

## **INTRODUCTION AND SCOPE OF SPECIFICATION**

### **1.1 Introduction**

1.1.1 This Part G covers:

- (a) the maintenance and support of the Trains and the Equipment which are to be provided by the Contractor under this Contract together with the maintenance of the Depot Properties, Outstations and Accommodation Properties (insofar as the maintenance requirements for the Depot Properties, Outstations and Accommodation Properties are not contained in the Depot Leases, the Outstation Licences and the Accommodation Licence); and
- (b) as from the Transfer Date, the maintenance and support of the Existing Trains until the withdrawal of the last Existing Train from service.

1.1.2 The Contractor must meet the requirements set out in this Part G and its Appendices to the satisfaction of the Company.

1.1.3 The Contractor's obligations under this Part G shall, without limitation and in addition to the Contractor's obligations under Clauses 5 and 13, be carried out so that the Trains and Equipment shall be fit for the purposes for which they are intended and remain so fit for the said purposes for the Contract Duration.

1.2 Appendix 1 lists the documents referenced in this Part G.

### **1.3 Principal Objectives**

1.3.1 The Contractor in providing and maintaining the Trains, the Equipment and the Depot facilities shall have the following objectives ranked in order of importance:

- (a) safety of operation in all modes;
- (b) high service availability and reliability;

- (c) achievement of specified performance; and
- (d) enhanced Passenger/customer benefits.

1.3.2 The Contractor in providing and maintaining the Existing Trains shall have the following objectives, ranked in order of importance:

- (a) safety of operation in all modes;
- (b) high service availability and reliability; and
- (c) achievement of specified performance.

1.3.3 Where the Contractor in performing the requirements of this Part G needs to exercise judgement on any compromise of the above objectives, the Contractor shall have regard to the order of importance and shall document objectively to the satisfaction of the Company the basis of any such compromise.

#### **1.4 Regulatory Notices**

If, through knowledge of Incidents on the Northern Line or any other Company line, the Company becomes aware of a potential unsafe working method, or equipment deficiency which may lead to an unsafe condition, a regulatory notice may be issued. The Contractor is obliged to act in accordance with such notice (see RSE Standard DEP-805-PRO-A3).

In the event of Incidents the Contractor shall comply with the requirements of Company Standard - RS-505-PRO-A1

## **MAINTENANCE**

### **2.1.1 Not Used.**

### **2.1.2 Trackside Equipment Maintenance**

Trackside Equipment supplied by the Contractor shall be maintained to a standard which meets the overall reliability needs of the Train service. Access will be made available to the Contractor for maintenance and call out repair in accordance with the provisions of Clause 15.6 and Schedules 4 and 8.

### **2.1.3 Equipment, Plant and Facilities**

The Contractor shall maintain the Equipment, other than the Trackside Equipment, such that the Train performance standards specified above are met and the terms of the Depot Leases, Outstation Licences and Accommodation Licences are satisfied.

## **2.2 Standards of Workmanship**

2.2.1 The Contractor, pursuant to, but without prejudice to, Clauses 5 and 13, shall carry out all maintenance work on Trains and Equipment in accordance with method statements. Such method statements shall not prejudice the RSE Standards as listed in Part J of this Schedule 6.

2.2.2 The method statements referred to in paragraph 2.2.1 shall detail the following information:

- (a) the description of the activity/purpose of the method statement;
- (b) a unique serial number and issue number for the method statement;
- (c) the tools or test equipment to be utilised;

- (d) the grade of staff or training required to be completed by the operative prior to commencement;
- (e) the method and sequence of assembly/disassembly inspection or test;
- (f) the tolerances on wear, test readings or measurements with objective pass or fail criteria;
- (g) any particular safety or materials handling precautions to be taken;
- (h) the documentation and record keeping to be completed; and
- (i) action required if pass/fail criteria not met.

2.2.3 Wheresoever such method statements inadequately define the standards of workmanship the Contractor shall ensure that procedures are updated, amended or written and are complied with by the staff assigned to the task.

2.2.4 All maintenance work carried out or to be carried out by the Contractor shall be subject to quality assurance procedures and to the approval of the Company.

2.2.5 The repainting of Car exteriors where the external paint finish is damaged or life expired (as defined in Part A of Schedule 6), the maintenance of Car saloon interiors or cab decor to the required standard and the periodic replacement of all seat covers is included within the scope of this Part G.

2.2.6 The standard of maintenance and workmanship shall ensure that the performance standards specified above are maintained for the Contract Duration. Such standards shall not prejudice the achievement of the full design life of the Trains and Equipment as specified in Part A of Schedule 6.

2.2.7 Half life replacement of the Car saloon interior or cab decor shall not be included in the scope of this Part G.

2.2.8 As from the Transfer Date, preventative maintenance of the Existing Trains shall be undertaken by the Contractor in accordance with the Company's maintenance documentation. Such maintenance documentation will be provided to the Contractor by the Company.

