make an Overhaul Spare available to the Maintainer in accordance with the Supply and Return Procedures pursuant to paragraph 3.9, or (II) the Purchaser returning an Overhaul Spare with Specified Damage, in which case the Maintainer shall at its own risk be responsible for using reasonable endeavours to maintain adequate stocks of Spares to enable it to perform its obligations under this Schedule 22 in relation to the supply of Spares required for the matters referred to in subparagraphs (A) and (B);

- (ii) maintaining, servicing, calibrating and overhauling Spares in accordance with the Scheduled Maintenance Requirements, the relevant agreed procedures in the Maintenance and Overhaul Cycle and all Applicable Laws and Standards, in each case for the purpose of keeping the Spares in a condition in which they are Fault Free at all material times; and

- (iii) obtaining and retaining all necessary safety approvals required under any Applicable Laws and Standards with respect to Spares.
- (b) During the TSSSA Period, the Maintainer shall at its own risk be responsible for using reasonable endeavours in maintaining adequate stocks of Spares and other materials to enable it to perform its obligations under this Schedule 22 in relation to the supply of Spares required to address Specified Damage in accordance with this paragraph 3.
- (c) The Maintainer's obligations to use reasonable endeavours under paragraphs (a) and (b) shall include (but shall not be limited to) identifying the stocks of Spares required by the Maintainer to perform its obligations under this Schedule 22 in relation to the supply of Spares based on:
 - (i) Scheduled Maintenance Requirements;
 - (ii) the Maintenance and Overhaul Cycle;
 - (iii) all relevant knowledge obtained by the Maintainer (and its Affiliates) in designing, building and maintaining the Units under the MSA and this Agreement;
 - (iv) all relevant knowledge obtained by the Maintainer (and its Affiliates) in designing, building and maintaining other rolling stock vehicles with similar characteristics to the Units;
 - (v) any information provided to the Maintainer by the Purchaser from time to time; and
 - (vi) ensuring that an appropriately prudent level of Spares is kept in stock to address unforeseen circumstances.
- (d) In the event that there are insufficient Spares for the performance of its obligations under this Schedule 22 in relation to the supply of Spares, the Maintainer shall be responsible for acquiring at its own cost any supplementary Spares which the Maintainer (acting reasonably) considers necessary to increase the stock of Spares to a level which enables the Maintainer to perform of its obligations under this Schedule 22 in relation to the supply of Spares efficiently and economically. The Maintainer shall notify the Purchaser prior to making any such adjustment to the stock levels of Spares.
- (e) If a Spare or any other such material is not available for any reason other than an Allowable Failure (TSSSA), and this prevents the Purchaser from performing each Diagram as scheduled and/or from performing maintenance, repairs and/or overhauls of the Units, there shall be no relief granted to the Maintainer under this Agreement and the provisions of the TSSSA Performance Regime shall apply.
- (f) Following the TSSSA Commencement Date, the Maintainer shall continue to report the quantity and usage of Spares, and shall keep updated the Spares Inventory, in each case in accordance with clause 9.6.

Provision of TSSSA Initial Spares

- 3.4 Upon the TSSSA Commencement Date, the Spares returned to the Purchaser in accordance with paragraph 1 (*Return*) of Part A (*Return Condition*) of Schedule 7 (*Return of Assets*) following a TSSSA Change Notice shall be made available to the Maintainer for use in the provision of the Services under this Schedule (the *TSSSA Initial Spares*).

Supply and Return Procedures

- 3.5 (a) Following service of a TSSSA Change Notice, and no later than six months before the TSSSA Commencement Date, the Maintainer shall submit to the Purchaser for Assurance Acceptance detailed procedures in relation to the performance of the obligations under this paragraph 3 in relation to the supply of Spares and the return of Overhaul Spares and once such procedures have been Assurance Accepted, they shall constitute the *Supply and Return Procedures* for the purposes of this Schedule 22.
- (b) The Supply and Return Procedures shall set out in detail, for each type of Spare:
- (i) the respective obligations of the Maintainer and the Purchaser;
 - (ii) a list of the Spares (the *Spares List*), together with, to the extent not listed in Appendix 2 (*Price of Additional Spares*) of Part B (*TSSSA Payment Mechanism*), the price for the supply of such Spare; and
 - (iii) the lead time required for the repair and/or overhaul of Parts which are replaced by an Overhaul Spare (the *Lead Time*).

Availability of Overhaul Spares

- 3.6 Subject to the Purchaser complying with its obligations pursuant to paragraphs 3.4, 3.9 and 3.15 of this Part A, the Maintainer shall make available to the Purchaser from the Designated Store at the relevant Maintenance Facility such Overhaul Spares as may be necessary for the proper maintenance, repair and overhaul of the Units by a competent maintainer in accordance with:
- (a) the Scheduled Maintenance Requirements and the Manuals;
 - (b) the Supply and Return Procedures; and
 - (c) consumption of such Overhaul Spares during the preceding Maintenance Period,

and the Maintainer's obligations under paragraph 3.3. The Purchaser shall ensure that all Overhaul Spares that are supplied pursuant to this paragraph 3.6 are Fault Free.

Overhaul, Repair and/or replacement of Overhaul Spares

- 3.7 (a) Where the Purchaser uses an Overhaul Spare by installing such Overhaul Spare on a Unit, the Maintainer shall, for the purposes of keeping the

Overhaul Spares in a condition in which they are Fit for Purpose at all material times:

- (i) procure, in accordance with paragraph 3.9, that the Part which has been replaced by such Overhaul Spare is overhauled in accordance with the Scheduled Maintenance Requirements and the Maintenance and Overhaul Cycle; or
 - (ii) where such Part is life-expired or damaged beyond economic repair, procure that such Part is replaced and such replacement may be a brand new Overhaul Spare or an Overhaul Spare that has been removed from a Unit and Repaired and/or overhauled.
- (b) The Maintainer shall not be entitled to any additional payment (other than the TSSSA Service Payment) in consideration for the replacement, Repair and/or overhaul of Overhaul Spares pursuant to paragraph 3.7(a) except where any such Part (or any component thereof) has incurred Specified Damage.

Overhaul Spares – Fault Rectification

- 3.8 (a) The Maintainer shall, at its own cost (subject always to payment of the Service Payments), in addition to the overhaul activities referred to in paragraph 3.7, Repair on demand any repairable Overhaul Spare which has been subject to a Fault other than where such Fault was Specified Damage, such that, subject to paragraph 3.9, any Fault affecting the relevant Overhaul Spare is rectified within the Lead Time for the supply of a new spare equivalent to the Overhaul Spare being repaired.
- (b) If the Purchaser requires the Maintainer to Repair or replace any Overhaul Spare which has been subject to Specified Damage the Maintainer shall, subject to paragraph 3.9, provide such Services as an additional service and shall either be separately chargeable to the Purchaser as a Spares Supply Adjustment in accordance with paragraph 3.3 of Part B (*TSSSA Payment Mechanism*) at the relevant price set out in Appendix 2 (*Price of Additional Spares*) of Part B or, if no such price is set out in that Appendix 2, at the price specified on the Spares List.

Overhaul Spares – Purchaser Obligation to make available

- 3.9 The Purchaser shall, following the removal from a Unit of any Part that incorporates any items which, following overhaul or Repair in accordance with the Manuals would constitute an Overhaul Spare, as a result of any maintenance activity (whether as part of scheduled activities following operation in service or because the Part has suffered a Fault):
- (a) make the removed Part or Parts available to the Maintainer at the Dedicated Store within twenty-four (24) hours of such replacement (or such other time as may be agreed between the parties and recorded in the Supply and Return Procedure), and the Maintainer shall be required to collect it or them from the Purchaser and, in accordance with paragraph 3.7 or 3.8 (as applicable):

- (i) carry out, or procure the carrying out within the Lead Time of any overhaul required pursuant to the Maintenance and Overhaul Cycle; and/or
 - (ii) carry out or procure the carrying out, within the Lead Time for the supply of a new Spare equivalent to the Overhaul Spare which is being Repaired, any necessary Repair of the relevant Overhaul Spare such that it is Fault Free.
- (b) To the extent the removed Overhaul Spare is not made available by the Purchaser for collection in accordance with paragraph 3.9(a) within the specified time period, the Maintainer shall remain under an obligation to collect and carry out or procure the carrying out of overhaul or repair of the relevant Overhaul Spare, but the Lead Times set out in the Supply and Return Procedure for the carrying out of such overhaul or repair shall be extended by the number of days by which the time period set out in paragraph 3.9(a) has been exceeded (the *Lead Time Extension*), an Allowable Failure (TSSSA) shall occur and the Maintainer shall not be liable under the TSSSA Performance Regime in respect of a Unit being Unavailable (TSSSA) where the principal cause thereof is that the relevant Overhaul Spares are unavailable at the Maintenance Facility as a result of the Lead Time Extension.
- (c) To the extent the removed Overhaul Spare is made available by the Purchaser for collection in accordance with paragraph 3.9(a), but such Overhaul Spare is subject to Specified Damage, the Maintainer and the Purchaser shall jointly agree a reasonable extension to the relevant agreed Lead Time(s) referenced in paragraph 3.9(a) (the *Extension*), for the carrying out of the relevant overhaul or Repair which such Overhaul Spare requires (and if, despite the exercise of reasonable endeavours in accordance with paragraph 3.3, the Maintainer cannot supply an Overhaul Spare when required in accordance with this paragraph 3, an Allowable Failure (TSSSA) shall occur and the Maintainer shall not be liable under the TSSSA Performance Regime in respect of a Unit being Unavailable (TSSSA) where the principal cause thereof is that necessary Overhaul Spares are unavailable at the Maintenance Facility as a result of the Extension), together with such additional cost (to be determined and paid as a Spares Supply Adjustment in accordance with paragraph 3.3 of Part B (*TSSSA Payment Mechanism*)) as may be reasonable taking into account the relevant missing components or relevant damage to the Overhaul Spare(s).
- (d) To the extent a removed Overhaul Spare is not made available by the Purchaser for collection in accordance with paragraph 3.9(a) at all, an Allowable Failure (TSSSA) shall occur and the Maintainer shall not be liable under the Performance Regime to the extent that a Unit is Unavailable (TSSSA) as a result of necessary Overhaul Spares being unavailable at the Maintenance Facility as a result of the non-return of such Overhaul Spare to the Maintainer, except where the Purchaser purchases replacements for such missing defective Overhaul Spare, in which case such exemption from

liability shall only apply for the period for which such Overhaul Spare(s) are missing, together with the period of the Lead Time for procurement of the replacement for the relevant Overhaul Spare in accordance with the Spares List.

Consumable Spares – General Obligations

- 3.10 (a) The Maintainer shall supply to the Purchaser all such Consumable Spares as may be necessary for the proper maintenance, repair and overhaul of the Units in accordance with the maintenance and repair instructions contained within the Manuals and the Scheduled Maintenance Requirements. The cost of supply of Consumable Spares shall be borne by the Maintainer, and the Maintainer's sole remuneration therefore shall be the Service Payment except to the extent that Consumable Spares are required for the purposes of replacing any Part which has been the subject of Specified Damage, in which case any necessary Consumable Spares shall be separately chargeable to the Purchaser as a Spares Supply Adjustment in accordance with paragraph 3.3 of Part B (*TSSSA Payment Mechanism*) at the relevant price set out in Appendix 2 (*Price of Additional Spares*) of Part B or, if no such price is set out in that Appendix 2, at the price specified on the Spares List.
- (b) The Maintainer shall at all times ensure that in its reasonable opinion the Purchaser's stock of Consumable Spares is sufficient to perform all currently contemplated planned maintenance set out in the Scheduled Maintenance Requirements and the Maintenance and Overhaul Cycle together with any unplanned maintenance.