### **2.3 Documentation Requirements**

2.3.1 The Contractor shall maintain records for the Trains and Existing Trains in respect of the matters listed below, such records to be in a format to be agreed with the Project Manager and in accordance with paragraph 2.3.2:

- (a) scheduled maintenance planned (including periodic overhaul);
- (b) scheduled maintenance completed (including periodic overhaul);
- (c) work undertaken in excess of maintenance schedules;
- (d) casualty work completed, including corrective actions taken and root causes;
- (e) analysis of generic component failures;
- (f) analysis of "no defect found" casualty failures, including repetition rates;
- (g) premature failures covered under defects liability;
- (h) fleet surveillance of failures by component part number;
- (i) status monitoring of wear rates of moving components;
- (j) component condition reports and test results following preventative maintenance, inspection or periodic overhaul;
- (k) consumables consumption rates;
- (l) damage caused by vandalism and/or wilful misuse;

- (m) quality assurance documentation;
- (n) staff training records;
- (o) actual maintenance of Equipment planned;
- (p) scheduled maintenance of Equipment completed; and
- (q) documentation for defects liability tracking in accordance with paragraph 3.2.2.

2.3.2 All records detailed in paragraph 2.3.1 shall be maintained on a database and shall be accessible by reference to Train running number, Existing Train running number, Unit number, Car number or discrete component part number or asset number.

2.3.3 The Contractor shall make available such information as may be required by the Company to ensure that:

- (a) safety of the Trains and the Existing Trains is not prejudiced;
- (b) appropriate corrective actions are taken rapidly to minimise loss or damage to the Company;
- (c) the Company is able to periodically audit the standards of maintenance workmanship, and the management systems to ensure the fitness of the Trains, the Equipment and the Existing Trains for safe operation and to avoid deterioration in the condition of the Trains, the Equipment, the Existing Trains or the Company's assets; and
- (d) in the event of an Incident or accident the investigator has access to relevant factual information.

2.3.4 For the avoidance of doubt, the Contractor shall be responsible for the maintenance and updating of all technical and maintenance information throughout the Contract Duration.

## **OTHER OBLIGATIONS OF CONTRACTOR**

### **3.1 Maintenance Staff**

3.1.1 The Contractor shall provide all staff necessary to discharge its responsibilities under this Contract. Without prejudice to Clause 13, all staff employed either by the Contractor or by any sub-contractor of the Contractor shall be appropriately skilled and competent to undertake the tasks assigned to them.

3.1.2 The Contractor shall provide the Company with details of the managerial and staff structure to be employed to discharge all its responsibilities under the Contract. Any changes to the managerial and staff structure are to be advised to the Company.

3.1.2.1 Staff employed to carry out the Contractor's obligations in the Depot or on the Site shall receive training in the specific tasks to be undertaken by them. Such training shall include, inter alia, training in relation to:

- (a) Depot safety;
- (b) track safety;
- (c) Train and Existing Train driving;
- (d) Train and Existing Train shunting control;
- (e) Train and Existing Train systems theory;
- (f) use of personal protective equipment;
- (g) use of any plant, facilities, special tools or test equipment;

- (h) isolation of hazardous voltages;
- (i) materials handling and movement;
- (j) work procedures and method statements;
- (k) Documentation requirements and work logging;
- (l) COSHH regulations;
- (m) particular hazards associated with the task; and
- (n) quality assurance policy, plans and implementation procedures.

3.1.2.2 The training shall be undertaken by a structured programme which includes:

- (a) a definition of the objective;
- (b) a description of the means of implementation;
- (c) an objective test with defined pass criteria that ensures that trainees have demonstrated adequate understanding; and
- (d) an appropriate level of periodic refresher training to reinforce the safety aspects and to ensure knowledge of any modifications to method statements or procedures.

3.1.3 Licensing of staff and training shall be undertaken in accordance with paragraph 6.

### **3.2.1 Provision and Management Of Materials**

3.2.1.1 The Contractor shall undertake the:

- (a) procurement;

- (b) stock control/rotation/shelf life management;
- (c) secure storage in accordance with the manufacturer's recommendations; and
- (d) issue control,

of all spares, components and materials requisite to maintain the Trains, the Existing Trains, the Equipment and Depot plant and facilities in accordance with this Schedule 6.

3.2.1.2 In respect of the Existing Trains, the Company shall free issue to the Contractor its existing stocks of spares, consumables and repairable items which exist at the Transfer Date. The Contractor shall control and manage the spares and report periodically to the Project Manager on their usage.

3.2.1.3 For the avoidance of doubt, the Contractor shall ensure that sufficient stocks of consumables are maintained at all times to allow the Contractor to meet all of its obligations under the Contract, and consistent with the reduction of the fleet of Existing Trains as the Trains enter service. The Contractor shall not be required to return any consumables to the Company at the time of withdrawal of the last Existing Train from service.

3.2.1.4 All materials supplied or fitted to the Trains shall be produced to the procurement specification utilised in the original manufacture. In the event that a modification is made to the procurement specification of a component for operational, environmental or reliability improvement, then such modification shall not prejudice the compliance of the component with this Contract unless otherwise agreed by the Company. In the event that any component which directly or indirectly has an operational, mechanical or electrical interface with the Company's existing assets for which a procurement specification modification is proposed then such proposed

modification must be communicated to the Company for approval prior to the fitment of any modified component to any Train.

3.2.1.5 Subject to paragraph 1.4 of Part E of Schedule 12, the Company shall reimburse the Contractor for any costs incurred in purchasing materials required by the Contractor to maintain the Existing Trains.

3.2.1.6 The materials supplied or purchased by the Contractor for the Existing Trains shall be to the procurement specification provided by the Company.

3.2.1.7 If the Contractor cannibalises spares with the prior agreement of the Project Manager from an Existing Train in accordance with paragraph 1.4 of Part E of Schedule 12 such that it is incapable of self propelled motion or unsafe for movement on the Company's railway network the Contractor shall ensure that the Car, Existing Unit or Existing Train so cannibalised is:

- (a) stabled at a location agreed by the Company as convenient for the subsequent disposal by the Company of such Car, Existing Unit or Existing Train pursuant to Clause 29.2; and
- (b) is prominently labelled as being incapable of self propelled motion and/or being unsafe for movement..

3.2.1.8 All materials procured for the maintenance or renewal of Depot track work within the Contractor's area of responsibility shall be in accordance with the provisions of Part I of Schedule 6 and must be approved by the Company.

### **3.2.2 Defects Liability**

The Contractor shall manage all defects liability issues arising in relation to spares, components and materials purchased or otherwise acquired by the Contractor pursuant to this Contract, including:

- (a) surveillance and tracking of failures by part number and by unique serial number;
- (b) return and progressing of components for fault rectification or replacement by the original manufacturer;
- (c) documentation and record keeping of work undertaken; and
- (d) resolution of any claims or disputes related to component performance and defects liability.

### **3.3 Management of Maintenance Works**

#### **3.3.1 Planned Preventative Maintenance**

3.3.1.1 The Contractor shall define the scope of all preventative maintenance activities and shall define the frequency of such activities on a time or kilometreage basis. The scope of the preventative maintenance shall be defined by method statements produced by the Contractor for each activity.

3.3.1.2 Paragraph 3.3.1.1 does not apply to the Existing Trains.

3.3.1.3 The Contractor shall then establish, and shall deliver to the Company, an annual forward programme for carrying out such activities having regard to:

- (a) scheduled annual fleet kilometreage (as defined in Clause 5.2.1(a)(iii));
- (b) utilisation of individual Units, Cars or Trains, components or uniquely numbered assets;
- (c) elapsed time from previous time based maintenance;
- (d) any statutory checks on Existing and New Equipment required by legislation;
- (e) Depot facility utilisation and production bottlenecks;

- (f) interaction with other planned programmes affecting the availability of the Trains for maintenance; and
- (g) the expected and existing casualty rate of Train or Equipment component failures.

This yearly forward programme shall be updated at three monthly intervals.

3.3.1.4 In respect of Trains, the Contractor shall report to the Project Manager at four weekly intervals the achievement of actual preventative maintenance activities versus planned preventative maintenance activities on a fleet basis for the sum of all preventative maintenance activities carried out by the Contractor during the applicable period pursuant to this Contract. The actual percentage completed shall not fall below 95% in any four week period and not below an average of 98% over any twelve week period.

### **3.3.2 Achievement of Planned Preventative Maintenance**

3.3.2.1 In the event that the actual preventative maintenance percentage completed falls below the percentages set out in paragraph 3.3.1.4, the Contractor shall take the appropriate corrective action to achieve the percentage completion of preventative maintenance detailed above. Such action shall not include downward revision of the defined planned preventative maintenance schedules.

3.3.2.2 The Contractor may, in the light of service experience, adjust the programme for the periodic preventative maintenance activities, excepting the mandatory Train preparation routine detailed in paragraph 3.6.

3.3.2.3 Paragraph 3.3.2.2 does not apply to the Existing Trains.

3.3.2.4 Any proposed adjustment to the periodicity of preventative maintenance activities must be agreed by the Company and must be supported by an objective

reliability analysis against a statistically significant population of equipment over an appropriate time period.

### **3.4 Periodic Overhaul Of Major Assemblies/ Components/ Fabrications**

3.4.1 The Contractor shall define the scope of all periodic overhaul activities and shall define the frequency of such activities on a time or kilometreage basis. The scope of the periodic overhauls shall be defined by method statements produced in accordance with paragraph 2.2 by the Contractor for each activity.