Purchaser Supplemental Spares

- 3.11 (a) The Purchaser shall have the right to order and purchase additional Spares from the Spares List on the following basis:
- (i) the Purchaser shall place any such order by giving written notice to the Maintainer that it wishes to do so, specifying the type and quantity of the relevant Spares it wishes to order and, upon receipt of any such order, the Maintainer shall sell the relevant Spares to the Purchaser in accordance with the terms of this paragraph 3.11;
 - (ii) the relevant Spares shall be sold at the relevant price set out in Appendix 2 (*Price of Additional Spares*) of Part B (*TSSSA Payment Mechanism*) or, if no such price is set out in that Appendix 2, at the net selling prices set out in the Spares List for such Spares applicable during the year in which they are ordered. Net selling prices are inclusive of all necessary postage, packaging, carriage, insurance and freight costs incurred in accordance with paragraph (iv);
 - (iii) within five (5) Working Days of receipt of the order described in subparagraph (i), the Maintainer shall confirm the expected delivery date or dates for each of the relevant Spares, upon which the Maintainer expects to be able to supply the relevant Spares to the Dedicated Store or other agreed location. The Maintainer shall in any event

REDACTED

supply the relevant Spares within a period which corresponds to the delivery Lead Time specified in the Supply and Return Procedures or, if no such delivery Lead Time is specified, within a reasonable period;

- (iv) supply of Spares ordered pursuant to this paragraph 3.11 shall be made by the Maintainer to the Purchaser to the Dedicated Store and the Maintainer shall be responsible, at its expense, for arranging suitable transport of relevant Spares to the Dedicated Store;
- (v) upon arrival of the relevant Spares at the Dedicated Store, the Maintainer shall present the same to the Purchaser for inspection of conformity of the type and quantities of Spares delivered with the type and quantities of Spares ordered and the condition of the Spares delivered. To the extent the Purchaser is satisfied, acting reasonably, that the relevant Spares constituting the order are in conformity with the order and are in satisfactory condition, as set out above, the Purchaser shall sign a delivery note evidencing such satisfaction, and thereupon title to the relevant Spares shall pass to the Purchaser by delivery with full title guarantee free and clear of all Security Interests. Subject only to paragraph (vi), the Maintainer shall thereupon be entitled to require that the cost of the relevant Spares is included in the TSSSA Service Payment for the Railway Period in which such delivery occurs as a Spares Supply Adjustment in accordance with paragraph 3.3 of Part B (*TSSSA Payment Mechanism*); and
- (vi) to the extent the Purchaser, acting reasonably, is not satisfied that the relevant Spares constituting the order and delivered to the Dedicated Store are in conformity with the order and are in satisfactory condition, as set out in paragraph (v), the Maintainer shall rectify any deficiencies as soon as reasonably practicable and re-present the order for acceptance in accordance with paragraph (v).

Spares – Risk, Title and Maintainer Undertakings

3.12 During the TSSSA Period, risk in:

- (a) any TSSSA Initial Spare made available by the Purchaser to the Maintainer pursuant to paragraph 3.4 or any other Overhaul Spare acquired from time to time by the Maintainer in accordance with paragraph 3.3(d) shall remain with the Maintainer until the relevant Spare is supplied to the Purchaser, at which point such risk shall pass to the Purchaser or the Purchaser's nominee and shall remain with the Purchaser or the Purchaser's nominee until such time as that Overhaul Spare is returned to the Maintainer in accordance with paragraph 3.9(a); or
- (b) any Consumable Spare shall remain with the Maintainer until the relevant Spare is supplied to the Purchaser, at which point such risk shall pass to and remain with the Purchaser or the Purchaser's nominee.

- 3.13 During the TSSSA Period, title to:
- (a) any TSSSA Initial Spare made available by the Purchaser to the Maintainer pursuant to paragraph 3.4 shall belong to and remain with the Purchaser or the Purchaser's nominee at all times;
 - (b) any other Overhaul Spare acquired from time to time by the Maintainer in accordance with paragraph 3.3(d), shall, from the earlier of the date of its supply to the Purchaser in accordance with this paragraph 3, without further act pass to and remain with the Purchaser or the Purchaser's nominee with full title guarantee free and clear of all Security Interests; or
 - (c) any Consumable Spare shall, upon supply of that Consumable Spare to the Purchaser, without further act pass to and remain with the Purchaser or the Purchaser's nominee with full title guarantee free and clear of all Security Interests.
- 3.14 During the TSSSA Period the Maintainer undertakes to the Purchaser that it shall:
- (a) not attempt to hold itself out as having any power to sell, charge, lease or otherwise encumber or dispose of the Spares, nor create any Security Interest over any of the TSSSA Initial Spares or any other Overhaul Spare;
 - (b) not do any act or thing which might jeopardise the title, rights and interest of the Purchaser in any of the Spares;
 - (c) store all Spares in a safe and orderly manner and in the applicable Designated Store, identified as the property of the Purchaser and capable of being differentiated from any other Spares. The Maintainer shall not, except to the extent permitted by this Agreement or as otherwise agreed by the Purchaser and the Operator, remove or permit the removal of any of the Spares from such location.

Purchaser's Obligations

- 3.15 (a) The Purchaser shall, following the TSSSA Commencement Date comply with the following obligations:
- (i) The Purchaser shall only use Spares procured by the Maintainer in maintaining the Units, except in an emergency (including where a Unit is Unavailable (TSSSA) due to the Maintainer being unable to provide a relevant Spare) when the Purchaser will be entitled to use spares not so procured, subject to substituting those spares with Spares procured from the Maintainer as soon as reasonably practicable and subject to the relevant spares having the same manufacturer part number as the Spare the Maintainer is unable to provide;
 - (ii) The Purchaser shall only use staff to maintain the Units who have received training which is appropriate to the level of maintenance which is being carried out and have, in relation to such training either
 - (a) passed competency tests through assessment by trainers that have

- been accredited by the Maintainer or (b) themselves been accredited by the Maintainer;
- (iii) The Purchaser shall perform all maintenance and cleaning of the Units in accordance with the Manuals;
 - (iv) All Spares supplied by the Maintainer shall be used exclusively by the Purchaser in relation to the maintenance and repair of the Units; and
 - (v) All Units will be operated in accordance with the Permitted Use.
- (b) Following the TSSSA Commencement Date, in order to enable the Maintainer to comply with its obligations pursuant to this Schedule the Purchaser shall submit to the Maintainer no later than five (5) Working Days before the start of each Railway Period a copy of the Purchaser's maintenance plan for such Railway Period.

Standard of Spares on Handback

- 3.16 On the termination or expiry of this Agreement after the implementation of a TSSSA Change, the Maintainer shall deliver to the Purchaser the Spares listed in the Spares Inventory on the nominated Return Date in accordance with Part A (*Return Condition*) of Schedule 7 (*Return of Assets*), and all such Spares shall be in a condition consistent with their having been maintained in accordance with the Maintenance and Overhaul Cycle, the Maintenance Plan and this Agreement (so far as applicable after the TSSSA Commencement Date). To the extent that the Spares do not satisfy the above requirements due to the act, omission, neglect or default of the Maintainer, the Maintainer shall promptly repair or replace such Spares at its own cost.

4. Technical Support Services

Technical Support Personnel

- 4.1 The Maintainer shall second to the Purchaser at the Maintenance Facility on an exclusive and full-time basis two (2) persons (the *Technical Support Personnel*) (the *Technical Support Secondment*). The identity of the Technical Support Personnel shall be agreed between the Maintainer and the Purchaser prior to the commencement of the Technical Support Secondment, and the Technical Support Personnel shall, upon appointment be deemed to be Key Posts for the purposes of Schedule 8 (*Contract Management*). The Technical Support Secondment shall commence on the TSSSA Commencement Date and shall continue until expiry or earlier termination of this Agreement.
- 4.2 The Maintainer shall procure that during the continuance of the Technical Support Secondment, the Technical Support Personnel shall provide with reasonable skill and care some or all of the specific activities set out in paragraphs 4.11 to 4.29 as the Purchaser may direct, together with any other activities identified as the responsibility of the Maintainer in the "Technical Support Services" section of the TSSSA Responsibility Table (together the *Technical Support Services*).

REDACTED

- 4.3 The Maintainer will procure that the Technical Support Personnel will provide the Technical Support Services for forty (40) hours a week each spread over five equal shifts on Monday through to Friday, or such other shifts as may be agreed pursuant to rosters to be agreed between the Parties subject to unavailability of the Technical Support Personnel as a result of statutory and/or contractual entitlement to leave (including annual leave).
- 4.4 The Technical Support Personnel shall remain subject to the Maintainer's approval and notification procedures in relation to any leave and/or absence entitlements. The Maintainer shall consult with the Purchaser before approving any holiday or other leave request made by the Technical Support Personnel.
- 4.5 The Technical Support Personnel shall be and shall remain employed by the Maintainer throughout the Technical Support Secondment. The Technical Support Personnel shall at all times during the provision of the Technical Support Services remain the responsibility of the Maintainer, including in relation to the payment of all wages, salaries, the provision of benefits, insurances, all contractual and statutory obligations and duties to the Technical Support Personnel (including in relation to management, appraisals and, if necessary, disciplining of and dealing with any grievances brought by Technical Support Personnel) and in relation to any corresponding obligations to third parties, and the Parties agree that the Technical Support Personnel will not become the responsibility or employee(s) of the Purchaser.
- 4.6 The Maintainer acknowledges and agrees that any information of a confidential nature which the Purchaser provides to the Technical Support Personnel in connection with the provision of the Technical Support Services or which they otherwise obtain during the Technical Support Secondment shall be covered by the definition of Confidential Information in this Agreement and the Maintainer shall procure that the Technical Support Personnel treat such information in accordance with the obligations of confidentiality set out in this Agreement.
- 4.7 The Maintainer shall ensure that in each case, the employment contracts between the Maintainer and the Technical Support Personnel shall remain in force during the Technical Support Secondment.
- 4.8 The Maintainer shall indemnify and hold harmless the Purchaser against all Losses which the Purchaser may incur in respect of the Technical Support Personnel arising from the provision of the Technical Support Services (including any third party claims), out of their employment with the Maintainer or in relation to the termination of such employment. For the avoidance of doubt, the indemnity given by the Maintainer herein shall cover Losses which the Purchaser may incur arising out of any claims by the Technical Support Personnel in connection with the Technical Support Secondment or the termination of such secondment.
- 4.9 In the event that the Purchaser requires that either of the Technical Support Personnel be removed from the Technical Support Secondment in accordance with the provisions of paragraph 4.5 of Schedule 8 (*Contract Management*) of this Agreement, should the Purchaser require, the Maintainer shall second a suitable alternative replacement (subject to agreement between the Maintainer and the Purchaser) to the Purchaser to carry out the Technical Support Services.

- 4.10 The Maintainer shall ensure that the Technical Support Personnel shall meet the applicable requirements of Schedule 12 (*Responsible Procurement*), Schedule 14 (*Health and Safety*) and Schedule 15 (*Environment*) of this Agreement.

Services

- 4.11 Provision of Fault-finding at the Maintenance Facilities, and, as requested, at other sites within the LO Infrastructure.
- 4.12 Provision of hands-on training to individuals including training on Fault-finding.
- 4.13 Provision of general technical advice on the Units.
- 4.14 Provision of local train or wayside diagnostic support (including interpretation of such diagnostic data and operating assistance).
- 4.15 Review of any replacement contractor's maintenance regime for potential improvements.
- 4.16 Provision of assistance in providing feedback on the Fleet's performance.
- 4.17 Provision of updates of Technical Documentation.
- 4.18 Daily involvement in the allocation of responsibility for Faults as part of the Performance Regime.
- 4.19 Making recommendations for improvements to the Fleet in the light of the Maintainer's experience of other fleets which it has supplied.
- 4.20 Attendance and assistance at major incidents and/or accidents across all routes on the LO Infrastructure and assistance with any resulting investigation.
- 4.21 Identification of design improvements to Spares and Units to reduce repair, maintenance and/or overhaul costs.
- 4.22 Analysis of data downloaded from train or wayside diagnostics by the Purchaser and supplied to the Maintainer to establish any preventative or corrective action required in relation to the Units. Liaising with the Purchaser's Maintenance Facility staff in a timely manner in connection with any such actions identified and producing a monthly report for the Purchaser of all outputs from this data analysis.
- 4.23 Managing the Technical Library established by the Maintainer on the Purchaser's premises and ensuring that the information contained in the Technical Library is updated as and when the Manuals or other relevant source documents are amended from time to time.
- 4.24 Providing operational support as reasonably required by the Purchaser to assist the Purchaser in diagnosing and rectifying reported problems with the Units, to include attendance on site at an affected Unit (wherever that Unit may be).
- 4.25 Providing monthly reports to the Purchaser as reasonably required by the Purchaser to include:

- (a) analysis of warranty failures in relation to the Manufacturer's warranty obligations under the Manufacture and Supply Agreement;
- (b) status of warranty claims (to include details of Parts away for repair and return dates in relation to the Manufacturer's warranty obligations under the Manufacture and Supply Agreement);
- (c) material supply performance (including unsatisfied demand against firstpick; failure analysis reports from original equipment; the Maintainer's statistical analysis of materials failure and recommendations for long term material stock levels);
- (d) modification reports; and
- (e) monitoring against any "key performance indicators" for the Units agreed by the Parties from time to time.

4.26 Supporting the Purchaser with the continued development of the Manuals to include:

- (a) liaising with the Purchaser to understand any concerns or problems the Purchaser has with the Manuals and progressing these to ensure that they are adequately addressed in the Manuals;
- (b) developing the Manuals in the light of experience gained by the Purchaser (and the Maintainer) in maintaining the Units when in revenue-earning service to optimise their usability;
- (c) assisting the Purchaser with amending and/or updating and validating the Manuals to accommodate any changes to the working practices and procedures described therein which are adopted by the Purchaser in the performance of maintenance and/or overhaul of the Units; and
- (d) assisting the Purchaser with amending and/or updating and validating the Manuals (and any relevant drawings where applicable) to accommodate any changes to the working practices and procedures described in the Manuals (or the Vehicles as depicted in the relevant drawings) which result from any modification to the Vehicles.

4.27 Fault-finding in relation to Spares or Parts, being either:

- (a) on-Unit fault-finding (*Level 1 Fault-Finding*);
- (b) fault-finding with the relevant Part/Spare removed from the Unit (*Level 2 Fault-Finding*); and/or
- (c) diagnosis of which element of the relevant Part/Spare actually failed (*Level 3 Fault-Finding*).

4.28 The Maintainer shall, following the performance by it of any Services hereunder, update the Purchaser's records showing the location, history of usage, present condition, modification status and maintenance history of each Spare or Part which is capable of identification by a serial number and in doing so provide a satisfactory

level of detail sufficient to understand the nature of the work which has been performed by the Maintainer.

- 4.29 Without prejudice to the Maintainer's specific obligations, the Maintainer shall:
- (a) advise the Purchaser if it becomes aware that any Units do not comply with the Rolling Stock Requirements – Technical (as the same may be amended from time to time with the agreement of the Purchaser, pursuant to the Manufacture and Supply Agreement and otherwise);
 - (b) advise the Purchaser if it becomes aware that any actions proposed in changing the Rolling Stock Requirements – Technical, maintenance procedures or supply of materials, will affect the delivery of the performance of the Units; and
 - (c) advise the Purchaser to the extent that it believes that the Units are not being maintained in a safe and efficient manner, free from any unreasonable risk to the health and well-being of persons maintaining the Units and from any avoidable risk of pollution, nuisance, interference or hazard.

For the avoidance of doubt activities which are identified in the responsibility table set out in Appendix 1 (*TSSSA Responsibility Table*) as the exclusive responsibility of the Purchaser are excluded from the Services set out above.

5. Performance Regime

The Parties will comply with the provisions of the TSSSA Performance Regime set out in Part C (*TSSSA Performance Regime*) of this Schedule 22 during the TSSSA Period.

6. Return of Spares

Schedule 7 (*Return of Assets*) of this Agreement will apply upon termination of the TSSSA Period, in accordance with paragraph 3.16.

Appendix 1
TSSSA Responsibility Table

Item No.	Services, Work and Activities	Responsibility	
		Maintainer	Purchaser
	Management		
1.	Management of maintenance staff at the Maintenance Facilities		✓
2.	Management of Stabling Site staff		✓
3.	Management of indirect staff at the Maintenance Facilities		✓
4.	Management of maintenance at the Maintenance Facilities		✓
5.	Management of maintenance of Units at servicing locations		✓
6.	Management of all warranty issues (including pursuing warranty claims)	✓	
7.	Management of the supply of Spares and other materials in support of the maintenance operation	✓	
8.	Management of Maintenance Facility safety for maintenance operations		✓
9.	Management of Maintenance Facility quality system for maintenance operations		✓
10.	Management of Maintenance Facility drivers		✓
11.	Management of Maintainer staff	✓	
	Direct Labour		
12.	Servicing of Units – labour		✓
13.	Scheduled maintenance labour		✓
14.	Warranty labour not otherwise covered in the MSA	✓	

Item No.	Services, Work and Activities	Responsibility	
		Maintainer	Purchaser
15.	Non-scheduled maintenance labour (after warranty)		✓
16.	Overhaul of Units labour (component exchange)		✓
17.	Level 1 Fault-Finding		✓
18.	Level 2 Fault-Finding		✓
19.	Level 3 Fault-Finding		✓
20.	Mid-life refurbishment – labour		✓
21.	Repainting - Faults in paint quality whilst under extended warranty under MSA	✓	
22.	Repainting - minor damage		✓
23.	Repainting – total		✓
24.	Tyre turning		✓
25.	Stabling Site staff		✓
26.	Line of route cover		✓
27.	Interior cleaning – daily		✓
28.	Interior cleaning - periodic heavy clean		✓
29.	Exterior Unit cleaning (automatic train wash plant)		✓
30.	Turn-around (Stabling Site) cleaning		✓
31.	Train preparation (drivers preparation)		✓
32.	Crash/accident/misuse of repairs while under control of Operator		✓
33.	Vandalism repairs		✓
34.	Crash recovery		✓
35.	Failure recovery labour		✓
36.	Accident/incidents cover labour		✓

Item No.	Services, Work and Activities	Responsibility	
		Maintainer	Purchaser
	Indirect Labour		
37.	Stores manager	✓	
38.	Stores issuer labour	✓	
39.	Materials controllers	✓	
40.	Stores delivery loading/unloading at Maintenance Facility	✓	
	Technical Support Services		
41.	Technical assistance on Unit Failures	✓	
42.	Technical support for changes to Manuals	✓	
43.	Update and validation of Manuals and drawings after any proposed modification has been agreed	✓	
44.	Liaison with vehicle acceptance body on changes to the Manuals, as applicable	✓	
45.	Performance analysis including trend analysis etc.	✓	
46.	Technical support undertaken by technical engineers	✓	
47.	Train system and software technical support services	✓	
48.	Performance/solutions engineering	✓	
49.	Engineering support to modification process	✓	
50.	Modification to reduce maintenance costs and improve reliability	✓	
51.	Initial training of the replacement contractor's maintenance instructors and key operating staff	✓	
52.	On-going and further training of replacement contractor staff (up to 50 man days)	✓	

Item No.	Services, Work and Activities	Responsibility	
		Maintainer	Purchaser
53.	Procuring access to diagnostic data from Unit for the Purchaser	✓	
54.	Provision of analysis to Purchaser of diagnostic data	✓	
	Spares		
55.	TSSSA Initial Spares (supply of float)		✓
56.	Supply of Consumable Spares	✓	
57.	Warranty Spares	✓	
58.	Spares procurement – HQ support	✓	
59.	Spares required for scheduled maintenance	✓	
60.	Spares required for non-scheduled maintenance (after warranty period)	✓	
61.	Overhaul Spares required for scheduled maintenance	✓	
62.	Mid-life refurbishment – materials		✓
63.	Cleaning materials – materials required for the internal daily cleans and heavy cleans, as well as the chemicals for the automatic train wash plant		✓
	General		
64.	Technical support by telephone to operations staff at Stabling Sites		✓
65.	Maintenance and repair of Special Tools		✓
66.	Maintenance planning		✓
67.	Vehicle movement planning (liaison with Operator)		✓
68.	Cascaded training of maintenance and operating staff		✓
69.	On-going training of operational staff		✓

Item No.	Services, Work and Activities	Responsibility	
		Maintainer	Purchaser
70.	Movements of Units at the Maintenance Facilities		✓
71.	Test running		✓
	Maintenance Facility Buildings		
72.	Maintenance Facility improvements		✓
73.	Storage facilities at principal Maintenance Facilities and Stabling Sites		✓
74.	Office accommodation for Maintainer staff		✓
75.	Utilities – gas, electricity, water		✓
76.	Waste disposal		✓
77.	Cleaning		✓
78.	Rent and rates		✓
79.	Maintenance – structural		✓
80.	Maintenance – general (including sidings and out buildings)		✓
81.	Security		✓
82.	Insurance		✓
83.	Depreciation		✓
	Maintenance Facility Equipment		
84.	Provision of plant and machinery at Maintenance Facilities		✓
85.	Additional plant and machinery for new Units		✓
86.	Maintenance and replacement of plant and machinery		✓
87.	Maintenance and replacement of Special Tools and test equipment		✓
88.	Calibration of Special Tools and test equipment for replacement contractor staff		✓

Item No.	Services, Work and Activities	Responsibility	
		Maintainer	Purchaser
89.	Maintenance Facility hand tools for replacement contractor staff		✓
90.	Maintenance Facility hand tools for Maintainer's staff	✓	
91.	Test equipment for Maintainer staff	✓	
92.	Calibration of Maintainer owned Special Tools and test equipment	✓	
	Motor Vehicles (For Maintainer personnel)		
93.	Lease charge	✓	
94.	Insurance	✓	
95.	Operating costs	✓	
	Office Equipment (For Maintainer personnel in the Maintenance Facility/Facilities)		
96.	Supply of desks, tables and chairs		✓
97.	Supply of other equipment, including IT and Telecoms equipment.	✓	
98.	Maintenance of office equipment supplied by the Maintainer	✓	
99.	Insurance of office equipment supplied by the Maintainer	✓	
100.	Replacement of office equipment supplied by the Maintainer	✓	
101.	Office consumables (such as paper and pens etc.)	✓	
102.	Provision of ISDN lines		✓
	Miscellaneous		
103.	Maintenance Facility telephone lines (installation)	✓	

Part B TSSSA Payment Mechanism

1. Definitions

For the purposes of this Part B, the following terms shall have the meanings given below:

Actual Annual Mileage has the meaning given in paragraph 4.1 of this Part B;

AWE means the Average Weekly Earnings: K5AE – manufacturing and allied industries (excluding bonuses);

Base Period TSSSA Charge or *BPTC* means the charge calculated for the Reference Railway Period in accordance with paragraph 3.1 of this Part B for the Reference Railway Period;

Following Railway Period means the Railway Period immediately following a Reference Railway Period;

PPI means the Producer Price Index: MB56 – other repairs, installations;

Previous Railway Period means the Railway Period immediately preceding the Reference Railway Period;

Railway Year means each period of 12 calendar months commencing on 1 April in each year;

Reference Contract Year means the Contract Year in respect of which any calculation is performed for a Contract Year pursuant to this Part B;

Reference Railway Period means the Railway Period in respect of which any calculation is performed for a Railway Period pursuant to this Part B;

Reference Railway Year means the Railway Year in respect of which any calculation is performed for a Railway Year pursuant to this Part B;

Spares Supply Adjustment or *SSA* has the meaning given in paragraph 3.3 of this Part B, being an amount per Railway Period;

TSSSA Annual Mileage Reconciliation or *TAMR* has the meaning given in paragraph 2.1 of this Part B;

TSSSA Performance Regime Adjustment or *TPRA* has the meaning given in paragraph 2.1 of this Part B, being an amount per Railway Period; and

TSSSA Service Payments means the service payments to be made by the Purchaser to the Maintainer calculated in accordance with paragraph 2 (*TSSSA Service Payments*) of this Part B.

2. TSSSA Service Payments

Calculation of TSSSA Service Payments

- 2.1 During the TSSSA Period, the TSSSA Service Payment for each Reference Railway Period shall be an amount equal to:

$$£TSP = ((BPTC) \times I_1) + ((-TPRA + SSA + TAMR) \times I_2)$$

where:

- £TSP means the TSSSA Service Payment for the Reference Railway Period payable by the Purchaser to the Maintainer;
- BPTC means the Base Period TSSSA Charge calculated for the Reference Railway Period in accordance with paragraph 3.1 of this Part B for the Reference Railway Period;
- I₁ means the first indexation factor, calculated in accordance with paragraph 6 of this Part B;
- TPRA means the TSSSA Performance Regime Adjustment relating to performance in the Previous Railway Period calculated in accordance with paragraph 3.2 of this Part B;
- SSA means the Spare Supply Adjustment, calculated in accordance with paragraph 3.5 of this Part B;
- TAMR means the TSSSA Annual Mileage Reconciliation, calculated in accordance with paragraphs 3.4 and 4 of this Part B; and
- I₂ means the second indexation factor, calculated in accordance with paragraph 6 of this Part B.

Disputed Amounts

- 2.2 The Undisputed Amount (as described in clause 19.3(c)) of each of the BPTC, the TPRA, the SSA and the TAMR will form part of the TSSSA Service Payment and be payable pursuant to clause 19.4 and the Disputed Amount (as described in clause 19.3(b)) shall be dealt with in accordance with clauses 19.2(c) and 19.4(b), save that any references in such clauses to the 'Service Payment' or any elements thereof under Schedule 6 (*Payment Mechanism*) that apply during the Maintenance Period shall be deemed to be references to the TSSSA Service Payment and the elements thereof under paragraph 2.1.

Payments

- 2.3 The Purchaser shall pay to the Maintainer the TSSSA Service Payment that is payable for each Railway Period in accordance with the payment terms set out in clause 19 (*Payments*), save that any references in such clauses to the 'Service Payment' or any elements thereof under Schedule 6 (*Payment Mechanism*) that apply during the Maintenance Period shall be deemed to be references to the TSSSA Service Payment and the elements thereof under paragraph 2.1.

3. Calculation of TSSSA Service Payments

Base Period TSSSA Charge (BPTC)

3.1 The Base Period TSSSA Charge for a Railway Period shall be calculated as follows:

$$BPTC = \sum_{n=1}^{N_{PAU}} PSC_i + APSC$$

where:

- APSC means the additional periodic TSSSA service charge for the Relevant Railway Period being the amount shown in Column 2 of the table in Appendix 1A to Part B of Schedule 22 appearing against the appropriate figure in Column 1 of the table in Appendix 1A to Part B of Schedule 22 (being the Reference Railway Period);
- BPTC means the Base Period TSSSA Charge for the Reference Railway Period;
- N_{PAU} means the number of Units comprising the Fleet; and
- PSC_i means the periodic service charge for the n 'th Unit, being the amount shown in Column 2 or Column 3 dependent on the Unit type of the table in Appendix 1 (*Periodic TSSSA Service Charge*) to this Part B appearing against the appropriate figure in Column 1 of the table in Appendix 1 to this Part B (being the number of complete Railway Periods (including the Reference Railway Period) since that Unit was Accepted).