3.4.2 Paragraph 3.4.1 does not apply to the Existing Trains.

3.4.3 The Contractor shall establish a forward programme for carrying out periodic overhaul activities. The programme for those items subject to periodic overhaul shall be constructed to ensure that the average condition of all major assemblies, components and fabrications across the population of such major assemblies, components and fabrications is maintained over the Contract Duration, i.e. the Contractor shall not run down the periodic overhaul towards the end of this Contract.

3.4.4 The Contractor shall report to the Project Manager at twelve weekly intervals the achievement of actual periodic overhauls versus planned periodic overhauls on a fleet basis for the sum of all overhaul activities in respect of major assemblies, components and fabrications carried out by the Contractor pursuant to this Contract. The actual percentage periodic overhauls completed shall not fall below 95% in any twelve week period and not below an average of 98% over any twenty four week period. In the event that the actual periodic overhauls percentage completed falls below such percentages, the Contractor shall take the appropriate corrective action to achieve the percentage completion of periodic overhaul detailed above. Such action shall not include downward revision of the planned periodic overhaul levels.

3.4.5 The programme of periodic overhauls may be adjusted during the Contract Duration to take account of service experience. Any adjustment to the programme must be approved by the Company and be supported by an objective reliability analysis carried out against a statistically significant population of equipment over an appropriate period of time.

3.4.6 The Contractor shall be responsible for carrying out all appropriate non-destructive testing on the Trains assemblies, components and fabrications and for the documentation of all test results.

3.4.7 The Contractor shall be responsible for the re-profiling and re-wheeling of wheelset assemblies and for carrying out periodic non-destructive testing of these assemblies.

### **3.5 Train Service Delivery**

3.5.1 Within the Company, the TSM is held accountable for the safe operation and control of all services on the Northern Line and the TSM uses Line Controllers, Duty Operations Managers and Train Operators to discharge this responsibility. The Contractor will work very closely with staff of the TSM to achieve the required level of service delivery.

3.5.2 Principal amongst the measures the Contractor will be required to undertake to effect and maintain the service delivery are:

- (a) the certification of the mandatory pre-service checks in accordance with paragraph 3.6 on all Trains and Existing Trains offered for service;
- (b) the clearance of defects reported in Train Operators' defect log books;
- (c) the cleaning of saloons and cabs to the specified level;
- (d) the 'railing' of service Trains and Existing Trains stabled on Shed Roads;

- (e) the display of 'targets' on any Train, Existing Train or Unit not fit for service;
- (f) the advice to TSM's staff of the location and composition of serviceable Trains and Existing Trains (the "TAS Sheet"). A TAS Sheet must be supplied by the Contractor to the staff of the TSM twice every traffic day prior to 03.00 hours (at the latest) at the start of the traffic day to which the TAS Sheet relates, and again prior to 14.00 hours (at the latest) on the day to which the TAS Sheet relates. Constant communication must take place between the Contractor, the staff of the TSM and the Depots with regard to any updated information (for the avoidance of doubt, the TAS Sheet must include the above information for the Outstations and Sidings, as well as the Depots);
- (g) the advice to TSM's staff of the location of serviceable Trains and Existing Trains to effect changeovers with service Trains and Existing Trains;
- (h) the advice to TSM's staff of any incident in the Depots or Outstation Properties that may impact upon the service delivery or stabling;
- (i) the provision and support of a Call Point service in accordance with paragraph 3.12;
- (j) provision of Equipment repair staff in accordance with paragraph 3.12A;
- (k) the provision of Trains and Existing Trains containing operational De-icing Units in accordance with the Timetable and the Contractor shall ensure that at all times following the Transfer Date, the proportion of Trains and Existing Trains equipped with De-icing Units and being offered for service to the Company pursuant to Clause 5.2.2(a) shall never be less than 6 per cent. of the total number of Trains and Existing Trains offered for service on any one day. Without prejudice to the generality of the foregoing, the Contractor shall make available to the Company Trains and Existing Trains containing operational

De-icing Units at the request of the Line Controller, so that such Trains and Existing Trains can operate, if required, on an overnight basis.

3.5.3 To ensure the efficiency of the interface between the TSM and the Contractor, the Contractor will nominate suitable persons to provide 24 hours a day cover in the Depot throughout each year of the Contract Duration. These persons shall be the normal point of contact between the TSM's staff and Depot personnel.

### **3.6 Mandatory Pre-Service Checks On Trains (Train preparation)**

3.6.1 As from the Transfer Date, Trains and Existing Trains shall be prepared for service by the Contractor by means of a pre-service check.