TSSSA Performance Regime Adjustment (TPRA)

- 3.2 (a) The Performance Regime Adjustment for a Railway Period shall be calculated by taking the aggregate of the Adjustments listed in paragraphs 3.2(a)(i) to (vi), each as calculated pursuant to Part C (*TSSSA Performance Regime*) for that Railway Period and as they appear in the Service Payment Report issued by the Purchaser to the Maintainer for that Railway Period (pursuant to clause 19.2(b)):
- (i) Availability Adjustment;
 - (ii) Cancellation Adjustment;
 - (iii) Delay Adjustment;
 - (iv) Major Incident Adjustment;
 - (v) Service Defect Adjustment; and
 - (vi) Performance Monitoring Adjustment.

- (b) The Undisputed Amount element of the Performance Regime Adjustment shall be paid by the Purchaser as part of the TSSSA Service Payment for the relevant Reference Railway Period pursuant to clause 19.4(a).
- (c) The Disputed Amount element of the Performance Regime Adjustment shall be referred to the Performance Review Meeting pursuant to paragraph 8 (*Performance Review Meetings*) of Schedule 8 (*Contract Management*) and the Dispute Resolution Procedure pursuant to clause 43 (*Dispute Resolution*) and, once such Disputed Amount has been determined, shall form part of the Performance Regime Adjustment to be included in the TSSSA Service Payment calculation for the Railway Period immediately following the Railway Period during which the Disputed Amount has been agreed.

Spares Supply Adjustment

- 3.3 (a) **Costs of Spare Supply Services:** Subject to and in accordance with Part A (*TSSSA Services*) and paragraph 3.3(b) of this Part B, the Purchaser shall reimburse the Maintainer for its reasonable and proper costs:
- (i) to Repair or replace any Overhaul Spare which has been subject Specified Damage pursuant to paragraphs 3.8(b) and 3.9(c) of Part A;
 - (ii) to supply any Consumable Spares that are required for the purposes of replacing any Part which has been the subject of Specified Damage pursuant to paragraph 3.10(a) of Part A; or
 - (iii) to supply any additional Spares pursuant to paragraph 3.11(a)(ii) of Part A.
- (b) **Basis of Costs:** The costs recoverable from the Purchaser by the Maintainer under this Part B for any of the matters listed in 3.3(a) shall be limited on the following basis:
- (i) subject to paragraphs 3.3(b)(ii) and 3.3(c) of this Part B, the cost of the relevant Spares which are listed in Appendix 2 (*Price of Additional Spares*) of this Part B shall be the cost set out in Appendix 2 of this Part B; and
 - (ii) the cost of the relevant Spares which are not listed in Appendix 2 of this Part B but are listed in the Spares List in the Supply and Return Procedures shall be the cost set out in the Spares List; and
 - (iii) subject to paragraph 3.3(c) of this Part B, otherwise on the basis of reasonably and properly incurred costs.
- (c) **Evidence of Costs:** The Purchaser may, where the cost of those Spare Supply Services is not substantially determined in accordance with Appendix 2 of this Part B or the Spares List, require the Maintainer to provide on an Open Book Basis the costs of the Maintainer and its related subcontractors (in respect of such works) in performing such services.

REDACTED

(d) **Cost Recovery**

- (i) Payments for Spares recoverable by the Maintainer under this paragraph 3.3 in accordance with Part A (*TSSSA Services*) shall be calculated as the Spares Supply Adjustment to the Service Payment during the Railway Period immediately following the supply of the relevant Spares.
- (ii) The Purchaser shall notify the Maintainer of the SSA in the Service Payment Report delivered by the Purchaser to the Maintainer within five Working Days following the end of the Railway Period during which the relevant Spares were supplied in accordance with clause 19.2.

- (e) **Obligation to supply Spares:** Subject to the provisions of Part A (*TSSSA Services*), the obligations of the Maintainer set out in Part A shall not be postponed or suspended pending agreement or determination of any question as to causation or of the amount of recoverable cost.

Annual Mileage Reconciliation

- 3.4 The Annual Mileage Reconciliation (calculated in accordance with paragraph 4 of this Part B) for a Reference Railway Year is payable in the third Railway Period in the Railway Year following the Reference Railway Year.

4. Annual Mileage Reconciliation

Notice of Actual Annual Mileage

- 4.1 Within 20 Working Days of the end of each Reference Railway Year, the Purchaser shall advise the Maintainer of the actual mileage run by the Fleet (including all ECS Movement mileage but excluding testing mileage unless in passenger service) in that Reference Railway Year (the *Actual Annual Mileage*).

Annual Reconciliation

- 4.2 If in any Reference Railway Year during all of which the entire Fleet is Accepted Units (including in circumstances where, but not otherwise, all Option Units ordered pursuant to an Option Notice under the MSA are Accepted Units), the Actual Annual Mileage falls into:
 - (a) the Central Mileage Band, then the Annual Mileage Reconciliation for the Reference Railway Year shall be zero; or
 - (b) a different mileage band in Column 1 of the table in Appendix 3 (*Mileage Period Table*) to this Part B than the Central Mileage Band, then the amount shown in Column 2 of the table in Appendix 3 to this Part B against the applicable mileage band multiplied by the sum of Accepted Vehicles multiplied by 365 shall be payable by the Purchaser to the Maintainer (or where, such amount is negative, by the Maintainer to the Purchaser).

Notice of Annual Mileage Reconciliation

4.3 The Maintainer shall notify the Purchaser of the amount of any Annual Mileage Reconciliation that is payable by one Party to the other in the Service Payment Report to be given to the Purchaser in the third Railway Period in the Railway Year immediately following the Reference Railway Year pursuant to clause 19.2. For all other Reference Railway Periods in a Railway Year, the Annual Mileage Reconciliation shall be zero.

Reconciliation on Termination or Expiry

4.4 If this Agreement is terminated or expires during the course of any Reference Railway Year, then:

- (a) the Purchaser shall advise the Maintainer within 20 Working Days of such termination or expiry of the actual mileage run during the course of the relevant part Railway Year;
- (b) the calculations pursuant to paragraph 4.2 of this Part B shall be performed as soon as practicable, provided that those calculations shall, where appropriate, be pro rated by reference to the number of days in that part Railway Year; and
- (c) any Annual Mileage Reconciliation as between the Maintainer and the Purchaser prior to such termination or expiry shall be made as soon as calculated in accordance with paragraph 4.4(b) of this Part B.

4.5 The provisions of paragraph 4.4 shall survive the termination or expiry of this Agreement, howsoever caused.

5. Events of Loss

If one or more Units suffers an Event of Loss, then no Service Payment shall be payable in respect of that Unit from the day after the day on which that Event of Loss occurred, and the Base Period Charge shall be amended:

- (a) for the Reference Railway Period in which such event occurs by adjusting the periodic service charge applicable to the relevant Unit in accordance with Appendix 1 to this Part B pro rata to the number of days in the Reference Railway Period until (and including) the day on which the Event of Loss occurred; and
- (b) for all subsequent Railway Periods by calculating such payment as if the relevant Unit had not been Accepted.

6. Indexation

Indexation adjustment of Service Payments

6.1 Indexation figures shall be adjusted annually on the first day of each Contract Year in accordance with the following formulae:

- (a) The first indexation factor, I_1 , shall be:

$$I_1 = \left(\frac{RPIX_y}{RPIX_x} \times a \right) + \left(\frac{AWE_y}{AWE_x} \times b \right) + \left(\frac{PPI_y}{PPI_x} \times c \right) + d$$

where: $d = 1 - a - b - c$

- (b) The second indexation factor, I_2 , shall be:

$$I_2 = \frac{RPIX_y}{RPIX_x}$$

- (c) For the purposes of the formulae in paragraphs 6.1(a) and (b) above:

I_1 means the first indexation factor applied in any calculation performed pursuant to paragraph 2.1 of Part B;

I_2 means the second indexation factor applied in any calculation performed pursuant to paragraph 2.1 of Part B;

$RPIX_y$ means the value of RPIX for February published in March of the preceding Contract Year;

$RPIX_x$ means the value of RPIX for March 2014 published in April 2014;

AWE_y means the value of AWE for February published in March of the preceding Contract Year;

AWE_x means the value of AWE for March 2014 published in April 2014;

PPI_y means the value of PPI for February published in March of the preceding Contract Year;

PPI_x means the value of PPI for March 2014 published in April 2014;

a means 100%;

b means 0%;

c means 0%; and

d means 0%.

Changes to the Indices

- 6.2 If any of the indices referred to in paragraph 6.1 ceases to be published, then such other appropriate index that may be published in place thereof shall apply or, in the absence of an appropriate replacement index, such index shall apply as the Parties may agree.

Base Date of Indices

- 6.3 If any of the indices specified in paragraph 6.1 is superseded by an index with a base date which is later than the base date of the index specified in paragraph 6.1, the

superseding index shall be used or an index with a later base date, as the case may require.

Provisional Indices

- 6.4 Where an index is published as “provisional” and is subsequently amended:
- (a) the calculation of any applicable adjustment may be undertaken using the published provision index and invoices may be rendered accordingly;
 - (b) any published amendment to the provisional index shall result in recalculation of any application adjustment; and
 - (c) such recalculation shall be retrospective for the relevant period, and the Party disadvantaged by the amendment to the provisional index shall be entitled to recover the difference in the value of any invoice calculated on the basis of an amended provisional index.

7. Decimal Places, Rounding

All calculations pursuant to this Part B shall be to two decimal places rounding up at 0.xx5 or above and rounding down otherwise (for example, 99.995 = 100.00 and 99.994 = 99.99).

Appendix 1
Periodic TSSSA Services Charge

All amounts stated in the table below shall be amounts at the Indexation Base Month and indexed as set out in the calculation of Service Payments.

** Please note, pricing has been provided for the period of operation prior to the earliest TSSSA change date.

Notes:

The table below reflects the periodic service charges for both DV and AC fleets.

In the event of 5-car trains being required, either by way of the purchase of additional 5-car trains or by the purchase of additional single cars to increase a 4-car to a 5-car then the Base Case Maintenance Model contains the mechanism to provide the periodic service charges for the revised fleet.

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		
91		
92		
93		
94		
95		
96		
97		
98		
99		
100		

REDACTED

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
101		
102		
103		
104		
105		
106		
107		
108		
109		
110		
111		
112		
113		
114		
115		
116		
117		
118		
119		
120		
121		
122		
123		
124		
125		
126		
127		
128		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
129		
130		
131		
132		
133		
134		
135		
136		
137		
138		
139		
140		
141		
142		
143		
144		
145		
146		
147		
148		
149		
150		
151		
152		
153		
154		
155		
156		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
157		
158		
159		
160		
161		
162		
163		
164		
165		
166		
167		
168		
169		
170		
171		
172		
173		
174		
175		
176		
177		
178		
179		
180		
181		
182		
183		
184		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
185		
186		
187		
188		
189		
190		
191		
192		
193		
194		
195		8
196		
197		
198		
199		
200		
201		
202		
203		
204		
205		
206		
207		
208		
209		
210		
211		
212		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
213		
214		
215		
216		
217		
218		
219		
220		
221		
222		
223		
224		
225		
226		
227		
228		
229		
230		
231		
232		
233		
234		
235		
236		
237		
238		
239		
240		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
241		
242		
243		
244		
245		
246		
247		
248		
249		
250		
251		
252		
253		
254		
255		
256		
257		
258		
259		
260		
261		
262		
263		
264		
265		
266		
267		
268		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
269		
270		
271		
272		
273		
274		
275		
276		
277		
278		
279		
280		
281		
282		
283		
284		
285		
286		
287		
288		
289		
290		
291		
292		
293		
294		
295		
296		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
297		
298		
299		
300		
301		
302		
303		
304		
305		
306		
307		
308		
309		
310		
311		
312		
313		
314		
315		
316		
317		
318		
319		
320		
321		
322		
323		
324		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
325		
326		
327		
328		
329		
330		
331		
332		
333		
334		
335		
336		
337		
338		
339		
340		
341		
342		
343		
344		
345		
346		
347		
348		
349		
350		
351		
352		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
353		
354		
355		
356		
357		
358		
359		
360		
361		
362		
363		
364		
365		
366		
367		
368		
369		
370		
371		
372		
373		
374		
375		
376		
377		
378		
379		
380		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
381		
382		
383		
384		
385		
386		
387		0
388		8
389	0	84
390	7	71
391		9
392		2
393		4
394		
395		
396		5
397		9
398		5
399		
400		
401		
402		
403		
404		
405		
406		
407		
408		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
409		
410		
411		
412		
413		
414		
415		
416		
417		
418		
419		
420		
421		
422		
423		
424		
425		
426		
427		
428		
429		
430		
431		
432		
433		
434		
435		
436		

Periodic Service Charge for each Unit		
Column 1	Column 2	Column 3
Railway Periods from Acceptance of relevant Unit – the first period relates to the Railway Period in which the Relevant Unit is delivered	£ per Railway Period for each Accepted 4-car DV Unit (up to 14 Units)	£ per Railway Period for each Accepted 4-Car AC Unit (up to 31 Units)
437		
438		
439		
440		
441		
442		
443		
444		
445		
446		
447		
448		
449		
450		
451		
452		
453		
454		
455		
456		

Appendix 1A
Additional Periodic TSSSA Services Charge

All amounts stated in the table below shall be amounts at the Indexation Base Month and indexed as set out in the calculation of Service Payments in paragraph 1.1 of Schedule 6.

Please note, pricing has been provided for the period of operation prior to the earliest TSSSA change date.

In the event of 5-car trains being required, either by way of the purchase of additional 5-car trains or by the purchase of additional single cars to increase a 4-car to a 5-car, then the Base Case Maintenance Model contains the mechanism to provide the additional periodic service charges for the revised fleet.

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
25 Jul 2015		
22 Aug 2015		
19 Sep 2015		
17 Oct 2015		
14 Nov 2015		
12 Dec 2015		
09 Jan 2016		
06 Feb 2016		
05 Mar 2016		
31 Mar 2016		
30 Apr 2016		
28 May 2016		
25 Jun 2016		
23 Jul 2016		
20 Aug 2016		
17 Sep 2016		
15 Oct 2016		
12 Nov 2016		
10 Dec 2016		
07 Jan 2017		

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
04 Feb 2017		0
04 Mar 2017		0
31 Mar 2017		0
29 Apr 2017		0
27 May 2017		0
24 Jun 2017		0
22 Jul 2017		0
19 Aug 2017		0
16 Sep 2017		0
14 Oct 2017		0
11 Nov 2017		0
09 Dec 2017		0
06 Jan 2018		2
03 Feb 2018		4
03 Mar 2018		7
31 Mar 2018		8
28 Apr 2018		13
26 May 2018		17
23 Jun 2018		22
21 Jul 2018		26
18 Aug 2018		31
15 Sep 2018		35
13 Oct 2018		40
10 Nov 2018		43
08 Dec 2018		45
05 Jan 2019		45
02 Feb 2019		45
02 Mar 2019		45
31 Mar 2019		45
27 Apr 2019		45

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
25 May 2019		45
22 Jun 2019		45
20 Jul 2019		45
17 Aug 2019		45
14 Sep 2019		45
12 Oct 2019		45
09 Nov 2019		45
07 Dec 2019		45
04 Jan 2020		45
01 Feb 2020		45
29 Feb 2020		45
31 Mar 2020		45
02 May 2020		45
30 May 2020		45
27 Jun 2020		45
25 Jul 2020		45
22 Aug 2020		45
19 Sep 2020		45
17 Oct 2020		45
14 Nov 2020		45
12 Dec 2020		45
09 Jan 2021		45
06 Feb 2021		45
06 Mar 2021		45
31 Mar 2021		45
01 May 2021		45
29 May 2021		45
26 Jun 2021		45
24 Jul 2021		45
21 Aug 2021		45

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
18 Sep 2021		45
16 Oct 2021		45
13 Nov 2021		45
11 Dec 2021		45
08 Jan 2022		45
05 Feb 2022		45
05 Mar 2022		45
31 Mar 2022		45
30 Apr 2022		45
28 May 2022		45
25 Jun 2022		45
23 Jul 2022		45
20 Aug 2022		45
17 Sep 2022		45
15 Oct 2022		45
12 Nov 2022		45
10 Dec 2022		45
07 Jan 2023		45
04 Feb 2023		45
04 Mar 2023		45
31 Mar 2023		45
29 Apr 2023		45
27 May 2023		45
24 Jun 2023		45
22 Jul 2023		45
19 Aug 2023		45
16 Sep 2023		45
14 Oct 2023		45
11 Nov 2023		45
09 Dec 2023		45

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
06 Jan 2024		45
03 Feb 2024		45
02 Mar 2024		45
31 Mar 2024		45
27 Apr 2024		45
25 May 2024		45
22 Jun 2024		45
20 Jul 2024		45
17 Aug 2024		45
14 Sep 2024		45
12 Oct 2024		45
09 Nov 2024		45
07 Dec 2024		45
04 Jan 2025		45
01 Feb 2025		45
01 Mar 2025		45
31 Mar 2025		45
28 Apr 2025		45
26 May 2025		45
23 Jun 2025		45
21 Jul 2025		45
18 Aug 2025		45
15 Sep 2025		45
13 Oct 2025		45
10 Nov 2025		45
08 Dec 2025		45
05 Jan 2026		45
02 Feb 2026		45
02 Mar 2026		45
31 Mar 2026		45

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
28 Apr 2026		45
26 May 2026		45
23 Jun 2026		45
21 Jul 2026		45
18 Aug 2026		45
15 Sep 2026		45
13 Oct 2026		45
10 Nov 2026		45
08 Dec 2026		45
05 Jan 2027		45
02 Feb 2027		45
02 Mar 2027		45
31 Mar 2027		45
28 Apr 2027		45
26 May 2027		45
23 Jun 2027		45
21 Jul 2027		45
18 Aug 2027		45
15 Sep 2027		45
13 Oct 2027		45
10 Nov 2027		45
08 Dec 2027		45
05 Jan 2028		45
02 Feb 2028		45
01 Mar 2028		45
31 Mar 2028		45
28 Apr 2028		45
26 May 2028		45
23 Jun 2028		45
21 Jul 2028		45

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
18 Aug 2028		45
15 Sep 2028		45
13 Oct 2028		45
10 Nov 2028		45
08 Dec 2028		45
05 Jan 2029		45
02 Feb 2029		45
02 Mar 2029		45
31 Mar 2029		45
28 Apr 2029		45
26 May 2029		45
23 Jun 2029		45
21 Jul 2029		45
18 Aug 2029		45
15 Sep 2029		45
13 Oct 2029		45
10 Nov 2029		45
08 Dec 2029		45
05 Jan 2030		45
02 Feb 2030		45
02 Mar 2030		45
31 Mar 2030		45
28 Apr 2030		45
26 May 2030		45
23 Jun 2030		45
21 Jul 2030		45
18 Aug 2030		45
15 Sep 2030		45
13 Oct 2030		45
10 Nov 2030		45

REDACTED

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
08 Dec 2030		45
05 Jan 2031		45
02 Feb 2031		45
02 Mar 2031		45
31 Mar 2031		45
28 Apr 2031		45
26 May 2031		45
23 Jun 2031		45
21 Jul 2031		45
18 Aug 2031		45
15 Sep 2031		45
13 Oct 2031		45
10 Nov 2031		45
08 Dec 2031		45
05 Jan 2032		45
02 Feb 2032		45
01 Mar 2032		45
31 Mar 2032		45
28 Apr 2032		45
26 May 2032		45
23 Jun 2032		45
21 Jul 2032		45
18 Aug 2032		45
15 Sep 2032		45
13 Oct 2032		45
10 Nov 2032		45
08 Dec 2032		45
05 Jan 2033		45
02 Feb 2033		45
02 Mar 2033		45

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
31 Mar 2033		45
28 Apr 2033		45
26 May 2033		45
23 Jun 2033		45
21 Jul 2033		45
18 Aug 2033		45
15 Sep 2033		45
13 Oct 2033		45
10 Nov 2033		45
08 Dec 2033		45
05 Jan 2034		45
02 Feb 2034		45
02 Mar 2034		45
31 Mar 2034		45
28 Apr 2034		45
26 May 2034		45
23 Jun 2034		45
21 Jul 2034		45
18 Aug 2034		45
15 Sep 2034		45
13 Oct 2034		45
10 Nov 2034		45
08 Dec 2034		45
05 Jan 2035		45
02 Feb 2035		45
02 Mar 2035		45
31 Mar 2035		45
28 Apr 2035		45
26 May 2035		45
23 Jun 2035		45

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
21 Jul 2035		45
18 Aug 2035		45
15 Sep 2035		45
13 Oct 2035		45
10 Nov 2035		45
08 Dec 2035		45
05 Jan 2036		45
02 Feb 2036		45
01 Mar 2036		45
31 Mar 2036		45
28 Apr 2036		45
26 May 2036		45
23 Jun 2036		45
21 Jul 2036		45
18 Aug 2036		45
15 Sep 2036		45
13 Oct 2036		45
10 Nov 2036		45
08 Dec 2036		45
05 Jan 2037		45
02 Feb 2037		45
02 Mar 2037		45
31 Mar 2037		45
28 Apr 2037		45
26 May 2037		45
23 Jun 2037		45
21 Jul 2037		45
18 Aug 2037		45
15 Sep 2037		45
13 Oct 2037		45

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
10 Nov 2037		45
08 Dec 2037		45
05 Jan 2038		45
02 Feb 2038		45
02 Mar 2038		45
31 Mar 2038		45
28 Apr 2038		45
26 May 2038		45
23 Jun 2038		45
21 Jul 2038		45
18 Aug 2038		45
15 Sep 2038		45
13 Oct 2038		45
10 Nov 2038		45
08 Dec 2038		45
05 Jan 2039		45
02 Feb 2039		45
02 Mar 2039		45
31 Mar 2039		45
28 Apr 2039		45
26 May 2039		45
23 Jun 2039		45
21 Jul 2039		45
18 Aug 2039		45
15 Sep 2039		45
13 Oct 2039		45
10 Nov 2039		45
08 Dec 2039		45
05 Jan 2040		45
02 Feb 2040		45

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
01 Mar 2040		45
31 Mar 2040		45
28 Apr 2040		45
26 May 2040		45
23 Jun 2040		45
21 Jul 2040		45
18 Aug 2040		45
15 Sep 2040		45
13 Oct 2040		45
10 Nov 2040		45
08 Dec 2040		45
05 Jan 2041		45
02 Feb 2041		45
02 Mar 2041		45
31 Mar 2041		45
28 Apr 2041		45
26 May 2041		45
23 Jun 2041		45
21 Jul 2041		45
18 Aug 2041		45
15 Sep 2041		45
13 Oct 2041		45
10 Nov 2041		45
08 Dec 2041		45
05 Jan 2042		45
02 Feb 2042		45
02 Mar 2042		45
31 Mar 2042		45
28 Apr 2042		45
26 May 2042		45

REDACTED

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
23 Jun 2042		45
21 Jul 2042		45
18 Aug 2042		45
15 Sep 2042		45
13 Oct 2042		45
10 Nov 2042		45
08 Dec 2042		45
05 Jan 2043		45
02 Feb 2043		45
02 Mar 2043		45
31 Mar 2043		45
28 Apr 2043		45
26 May 2043		45
23 Jun 2043		45
21 Jul 2043		45
18 Aug 2043		45
15 Sep 2043		45
13 Oct 2043		45
10 Nov 2043		45
08 Dec 2043		45
05 Jan 2044		45
02 Feb 2044		45
01 Mar 2044		45
31 Mar 2044		45
28 Apr 2044		45
26 May 2044		45
23 Jun 2044		45
21 Jul 2044		45
18 Aug 2044		45
15 Sep 2044		45

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
13 Oct 2044		45
10 Nov 2044		45
08 Dec 2044		45
05 Jan 2045		45
02 Feb 2045		45
02 Mar 2045		45
31 Mar 2045		45
28 Apr 2045		45
26 May 2045		45
23 Jun 2045		45
21 Jul 2045		45
18 Aug 2045		45
15 Sep 2045		45
13 Oct 2045		45
10 Nov 2045		45
08 Dec 2045		45
05 Jan 2046		45
02 Feb 2046		45
02 Mar 2046		45
31 Mar 2046		45
28 Apr 2046		45
26 May 2046		45
23 Jun 2046		45
21 Jul 2046		45
18 Aug 2046		45
15 Sep 2046		45
13 Oct 2046		45
10 Nov 2046		45
08 Dec 2046		45
05 Jan 2047		45

REDACTED

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
02 Feb 2047		45
02 Mar 2047		45
31 Mar 2047		45
28 Apr 2047		45
26 May 2047		45
23 Jun 2047		45
21 Jul 2047		45
18 Aug 2047		45
15 Sep 2047		45
13 Oct 2047		45
10 Nov 2047		45
08 Dec 2047		45
05 Jan 2048		45
02 Feb 2048		45
01 Mar 2048		45
31 Mar 2048		45
28 Apr 2048		45
26 May 2048		45
23 Jun 2048		45
21 Jul 2048		45
18 Aug 2048		45
15 Sep 2048		45
13 Oct 2048		45
10 Nov 2048		45
08 Dec 2048		45
05 Jan 2049		45
02 Feb 2049		45
02 Mar 2049		45
31 Mar 2049		45
28 Apr 2049		45

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
26 May 2049		45
23 Jun 2049		45
21 Jul 2049		45
18 Aug 2049		45
15 Sep 2049		45
13 Oct 2049		45
10 Nov 2049		45
08 Dec 2049		45
05 Jan 2050		45
02 Feb 2050		45
02 Mar 2050		45
31 Mar 2050		45
28 Apr 2050		45
26 May 2050		45
23 Jun 2050		45
21 Jul 2050		45
18 Aug 2050		45
15 Sep 2050		45
13 Oct 2050		45
10 Nov 2050		45
08 Dec 2050		45
05 Jan 2051		45
02 Feb 2051		45
02 Mar 2051		45
31 Mar 2051		45
28 Apr 2051		45
26 May 2051		45
23 Jun 2051		45
21 Jul 2051		45
18 Aug 2051		45

Additional Periodic Service Charge		
Column 1	Column 2	Column 3
Railway Periods ending on the date below	£ per Railway Period	Scheduled number of Accepted Units to have been accepted prior to the Railway Period
15 Sep 2051		45
13 Oct 2051		45
10 Nov 2051		45
08 Dec 2051		45
05 Jan 2052		45
02 Feb 2052		45
01 Mar 2052		45
31 Mar 2052		45
28 Apr 2052		45
26 May 2052		45
23 Jun 2052		45
21 Jul 2052		45
18 Aug 2052		45
15 Sep 2052		45
13 Oct 2052		45
10 Nov 2052		45
08 Dec 2052		45

Appendix 2
Price of Additional Spares

The costs stated in the table below (and for the avoidance of doubt, such costs are for all materials required for the performance of the items of work listed in the left hand column of the table below) shall be amounts at the Indexation Base Month and are subject to indexation in accordance with paragraph 6 (*Indexation*) of Part B.