3.6.2 The Contractor shall ensure that the features listed in paragraph 3.6.2(a) to (z) are operational prior to any Train being certified by the Contractor to the Company as being fit for service, save that the Contractor may offer a Train for service without a pre-service check or certification, provided that (i) no more than twenty four hours have elapsed since the last pre-service check and (ii) no work other than cleaning has been done on the Train:

- (a) brake system;
- (b) tripcock;
- (c) safety brake;
- (d) ATO and ATP (when commissioned);
- (e) emergency equipment cupboard (contents complete);
- (f) flag and detonator case;
- (g) whistle;

- (h) Train Radio;
- (i) public address/digitised speech/visual indicators;
- (j) Passenger emergency alarm/talkback;
- (k) cab to cab communications;
- (l) Tunnel Telephone;
- (m) cab CCTV;
- (n) fire extinguishers water/gas;
- (o) Short Circuiting Device;
- (p) windscreen washer/wiper;
- (q) cab lighting;
- (r) exterior lighting;
- (s) saloon/cab door controls;
- (t) cab comfort conditioning system;
- (u) doors (powered) operational and timing check;
- (v) door warning lights operational check;
- (w) saloon lighting;
- (x) doors closed/traction interlocking;
- (y) saloon seats (including security); and
- (z) saloon and cab glass.

3.6.3 Where a Train or Unit of a Train is to be moved outside a Depot Property or Outstation or Siding boundary but is not going to enter service, the Contractor shall carry out all the checks set out in paragraph 3.6.2 with the exception of the items referred to at paragraphs 3.6.2(i), (j), (v), (w) and (x) and shall certify to the Company that the checks have been successfully completed in relation to the Train or Unit of a Train.

3.6.4 If a Train or Unit of a Train is to be moved outside a Depot Property or Outstation or Siding boundary but is not going to enter service, and the Contractor has not certified that all the checks referred to in paragraph 3.6.3 have been successfully completed, such Train or Unit of a Train shall not be moved outside the boundary of a Depot Property or Outstation or Siding unless the TSM has, in his absolute discretion, expressly sanctioned such movement.

3.6.5 Company Standard RSE-ST-04001-A1 sets out the pre-service checks to be carried out in relation to Existing Trains. Where an Existing Train or a Unit of an Existing Train is to be moved outside a Depot or Outstation or Siding boundary but is not going to enter service, the Contractor shall not be required to undertake checks relating to:

- (a) public address;
- (b) Passenger emergency alarm;
- (c) door warning lights operational check;
- (d) saloon seats; and
- (e) saloon lighting.

3.6.6 The Contractor shall rectify, replace or adjust any malfunctioning equipment or component identified in the mandatory pre-service checks detailed above.

3.6.7 Checks and tests set out in paragraph 3.6.2 in respect of the Trains and paragraph 3.6.5 in respect of Existing Trains must be incorporated in the release for service checks following routine or casualty maintenance.

### **3.7 Mandatory 14 Day Examination of Trains**

3.7.1 Subject to paragraph 3.7.2, the Contractor shall carry out the following checks/examinations on every Train or Unit of a Train at usual intervals of fourteen days, but, in any event, at intervals of not more than seventeen days, but excluding days during which such Train or Unit of a Train was not offered by the Contractor, nor accepted by the Company, for entry into service:

- (a) underframe equipment and fixings;
- (b) shoe gear, beams and isolation equipment;
- (c) sleet and De-icing Equipment
- (d) brake blocks and suspension;
- (e) compressor oil level;
- (f) tripcock;
- (g) bogie structure and components;
- (h) Autocouplers;
- (i) semi-permanent couplings;
- (j) hoses, cables and dropleads;
- (k) functionality of detrainment device and lights;
- (l) saloon heating and ventilation;

(m) saloon CCTV.

3.7.2 The Contractor may carry out the checks and examinations listed in paragraph 3.7.1 on the Trains or Units of Trains at intervals measured in terms of half days, service hours or kilometres travelled or any other appropriate measure, provided that the prior written approval of the Project Manager has been obtained.

3.7.3 Company Standard RSE-ST-04002-A1 sets out the scope of the 14 day examination in relation to Existing Trains.

3.7.4 The Contractor shall rectify, replace or adjust any malfunctioning equipment or component identified in any examination carried out pursuant to paragraph 3.7.1.

3.7.5 Any proposed adjustment to the periodicity of such examination must be approved by the Company and must be supported by an objective reliability analysis against a statistically significant population of equipment over an appropriate period of time.

3.8 When Trains or Existing Trains have been uncoupled and reformed using the same or different Units they must, prior to being offered for service, undergo both the full pre-service certification procedures detailed above and additional reformation tests. These reformation tests shall confirm:

- (a) the Units are properly coupled;
- (b) all isolating cocks and switches are in the correct orientation; and
- (c) the continuity of all cross coupler pneumatic, electrical and all services and connections.

### **3.9 Cleaning**

3.9.1 The Contractor shall clean the Trains in accordance with the standards set out in Part H of Schedule 6 and shall clean Existing Trains in accordance with the standards set out in contract C P001, between COMATEC UK Ltd and the Company.

3.9.2 If a Train or Existing Train offered for service pursuant to Clause 5.2.2(a) fails to meet the relevant standards referred to in paragraph 3.9.1, the relevant Train Operator shall be entitled to refuse to accept such Train or Existing Train in accordance with Clause 5.2.2(b).

3.9.3 The Company shall be entitled to audit from time to time the Contractor's compliance with the provisions of this paragraph 3.9. If the Contractor is not complying with its cleaning obligations pursuant to this paragraph 3.9, the Contractor shall take all necessary steps to promptly remedy the situation (without prejudice to any other remedies the Company may have), and the Contractor shall report to the four weekly maintenance meetings as to any steps which are so being taken.

3.9.4.1 If a Train Operator accepts a Train or an Existing Train pursuant to Clause 5.2.2(b) that he would have been entitled to reject pursuant to such Clause on the grounds of its lack of cleanliness, the Company shall, provided that it has complied with Clauses 18.6.1(a) and (b) and the Train Operator has notified the Line Controller of the lack of cleanliness in accordance with Clause 5.2.2(a), be entitled to deduct from any amount due or to become due to the Contractor from the Company under this Contract:

- (a) if the ground for rejection related to the cleanliness of the interior of the Train or Existing Train, £30 in respect of each Train or Existing Train accepted in such circumstances; or

- (b) if the ground for rejection related to the cleanliness of the exterior of the Train or Existing Train, £40 in respect of each Train or Existing Train accepted in such circumstances; or
- (c) if both paragraphs 3.9.4.1(a) and (b) apply, £70 in respect of each Train or Existing Train accepted in such circumstances.

3.9.4.2 The amounts referred to in paragraph 3.9.4.1 shall be adjusted annually on, and with effect from and excluding, 31 March in each year, by multiplying each such amount by the Indexation Factor for the year in which the relevant adjustment date falls. In calculating such adjustments, paragraph 1.4 of Part A of Schedule 10 shall apply.

3.9.5 Appendix 2 to this Part G of Schedule 6 includes photographs which act as a guide to the level of cleanliness expected to be achieved in respect of Trains. If any Train is offered for service by the Contractor, and the cleanliness of such Train is similar to the level of cleanliness shown in the photographs designated in that Appendix 2 "unacceptable to enter service", then the Company shall be entitled to reject such Train pursuant to Clause 5.2.2(b). If a Train is offered for service by the Contractor, and the cleanliness of such Train is similar to the level of cleanliness shown in such photographs designated "acceptable to enter service", then the Company will not reject the Train on the basis that the required level of cleanliness is not in accordance with this Contract. For the avoidance of doubt, nothing in this paragraph 3.9.5 shall prevent the Company from rejecting a Train for failing to meet the level of cleanliness where the uncleanliness is not of a type indicated in the photographs designated "unacceptable to enter service", nor shall it limit any of the Company's remedies other than when it has the right to reject a Train in accordance with Clause 5.2.2(b).

3.9.6 This paragraph 3.9.6 is subject to paragraph 3.9.7. Appendix 3 to this Part G of Schedule 6 includes photographs which act as a guide to the level of cleanliness expected to be achieved in respect of Existing Trains. If any Existing Train is offered for service by the Contractor, and the cleanliness of such Existing Train is similar to the level of cleanliness shown in the photographs in that Appendix 3 designated "unacceptable to enter service", then the Company shall be entitled to reject such Existing Train pursuant to Clause 5.2.2(b). If an Existing Train is offered for service by the Contractor, and the cleanliness of such Existing Train is similar to the level of cleanliness shown in such photographs designated "acceptable to enter service", then the Company will not reject the Existing Train on the basis that the required level of cleanliness is not in accordance with this Contract. For the avoidance of doubt, nothing in this paragraph 3.9.6 shall prevent the Company from rejecting an Existing Train for failing to meet the level of cleanliness where the uncleanliness is not of a type indicated in the photographs designated "unacceptable to enter service", nor shall it limit any of the Company's remedies other than the right to reject an Existing Train in accordance with Clause 5.2.2(b).

3.9.7 In relation to Existing Trains, where the standards set by contract C P001 as referred to in paragraph 3.9.1 are more onerous than those shown in that Appendix 3, then the standards set out in contract C P001 shall prevail over the standards shown in that Appendix 3 for the purposes of paragraph 3.9.6.

### **3.10 Test Equipment**

The Contractor shall be responsible for the design, procurement, secure storage, maintenance, calibration, repair and replacement and safe working of all special test equipment necessary to discharge its responsibilities under this Part G. The Contractor shall ensure that sufficient test equipment is available to cover, inter alia:

- (a) loss or damage;

- (b) maintenance, calibration;
- (c) repair downtime;
- (d) testing and gauging of component repairs on or off Site; and
- (e) requirements for preventative maintenance, casualty maintenance and periodic overhaul.