All materials associated with the following items of work	Material (£)
(A) External Damage to Unit	
Replace broken Windscreen - Drivers Side (LH)	£
Replace broken Windscreen - Non-Drivers Side (RH)	£
Replace broken Side Light	£
Replace broken Door Glass	£
Replace damaged Headlamp Unit	£
Replace damaged Marker/Tail Light Unit	£
Replace damaged Droplight	£
Replace Destination Glass (Not fitted)	
Replace obstacle defector	£
Replace Front Lower Fairing	£
Replace Passenger bodyside door leaf	£
Replace passenger door control panel (external)	£
Replace Cab door lead	£
Replace End coupler, complete	£
Replace Intermediate coupler, complete	£
Replace Pantograph	£
Replace Roof-mounted HT equipment	£
Replace DOO CCTV receiving antenna	£
Replace GSM/R voice radio antenna	£
Replace GSM/P public radio antenna	£
Replace Bogie mounted lifeguard	£
(B) Internal Saloon Damage	
Replace damaged partition glass	£
Replace damaged seat (complete)	£
Replace damaged cushion fully trimmed	£
Replace damaged seat squab fully trimmed	£
Replace damaged grab pole	£

All materials associated with the following items of work	Material (£)
Replace damaged seat back grab handle	£
Replace damaged armrest	£
Replace emergency hammer and glass	£
Replace damaged armrest	£
Replace damaged bodyside/end/ceiling panel	£
Replace damaged floor surface, per m2	£
Replace damaged interior lighting module	£
Replace passenger door control panel (internal)	£
(C) Internal cab damage	
Replace damaged seat (complete)	£
Replace damaged cushion fully trimmed	£
Replace damaged seat squab fully trimmed	£
Replace damaged armrest	£
Replace damaged trim panels	£
Replace damaged cup holder (if fitted)	£
Replace damaged floor surface, per m2	£
Replace damaged interior lighting module	£
Replace sunblind	£
Replace TCMS/CCTV screen	£
Replace radio/PA handset	£

Appendix 3
Mileage Period Table

All amounts stated in the table below shall be amounts at the Indexation Base Month and indexed as set out in the calculation of Service Payments.

Where the Purchaser issues an Option Notice pursuant to the MSA, the Purchaser shall issue to the Maintainer a revised version of this Appendix 3, such revised version, in absence of manifest error, shall be final and binding on the Parties.

Column 1	Column 2
Mileage Band ⁴ Actual Annual Mileage Per Fleet (million Unit miles)	Annual Mileage Reconciliation per Accepted Vehicle Day (£)
Band +4: more than 4.54 up to and including 4.77	■
Band +3: more than 4.33 up to and including 4.54	■
Band +2: more than 4.04 up to and including 4.33	■
Band +1: more than 3.68 up to and including 4.04	■
Central Mileage Band: 2.72 up to and including 3.68	0
Band -1: less than 2.72 down to and including 2.45	■

⁴ The mileage bands in this Column 1 are based upon an average annual utilisation of 71,000 miles per Vehicle forming the Units pursuant to the Initial Order (i.e. 45 4-Vehicle Units). To the extent that any Option Notice is delivered by the Purchaser under the MSA, the mileage bands in this table will be reused proportionately.

Part C TSSSA Performance Regime

1. Definitions and interpretation

1.1 Definitions:

Allowable Failure (TSSSA) means, during any applicable relevant Allowable Relief Period (TSSSA), a Failure (TSSSA), to the extent:

- (a) caused by a Purchaser Fault;
- (b) caused by the Purchaser disregarding any material technical advice provided by the Maintainer pursuant to paragraph 4 (*Technical Support Services*) of Part A (*TSSSA Services*);
- (c) caused by an Event of Loss;
- (d) caused by the wilful misconduct of the Purchaser or a Purchaser breach of this Agreement under clause 10.7(c) or paragraph 2.6 of Part A (*TSSSA Services*);
- (e) which arises as a result of any failure by the Purchaser to comply with its obligations pursuant to paragraph 3.9 of Part A;
- (f) which arises as a result of Infrastructure Damage;
- (g) which is an Infrastructure Controller Matter; or
- (h) caused by Operator Error,

in each case, except to the extent caused by (i) a Force Majeure Event; (ii) a Maintainer Fault; (iii) any act, omission, neglect or default of the Maintainer, the Manufacturer, any Subcontractor, any member of the Maintainer's Group or the Manufacturer's Group or the employees, agents, subcontractors or suppliers of any of them; (iv) the Maintainer's or the Manufacturer's performance or non-performance of their respective obligations under this Agreement or the MSA; and (v) the failure of the Maintainer or any Subcontractor to use all reasonable endeavours to mitigate the effect of the Failure (TSSSA);

Allowable Relief Period (TSSSA) means the aggregate period for which the Failure (TSSSA) becomes or is determined to be an Allowable Failure (TSSSA) pursuant to this Part C and ending on the earliest to occur of: (i) the time when the Allowable Failure (TSSSA) is remedied or ceases to have an impact; (ii) the taking effect of a Change Confirmation Notice relating to the impact of the Allowable Failure (TSSSA); (iii) the point at which the Maintainer fails to use all reasonable endeavours to mitigate the effect of the Allowable Failure (TSSSA); and (iv) in the case of:

- (a) a Purchaser Fault, the time at which the impact of the Purchaser Fault has ceased to have effect or the impact of the Purchaser Fault has been taken account of in a Change Confirmation Notice or otherwise;
- (b) the Purchaser disregarding any material technical advice provided by the Maintainer pursuant to paragraph 4 (*Technical Support Services*) of Part A

(*TSSSA Services*), the time at which the impact of the Purchaser's action has ceased to have effect or the impact of the Purchaser's action has been taken account of in a Change Confirmation Notice or otherwise;

- (c) an Event of Loss, the taking effect of the relevant Change Confirmation Notice dealing with the impact of the Event of Loss or the replacement of the Unit which was the subject of the Event of Loss, whichever occurs first;
- (d) wilful misconduct by the Purchaser or breach by the Purchaser of this Agreement under clause 10.7(c) or paragraph 2.6 of Part A (*TSSSA Services*), the time at which the breach has been remedied or the impact of the wilful misconduct or breach has been taken account of in a Change Confirmation Notice or otherwise;
- (e) failure by the Purchaser to comply with its obligations pursuant to paragraph 3.9 of Part A, the period of the Lead Time Extension or the Extension agreed pursuant to paragraph 3.9 of Part A, or, where paragraph 3.9(d) of Part A applies, the period for which the relevant Overhaul Spares are missing;
- (f) a Failure (*TSSSA*) caused by Infrastructure Damage, the time at which the impact of the Infrastructure Damage has been remedied or has otherwise ceased to have effect or the impact of the Infrastructure Damage has been taken account of in a Change Confirmation Notice or otherwise;
- (g) an Infrastructure Controller Matter, the time at which the impact of the Infrastructure Controller Matter has ceased to have effect or the impact of the Infrastructure Controller Matter has been taken account of in a Change Confirmation Notice or otherwise; and
- (h) Operator Error, the time at which the impact of the Operator Error has ceased to have effect or the impact of the Operator Error has been taken account of in a Change Confirmation Notice or otherwise;

Annual Deductions Cap (TSSSA) means an amount per Contract Year expressed in Pounds Sterling which is equivalent [REDACTED]

Annual Service Payment means the aggregate of the Service Payments in the relevant Contract Year;

Availability Adjustment means the adjustment to the Service Payment for any Railway Period calculated in accordance with paragraph 2 of this Part C and made in accordance with paragraph 3.2 of Part B (*TSSSA Payment Mechanism*);

Available means that a Unit required for a Diagram is available at the time and in the condition required by the Purchaser and/or the Operator, regardless of whether the Purchaser or the Operator allows the Unit into service, despite the Unit not being available at the time or in the condition required;

Cancellation means, in relation to a Unit which has been made Available on a Diagram Leg, that such Unit is not Fit to Remain in Service and references to ***Cancelled*** shall be construed accordingly;

Cancellation Adjustment means the adjustment to the Service Payment for any Railway Period calculated in accordance with paragraph 3.2 of this Part C and made in accordance with paragraph 3.2 of Part B (*TSSSA Payment Mechanism*);

Cancellation Deduction means a deduction calculated in accordance with paragraph 3.1 of this Part C that comprises part of a Cancellation Adjustment;

Delay Adjustment means the adjustment to the Service Payment for any Railway Period calculated in accordance with paragraph 4.2 of this Part C and made in accordance with paragraph 3.2 of Part B (*TSSSA Payment Mechanism*);

Delay Deduction means a deduction calculated in accordance with paragraph 4.2 of this Part C that comprises part of a Delay Adjustment;

Delay Incident means a planned or unplanned incident that has given rise to Minutes Lateness;

Diagram Leg means that element of a Diagram that relates to a single journey between an originating point and a terminating point as identified in the Train Plan;

Failure (TSSSA) means that:

- (a) a Unit is Unavailable (TSSSA);
- (b) a Unit suffers a Cancellation;
- (c) a Unit suffers Relevant Minutes Lateness;
- (d) a Unit suffers a Major Incident; or
- (e) an SD Spare Supply Failure occurs;

Infrastructure Controller Matter means any matter which is in fact attributed and finally allotted to the relevant infrastructure controller in accordance with the Network Monitoring System and the relevant Track Access Agreement;

Infrastructure Damage means damage or excessive or unusual wear and tear caused to the Units (as proved by the Maintainer and demonstrated in written evidence from a reputable and independent third party with relevant experience) as a direct result of any Railway Infrastructure (other than infrastructure and any Railway Infrastructure maintained by the Maintainer) being in a condition which is worse than that to be expected of such Railway Infrastructure which is being maintained by a competent maintenance contractor having regard to: (i) the standards applicable to such Railway Infrastructure (being Railway Group Standards in the case of Railway Infrastructure controlled by Network Rail); and (ii) the condition of such Railway Infrastructure (to the extent that such Railway Infrastructure exists) at the date of this Agreement, taking into account that the condition of certain parts of such Railway Infrastructure may not be compliant with Railway Group Standards;

Maintainer Daily Performance Record has the meaning given in paragraph 7.1 of this Part C;

REDACTED

Maintainer Minutes Lateness (TSSSA) means, in relation to a Unit, any Relevant Minutes Lateness, but excluding any Relevant Minutes Lateness caused by an Allowable Failure (TSSSA) during the Allowable Relief Period (TSSSA) to which that Allowable Failure (TSSSA) relates;

Maintainer Performance Monitoring Report means the report to be provided by the Maintainer pursuant to paragraph 7.2 of this Part C in the form to be agreed between the Parties;

Major Incident (TSSSA) means, in relation to a Unit that has been made Available on a Diagram Leg, any planned or unplanned incident that causes Minutes Lateness in excess of the Major Incident Threshold, excluding any Major Incident caused by an Allowable Failure (TSSSA) during the Allowable Relief Period (TSSSA) to which that Allowable Failure (TSSSA) relates;

Major Incident Adjustment means the adjustment to the TSSSA Service Payment for any Railway Period calculated in accordance with paragraph 5 (*Major Incident Adjustment*) of this Part C of this Schedule 22 and made in accordance with paragraph 3.2 of Part B (*TSSSA Payment Mechanism*);

Major Incident Deduction means:

- (a) £20,000 in respect of the Liverpool Street Approach; or
- (b) £10,000 for any other part of the LO Infrastructure;

Major Incident Threshold means:

- (a) 30 Minutes Lateness in respect of the Liverpool Street Approach; or
- (b) 60 Minutes Lateness for any other part of the LO Infrastructure;

Minutes Lateness means, in relation to a Unit which has been made Available on a Diagram Leg, the minutes and seconds of delay that arise as a result of a planned or unplanned incident that are recorded at the Relevant Delay Recording Point for that Unit on that Diagram Leg as compared to the scheduled times at that Relevant Delay Recording Point in the Working Timetable (adjusted with the relevant timing offset where the Relevant Delay Recording Point is not exactly located at the relevant terminating point) and reported by the Network Monitoring System;

Network Code means the document now known as the Network Code and formerly known as the Railtrack Track Access Conditions 1995 (as updated from time to time);

Network Monitoring System means TRUST or any similar or equivalent network monitoring system operated by the relevant Infrastructure Manager;

Operational Spare Unit means a Unit identified as such in the Train Plan and made Available in accordance with the Train Plan, which may be used by the Operator at the Operator's sole discretion for any Permitted Use;

Operator Error means the train crew (whether or not as a result of passengers) acting or failing to act in a manner which would be expected of train crew acting in a reasonable and prudent manner (such failure to act in a reasonable and prudent

REDACTED

manner would include failure to comply with a Recovery Plan) except to the extent of any action or inaction which is:

- (a) the responsibility of the Maintainer or effected at the request of the Maintainer other than in accordance with the Recovery Plan; or
- (b) caused directly or indirectly by, or taken as a result of or following, the occurrence of a Maintainer Fault and the train crew acts in accordance with the Recovery Plan and the Manuals;

Performance Monitoring Adjustment for a Railway Period means the aggregate of all Performance Monitoring Deductions that have accrued, in accordance with paragraph 7.14 of this Part C, in that Railway Period, and made in accordance with paragraph 3.2 of Part B (*TSSSA Payment Mechanism*);

Performance Monitoring Deduction means a deduction in an amount of the greater of:

- (a) 10 x the value of the deduction relating to the matter which the Maintainer has failed properly to monitor or report in accordance with paragraph 7.14 of this Part C; and
- (b) £1,000 (indexed by the Indexation Adjustment Formula);

Purchaser Daily Performance Record has the meaning given in paragraph 7.2 of this Part C;

Railway Operational Code has the meaning given to such term in Condition H1.1 of the Network Code;

Railway Period Deductions Cap (TSSSA) means an aggregate maximum amount expressed in Pounds Sterling £ [REDACTED]

Recovery Plan means any plan prepared by the Maintainer to deal with disruptive events which has been submitted to the Purchaser for Assurance Acceptance at least six months prior to the Operating Date and has received Assurance Acceptance;

Relevant Delay Incident means a Delay Incident that has given rise to Relevant Minutes Lateness;

Relevant Delay Recording Points means the recording points (as defined in the relevant Track Access Agreement) which monitor the timing of trains, located at or most proximate to the terminating point or station (including any early termination point or station where a Unit is taken out of service early or the Diagram Leg is terminated early) for the relevant Diagram Leg;

Relevant Minutes Lateness means in relation to a Unit on a Diagram Leg, three or more Minutes Lateness at the Relevant Delay Recording Point;

SD Spare Supply Failure has the meaning given to such term in paragraph 6.6(a);

Service Defect means a service defect on a Unit as described and listed in column 3 of Appendix 1 (*Train Facility Failure (Service Defects)*) of this Part C;

Service Defect Adjustment means the adjustment to the Service Payment for any Railway Period, being the aggregate of all Service Defect Deductions that have accrued in that Railway Period, calculated in accordance with paragraph 6 (*Service Defect Adjustment*) of this Part C and made in accordance with paragraph 3.2 of Part B (*TSSSA Payment Mechanism*);

Service Defect Deduction means the corresponding amount set out in column 4 of Appendix 1 (*Train Facility Failure (Service Defects)*) of this Part C for each SD Spare Supply Failure that relates to a Service Defect set out in column 3 of that Appendix 1, as calculated in accordance with paragraph 6.6 of this Part C of this Schedule 22 (excluding any SD Spare Supply Failure that is an Allowable Failure (TSSSA) during the Allowable Relief Period (TSSSA) to which that Allowable Failure (TSSSA) relates);

Track Access Agreement means an agreement between the Purchaser or the Operator on the one hand and a controller of the LO Infrastructure (or part thereof) on the other giving the Purchaser or the Operator access to operate trains on the LO Infrastructure;

TRUST means an operational system owned by Network Rail for recording train running performance;

Unavailable (TSSSA) means that a Unit required for any Diagram is not Available as a result of a failure by the Maintainer to deliver a Spare or to rectify a Fault in or replace any Spare in accordance with its Spare Supply Obligations, and **Unavailability** shall be construed accordingly; and

Working Timetable means, in respect of a day, the timetable or timetables of train movements which in the case of the LO Infrastructure, Network Rail is obliged to draw up pursuant to Condition D2.1.1 and D2.1.6 of the Network Code and as such is revised pursuant to Condition D3 of the Network Code and entered into the train service database by 22:00 on the day prior to that day (and taking into account the effects of any Contingency Plan as defined in, and issued in accordance with, the Railway Operational Code).

Indexation of Adjustments

1.2 In this Part C of this Schedule 22, each of:

- (a) the Availability Adjustment;
- (b) the Cancellation Adjustment;
- (c) the Delay Adjustment;
- (d) the Major Incident Adjustment;
- (e) the Service Defect Adjustment;
- (f) the Performance Monitoring Adjustment,;

and any values specified in the provisions of this Part C relating to each such Adjustment, shall be references to such amounts at the Indexation Base Month and shall be indexed by the Indexation Adjustment Formula as set out in the calculation of

TSSSA Service Payments in paragraph 2.1 of Part B (*TSSSA Payment Mechanism*). Clause 1.2(q) of this Agreement shall apply to the values in paragraph 8 (*Overall Cap on adjustments*) of this Part C.

2. Availability Adjustment

- 2.1 During the TSSSA Period, the Availability Adjustment for a Railway Period shall be the aggregate of £12,000 per Unavailable (TSSSA) Unit per day (other than where an Allowable Failure (TSSSA) applies).
- 2.2 The Availability Adjustment will be made to the relevant TSSSA Service Payment for each Railway Period in accordance with the provisions of paragraph 3.2 of Part B (*TSSSA Payment Mechanism*).
- 2.3 The Maintainer shall use all reasonable endeavours to mitigate the impact of each event giving rise to any Unavailability, whether or not it is an Allowable Failure (TSSSA), so that the Unit becomes Available as soon as possible.

3. Cancellation Adjustment

- 3.1 During the TSSSA Period, if a Unit suffers a Cancellation by reason only of a Maintainer Fault and is required to be taken out of operation (other than where an Allowable Failure (TSSSA) applies), a daily Cancellation Deduction for each such Unit will apply in accordance with the following provisions:

- (a) where the Unit is Fit to Run, then the daily Cancellation Deduction for that Unit shall be £2,500; and
- (b) where the Unit is not Fit to Run, then the daily Cancellation Deduction for that unit shall be £5,000,

unless, in each case, the Unit is repaired or a replacement Unit is provided by the Purchaser in accordance with paragraph 3.2, in which case:

- (c) where the Unit or replacement Unit completes a minimum of fifty (50)% but no more than seventy-five (75)% of the total mileage of the relevant Diagrams scheduled to be completed by the affected Unit on that day, the daily Cancellation Deduction for that Unit shall be reduced to (i) £1,500 where the Unit giving rise to the Cancellation Deduction was Fit to Run, or (ii) £3,000 where the Unit giving rise to the Cancellation Deduction was not Fit to Run; or
 - (d) where the Unit or replacement Unit completes seventy-five (75)% or more of the total mileage of the relevant Diagrams scheduled to be completed by the affected Unit on that day, the daily Cancellation Deduction for that Unit shall be reduced to (i) £1,000 where the Unit giving rise to the Cancellation Deduction was Fit to Run, or (ii) £2,000 where the Unit giving rise to the Cancellation Deduction was not Fit to Run.
- 3.2 The Purchaser shall take all reasonable steps to mitigate the Cancellation (TSSSA) of a Unit wherever possible by making available another Unit to operate the Diagrams

scheduled to be operated by the cancelled Unit and/or by repairing the Maintainer Fault which led to such Cancellation (TSSSA) as soon as reasonably practicable.

- 3.3 The Cancellation Adjustment for a Railway Period shall be the aggregate of the daily Cancellation Deductions incurred in that Railway Period, and will be made to the relevant TSSSA Service Payment for each Railway Period in accordance with the provisions of paragraph 3.2 of Part B (*TSSSA Payment Mechanism*).

4. Delay Adjustment

- 4.1 During the TSSSA Period, the Delay Adjustment for any Railway Period shall be the aggregate of all Delay Deductions that are calculated in relation to that Railway Period.
- 4.2 Each Delay Deduction shall be calculated by multiplying all minutes (including partial minutes expressed as a decimal fraction of a minute) of Maintainer Minutes Lateness (TSSSA) by £60 per minute.
- 4.3 A Delay Adjustment will be made to the relevant TSSSA Service Payment for each Railway Period in accordance with the provisions of paragraph 3.2 of Part B (*TSSSA Payment Mechanism*).
- 4.4 The Purchaser shall take all reasonable steps to mitigate the impact of any event giving rise to Maintainer Minutes Lateness (TSSSA).

5. Major Incident Adjustment

- 5.1 During the TSSSA Period, the Major Incident Adjustment for any Railway Period shall be an amount equal to the number of Major Incidents that occur in the relevant Railway Period multiplied by the Major Incident Deduction.
- 5.2 A Major Incident Adjustment will be made to the relevant Service Payment for each Railway Period in accordance with the provisions of paragraph 3.2 of Part B (*TSSSA Payment Mechanism*).

6. Service Defect Adjustment

- 6.1 During the TSSSA Period, the Service Defect Adjustment for any Railway Period shall be the aggregate of the Service Defect Deductions (other than where an Allowable Failure (TSSSA) applies) that occur during that Railway Period.
- 6.2 The Service Defect Adjustment will be made to the relevant Service Payment for each Railway Period in accordance with the provisions of paragraph 3.2 of Part B (*TSSSA Payment Mechanism*).
- 6.3 The Purchaser shall, upon becoming aware of a Service Defect, promptly inform the Maintainer of such Service Defect.
- 6.4 Upon receipt of a notice under paragraph 6.1 or otherwise becoming aware of any Service Defect, the Maintainer shall, as soon as reasonably practicable but in any event within 24 hours either:

REDACTED

- (a) supply appropriate Spares to the Purchaser in accordance with Part A (*TSSSA Services*) to enable the Purchaser to remedy such Service Defect; or
 - (b) if any such Spare is not available at such time only because it is an Overhaul Spare and is not available because of a failure of the Purchaser to comply with its obligations pursuant to paragraph 3.9 of Part A, notify the Purchaser of such situation and of the date on which, in accordance with its obligations under Part A, it will be able to provide an appropriate Spare to enable the Purchaser to remedy the Service Defect.
- 6.5 If the Maintainer provides a notice pursuant to paragraph 6.4(b), it shall supply the relevant Spare(s) which are the subject of such notice within 24 hours of the date of supply stated in such notice.
- 6.6 Where the Maintainer fails to supply any Spare (or provide a notice in relation to such Spare) in accordance with paragraph 6.4 or (where a notice has been provided pursuant to paragraph 6.4(b)) a Spare in accordance with paragraph 6.5 (as applicable), then at the end of the applicable 24 hour period:
- (a) an *SD Spare Supply Failure* shall occur;
 - (b) the related Service Defect shall (subject to paragraph 6.7, if applicable) be deemed to be a new Service Defect that has been notified to the Maintainer for the purposes of paragraph 6.4; and
 - (c) any subsequent failure by the Maintainer to comply with paragraph 6.4 and/or 6.5 (as applicable) in relation to such Service Defect within a further 24 hours (commencing on such deemed notification) shall be a further SD Spare Supply Failure.
- 6.7 A Service Defect Deduction shall be made for each SD Spare Supply Failure in the amount relating to the associated Service Defect set out in column 4 of Appendix 1 (*Train Facility Failure (Service Defects)*) of this Part C on the basis that, if the Maintainer has complied with its obligations under paragraphs 6.4 and/or 6.5 (as applicable) in relation to some but not all Spares required to enable the Purchaser to remedy such Service Defect, the original Service Defect shall be deemed to have been remedied to the extent of such compliance.
- 7. Performance Monitoring**
- 7.1 On and from the Operating Date the Maintainer shall, on a daily basis, monitor all Failures (TSSSA) under this Part C using data obtained from the TMS and any other reliable and accurate data available to it (including Maintainer and Subcontractor staff) (*Data*) and shall accurately record all Failures (TSSSA) (where it can do so using the Data) including Allowable Failures (TSSSA) (and as far as the Maintainer is aware and where possible, an allocation of responsibility for each Failure (TSSSA)), in a daily Maintainer performance record (the *Maintainer Daily Performance Record*). The Maintainer Daily Performance Record and Data shall be provided to the Purchaser no later than 05.00 on the following day in a format or formats to be agreed with the Purchaser.