### **3.11 Plant and Tools**

The Contractor shall maintain and test all hand and power tools required and any plant or mechanical handling equipment necessary to discharge its obligations under this Part G.

### **3.12 Provision of Call Point Workforce**

3.12.1 The Contractor shall provide sufficient Call Point staff to respond to Train and Existing Train failures in service.

3.12.2 The Call Point staff shall be mobile and capable of attending a Train or Existing Train anywhere on the Northern Line. Their times of working and disposition shall have regard to:

- (a) probability of a service failure at any given time of day; and
- (b) the probability of more than one service failure occurring at the same time.

3.12.3 Call Point staff shall be sufficiently skilled to undertake rapid fault finding and diagnosis of any type of fault affecting the service, operational capability or safety of a Train or an Existing Train. They shall be sufficiently well trained to be able to correct or isolate the failed component to enable a return of the Train or Existing Train to service, where practicable. If the failed component is such that the Trains or Existing Trains cannot continue with the failed component isolated, the Call

Point staff shall be sufficiently well trained to certify a service failure and have the Train or Existing Train taken out of service. The circumstances which shall cause a Train or Existing Train to be taken out of service are:

- (a) any circumstance which actually or potentially creates a hazard to the safety of any person;
- (b) any circumstance which actually or potentially creates a hazard to the continued operation of any system, assembly or component on the Train or Existing Train or of the Company's infrastructure;
- (c) hazards or potential hazards identified by the Company line operational procedures; and
- (d) the Trains or Existing Trains continued usage is leading, or is likely to lead, to service disruption.

3.12.4 The Call Point staff shall be called out by Company staff, either by the Line Controller, station staff or Operators. All calls shall be logged and recorded as follows:

- (a) time of call;
- (b) time of allocation of staff;
- (c) time of attendance;
- (d) time of clearance;
- (e) problem reported; and
- (f) action taken.

3.12.5 The Contractor shall report to the Company at the end of each four week period in accordance with Schedule 4 in respect of the information so derived for the previous four week period. The Contractor shall take any corrective action necessary to achieve the service performance standard.

### **3.12A Provision of Equipment Repair Staff**

3.12A.1 The Contractor shall provide sufficient staff to respond to Equipment failures, both during and outside Traffic Hours, who shall be sufficiently skilled to undertake rapid fault finding and diagnosis of any type of fault.

3.12A.2 The Equipment repair staff shall undertake repairs to failed Equipment as soon as reasonably practicable after the Equipment failure has been identified, which may include repairs during Traffic Hours.

3.12A.3 Licencing of staff and training shall be undertaken in accordance with paragraph 6.

### **3.13 Train Recovery on the Company's Railway**

3.13.1 As from the Transfer Date, in the event that any Train or Existing Train is involved in a collision, derailment or incident on the Company's Railway (including the Sidings), the Contractor shall provide a nominated call-out person to attend any such incident immediately upon its occurrence to:

- (a) assist the Company in ascertaining the root cause of the incident;
- (b) determine the extent of damage caused at the time of the incident;
- (c) determine the extent of damage caused as a consequence of recovery of the Car, Unit, Train or Existing Train;

- (d) advise on changes in procedures, method statements or maintenance practices to prevent recurrence; and
- (e) certify as fit to move or supervise the recovery of the Train(s) back to one of the Depots.

3.13.2 The physical recovery of any Car, Unit, Train or Existing Train following any such incident shall be carried out by the Company.

3.13.3 Should the Contractor's nominated person not attend any such incident, a statement of damage consequential to the recovery operation shall be provided by the Company, which shall be deemed to form the record of the event.

### **3.14 Safe Working of Trains with Company Assets**

3.14.1 The Contractor shall provide technical assistance or advice in respect of ensuring the continued safe and reliable operation of the Trains, the Equipment and the Existing Trains. The Contractor shall report immediately to the Company any problems encountered in respect of mechanical, electrical, environmental interfaces with existing Company assets and shall institute such additional monitoring, surveillance or procedural changes as are deemed necessary in order to maintain the service performance standards detailed above.

3.14.2 The Contractor shall provide a suitably qualified member of staff in the Northern Line Main Control Centre with the primary task of assisting Line Controllers and Train Operators with the resolution of technical faults as they occur in service during Traffic Hours. The Contractor may provide a suitably qualified member of staff in the Northern Line Main Control Centre outside Traffic Hours.

### **3.15 Damage Caused by Defective Work**

3.15.1 The Contractor shall repair, replace or renew any component, whether on Trains, Equipment or Existing Trains or off Trains, Equipment or Existing Trains whose repair replacement or renewal arises out of defective workmanship, error or omission on the part of the Contractor or any of its sub-contractors.