- 7.2 The Purchaser shall monitor all Failures (TSSSA) using data obtained from:
- (a) the Network Monitoring System(s);
 - (b) the Operator's Control Room;
 - (c) any information obtained from the Operator's staff (including drivers of the Units);
 - (d) the Maintainer Daily Performance Record and Data provided by the Maintainer under paragraph 7.1 of this Part C; and
 - (e) other reliable and accurate data available,

and shall detail for that day all Failures (TSSSA) (including Allowable Failures (TSSSA)), the reason for each Failure (TSSSA), and an allocation of responsibility for each Failure (TSSSA) in a daily record (the *Purchaser Daily Performance Record*). The Purchaser Daily Performance Record shall be provided by the Purchaser to the Maintainer by 09.00 on the day after the day following the day to which it relates.

- 7.3 The Purchaser Daily Performance Record shall also record on an aggregated and Diagram by Diagram basis:
- (a) the number of Units (or Operational Spare Units) on that day that are:
 - (i) Available;
 - (ii) Unavailable (TSSSA); and
 - (iii) would have been Unavailable (TSSSA) but for an Allowable Failure (TSSSA);
 - (b) where any Unit is Unavailable on that day:
 - (i) the reason why that Unit or Operational Spare Unit is Unavailable (TSSSA);
 - (ii) the number of Diagram Legs comprised in the relevant Diagram and the point and time at which that Unavailable (TSSSA) Unit was scheduled to enter service for the first time on that Diagram (or any other Diagram agreed with the Maintainer, together, where relevant, with the number of Diagram Legs comprised in such other Diagram agreed with the Maintainer).

- 7.4 The Purchaser Daily Performance Record shall:
- (a) record the number of Cancellations;
 - (b) make an allocation of Cancellations under the terms of this Part C in accordance with the categories below:
 - (i) Allowable Failures (TSSSA); and
 - (ii) Cancellations the responsibility of the Maintainer; and

- (c) record whether any replacement Unit was made available by the Purchaser in accordance with paragraph 3.2, details of the Cancellation which it replaced and the Diagram Legs that were operated by the replacement Unit.
- 7.5 The Purchaser Daily Performance Record shall record the number of Delay Incidents and indicate whether they are Relevant Delay Incidents, and make an allocation of Minutes Lateness per Unit in accordance with the categories set out below and shall include a description of each Delay Incident including date, time, location and number of Minutes Lateness categorised according to the appropriate type of Delay Incident as follows:
 - (a) Allowable Failures (TSSSA);
 - (b) Maintainer Minutes Lateness (TSSSA); and
 - (c) Minutes Lateness arising from Delay Incidents which are not Allowable Failures (TSSSA) or Maintainer Minutes Lateness (TSSSA).
- 7.6 The Purchaser Daily Performance Record shall make an allocation of Major Incidents (TSSSA) per Unit in accordance with the categories set out below and shall include a description of each Major Incident (TSSSA) including date, time, location categorised according to the appropriate type of Major Incidents (TSSSA) as follows:
 - (a) Allowable Failures (TSSSA);
 - (b) Major Incidents (TSSSA) the responsibility of the Maintainer; and
 - (c) Service Defects.
- 7.7 The Purchaser Daily Performance Record shall record the number of SD Spare Supply Failures and indicate whether they are Allowable Failures (TSSSA), and shall include a description of the related Service Defect for each SD Spare Supply Failure.
- 7.8 The Maintainer and the Purchaser shall work together on a daily basis to seek to establish and agree the cause of Unavailability, Cancellations, Delay Incidents, Major Incidents (TSSSA) and SD Spare Supply Failures as the case may be and attribute responsibility for each such event by further investigation as appropriate. If the parties are not able to agree the cause of any Unavailability, Cancellations, Delay Incidents, Major Incidents (TSSSA) or SD Spare Supply Failure, as the case may be, each Party shall conduct such further investigations as it shall consider necessary and appropriate and the matter shall be further considered by the Parties on the following day.
- 7.9 If the Parties are still not able to agree the cause of any such Unavailability, Cancellations, Delay Incidents, Major Incidents (TSSSA) or SD Spare Supply Failure, the matter shall be referred to the next Performance Review Meeting for resolution unless otherwise agreed.
- 7.10 If by the end of the Performance Review Meeting the Parties are still not able to agree the cause of the relevant Unavailability, Cancellation, Delay Incident, Major Incident (TSSSA) or SD Spare Supply Failure, the matter shall be referred as an Expert Dispute for resolution pursuant to the Dispute Resolution Procedure.

REDACTED

- 7.11 A Performance Review Meeting shall be held each Railway Period following the Operating Date (to review the previous Railway Period's performance) and shall be attended at least by the Maintainer Contract Manager and the Purchaser Contract Manager. The standing agenda for the Performance Regime aspects of the Performance Review Meeting shall be as follows:
- (a) Minutes of previous meeting;
 - (b) Review of the Maintainer Performance Monitoring Report;
 - (c) Reconciliation of Adjustments; and
 - (d) Disputed attributions.
- 7.12 No later than two Working Days following the end of each Railway Period (and prior to the Performance Review Meeting) the Maintainer shall produce the Maintainer Performance Monitoring Report for the preceding Railway Period (which shall be based upon and accompanied by the Maintainer Daily Performance Record and the Purchaser Daily Performance Record for each of the days in that Railway Period and details of any further matters considered or investigated by the parties pursuant to paragraph 7.9 of this Part C) and shall provide a copy to the Purchaser. The Purchaser may refer to the information in the Maintainer Performance Monitoring Report in the Service Payment Report to be delivered by the Purchaser to the Maintainer pursuant to clause 19.2. The Maintainer shall provide to the Purchaser, within a reasonable time following any request, any additional information and other reports as are reasonably required by the Purchaser.
- 7.13 Subject to paragraph 7.10 of this Part C (and the outcome of any ongoing dispute raised with the Infrastructure Manager with respect to information arising from the Network Monitoring System), the content of the Maintainer Performance Monitoring Report shall be agreed at the Performance Review Meeting and such agreed report shall be the source of the factual information regarding the performance of the TSSSA Services for the relevant Railway Period for the purposes of calculating the relevant TSSSA Service Payment and any Adjustments.
- 7.14 If the Maintainer has failed to monitor or accurately to report any matter contained in or accompanying (or which ought to be contained in or accompanying) the Maintainer Performance Monitoring Report then, without prejudice to the ability to make Adjustments in respect of that matter in accordance with the provisions of this schedule, a Performance Monitoring Deduction for each failure to monitor or report that matter accurately shall accrue. The Performance Monitoring Adjustment shall be made to the relevant TSSSA Service Payment for each Railway Period in accordance with the provisions of paragraph 3.2 of Part B (*TSSSA Payment Mechanism*).
- 8. Overall Cap on adjustments**
- 8.1 Adjustments calculated pursuant to this Part C (excluding any Availability Adjustments and Major Incident Adjustments) shall not exceed:
- (a) the Railway Period Deductions Cap (TSSSA) in any Railway Period; and
 - (b) the Annual Deductions Cap (TSSSA) in any Contract Year.

- 8.2 The Major Incident Adjustments shall not exceed [REDACTED] in any Railway Period.
- 8.3 Each of the values referred to in this paragraph 8 shall be subject to indexation pursuant to the Indexation Adjustment Formula.

**Appendix 1
 Train Facility Failure (Service Defects)**

Note A

Where the column "Service Defect Amount" indicates "Note A" this means that, in relation to the Vehicles on any Unit:

- if the failure or defect occurs in 1 Vehicle, £75 per Vehicle for all affected Vehicles;
- if the failure or defect occurs in 2 to 3 Vehicles, £150 per Vehicle for all affected Vehicles; and
- if the failure or defect occurs in 4 or more Vehicles, £250 per Vehicle for all affected Vehicles.

General note

Where no specific reference is made to the method for Service Defect detection (in column 5 below), detection will be in accordance with the method or methods appropriate in the circumstances, using any available data as referred to in paragraph 7 (*Performance Monitoring*) of Part C (*TSSSA Performance Regime*) of this Schedule 22. Service Defects are applicable to the extent that the Maintainer is obliged to supply Spares to enable the remediation of that particular Service Defect.

	Service Defect category	Service Defect	Service Defect Deduction (per SD Spare Supply Failure)	Service Defect detection to be in accordance with Schedule 1 (Train Technical Specification) of the MSA
1.	Passenger area HVAC	In a Vehicle, failure to regulate the saloon temperature within the range set out in the Train Technical Specification requirements.	Note A	Yes
2.	Passenger information system (PIS)	In a Vehicle, audio broadcast from more than 50% of the broadcast equipment mute (1), unintelligible or of a not fit for purpose quality.	Note A	(1) Yes

Service Defect category	Service Defect	Service Defect Deduction (per SD Spare Supply Failure)	Service Defect detection to be in accordance with Schedule 1 (Train Technical Specification) of the MSA
3.	An internal destination or service information display inactive or the quality of displayed information not fit for purpose.	£25 per display	
4.	In a Vehicle, all internal destination or service information displays inactive (1) or the quality of none of the displayed information fit for purpose.	Note A	(1) Yes
5.	An external destination display inactive or the displayed information of a not fit for purpose quality.	£25 per display	
6.	In a Vehicle, all external destination displays inactive (1) or the quality of none of the displayed information fit for purpose.	Note A	(1) Yes
7.	On a Unit, no cab to cab communication or quality of cab to cab communication not fit for purpose.	£100	
8.	In a Unit, inability to remotely broadcast live audio or visual messages from the Operator's Control Room.	£100	Yes
9.	In a Unit, inability to remotely download to the Unit PIS audio and visual databases.	£100	Yes
10.	In a Unit, incorrect audio or visual destination or service information being displayed at any point in the journey due to corrupted or wrong version of PIS programming.	£100	

	Service Defect category	Service Defect	Service Defect Deduction (per SD Spare Supply Failure)	Service Defect detection to be in accordance with Schedule 1 (Train Technical Specification) of the MSA
11.	CCTV	In a cab, failure of the forward facing CCTV to record in accordance with the Train Technical Specification (1), or recorded image quality not fit for purpose.	£100	(1) Yes
12.		In a Vehicle, failure of the saloon CCTV to record in accordance with the Train Technical Requirements (1), or recorded image quality not fit for purpose.	Note A	(1) Yes
13.		In a Vehicle, an inability to view in the driving cab a live saloon CCTV image from two or more cameras.	Note A	
14.	Exterior passenger doors	A passenger door locked out of use.	£100 per door for 1-2 doors in a Unit locked out of use £200 per door for 3-5 doors in a Unit locked out of use £300 per door for 6 or more doors in a Unit locked out of use	Yes
16.		At a door, 'hustle' alarms not functioning in accordance with the Train Technical Specification.	£50 per door	

	Service Defect category	Service Defect	Service Defect Deduction (per SD Spare Supply Failure)	Service Defect detection to be in accordance with Schedule 1 (Train Technical Specification) of the MSA
17.		At a door, internal or external 'Door Out of Use' signs not working.	£50 per door	
19.	Interior lighting	In a Vehicle, loss of more than 10% of lighting.	Note A	
20.	Energy consumption	In a Unit, inability to retrieve energy consumption data or data inaccurate or corrupted.	£100	
21.	Noise and Vibration in the passenger areas	In a Vehicle, excessive equipment noise or vibration.	Note A	
22.	Regenerative braking	In a Unit, the regenerative brake not functioning in accordance with the Train Technical Requirements.	£250	Yes
24.	Cab	In a cab, a cup holder or coat hook or illuminated clip board missing or defective.	£25 per missing or defective item	
25.		In a cab, failure to regulate the saloon temperature to within the range set out in the Train Technical Specification, or excessive equipment noise or vibration.	£100	Yes
26.		In a cab, inability to record defects via the cab touch-screen.	£100	
27.		In a cab, a portable electronic device charging point defective.	£50 per charging point	

	Service Defect category	Service Defect	Service Defect Deduction (per SD Spare Supply Failure)	Service Defect detection to be in accordance with Schedule 1 (Train Technical Specification) of the MSA
28.	Passenger load measurement	In a Unit, failure to present Vehicle passenger loading data for all Vehicles in the Unit in accordance with the Agreement.	£100	
29.	On-train condition monitoring	In a Unit, failure to present system health status information required to comply with the Agreement.	£100	
30.	Electronic advertising display	An electronic advertising display inactive or the quality of displayed information not fit for purpose.	£25 per display, capped at £150 per Vehicle	
31.	Passenger area electrical sockets for mobile device charging (AC Only Units)	In a Vehicle, one or more sockets not functioning due to a Maintainer Fault.	Note A	Yes