3.15.2 In the event that damage is caused to the Company's assets (other than the Trains, the Equipment, the Existing Trains or Depot facilities) by such defective workmanship, error or omission, the Company shall undertake the repair, replacement or renewal as is deemed necessary and the Contractor shall pay to the Company the full replacement cost including any installation costs. The Company, in undertaking any such repairs shall:

- (a) repair, replace or renew on a like-for-like basis as far as is practicable in the circumstances;
- (b) seek to minimise the cost, having regard to operational requirements of the Company's Railway; and
- (c) maintain a true and accurate record of expenditure for disclosure to the Contractor.

### **3.16 Additional Work**

3.16.1 The Contractor when required by the Company shall carry out any additional work authorised under the variation to Contract procedure set out in Schedule 4.

3.16.2 For the avoidance of doubt, the Company shall issue a Notice of Required Variation or Notice of Company Proposed Variation in respect of the following required additional work:

- (a) collision repair, unless the responsibility of the Contractor;

- (b) modifications to the Trains or the Existing Trains required by the Company for legislative, operational, environmental or customer benefit reasons;
- (c) modification to the Depots required by the Company for operational reasons or for enhancement of Company staff facilities;
- (d) vandalism or wilful misuse of the Trains or Existing Trains by any person(s), save in respect of the items listed below, in respect of which the Company shall only be required to issue a Notice of Required Variation or Notice of Company Proposed Variation insofar as such vandalism or wilful misuse exceeds the following annual limits:

lighting tubes	100
advert card holders	10
saloon windows	50
other window/droplights/ draught screens	5
armrests	50
seats	20
fire extinguishers	20

graffiti

200 "tags" per 28 day period (for the purposes of this paragraph 3.16 a "tag" shall be deemed to be any defacement of less than 1 square metre and "graffiti" shall mean unauthorised markings made in paint, ink, dye or similar substance).

graffiti

5 square metres of murals (for the purposes of this paragraph 3.16 a mural shall be deemed to be any continuous coverage of graffiti of one square metre or more).

3.16.3 A Train or an Existing Train stabled in the Sidings on roads 24, 25 or 26 or "the loop" at Golders Green shall be deemed not to be within the Contractor's security responsibility.

3.16.4 The Contractor shall develop write and implement method statements and procedures covering the stabling of Trains in the Depot which minimise the standing load on the Traction Supply.

## **FLEET MANAGEMENT / DEPOT TRANSFER**

### **4.1.1 Responsibility of Contractor**

As from the Transfer Date, responsibility for the management and conduct of Train maintenance activities, Depot and facilities maintenance and all other fleet management responsibilities shall be assumed by the Contractor.

#### **4.1.2 Transfer of Call Point Service**

As from the Transfer Date, the Contractor will provide a Call Point service on the Northern Line.

#### **4.2 Handover of Depot Properties, Outstations and Sidings**

Paragraph 4.2 should be read in conjunction, without limitation, with the provisions of the Depot Leases, the Outstation Licences and the Sidings Licence.

##### **4.2.1 Morden Depot**

As from the Transfer Date, the Contractor shall perform the duties listed below at the Morden Depot:

- (a) the delivery of the required service;
- (b) Depot shunting and shunting control;
- (c) Train and Existing Train preparation and yard support (e.g. despatch and reception of Trains and Existing Trains and minor repairs);
- (d) Train and Existing Train machine washing; and
- (e) Depot and Equipment maintenance.

##### **4.2.2 Golders Green Depot**

As from the Transfer Date, the Contractor shall perform the duties listed below at Golders Green Depot:

- (a) the delivery of the required service;
- (b) Depot shunting and shunting control;
- (c) Train and Existing Train preparation and yard support;

- (d) Depot and Equipment maintenance;
- (e) the provision of a wheel turning facility for the Company in accordance with paragraph 4.5.

#### **4.2.3 Outstations/Sidings**

As from the Transfer Date, the Contractor shall carry out at the Outstation Properties the following activities:

- (a) the delivery of the required service from the Outstation Properties;
- (b) Train and Existing Train preparation and yard support;
- (c) shunting and shunting control (at Edgware only);
- (d) maintenance of Outstation Properties (as set out in the Outstation Licences).

As from the Transfer Date, the Contractor shall carry out at the Sidings the following activities:

- (a) the delivery of the required service from the Sidings; and
- (b) Train and Existing Train preparation and yard support.

#### **4.2.4 Fleet Management**

As from the Transfer Date, the Contractor will assume complete responsibility for fleet management of Trains and Existing Trains to ensure the delivery of a safe service fleet to agreed appropriate standards of maintenance, reliability and cleanliness.

### **4.3 Depot Properties, Outstations, Sidings and Accommodation Properties Handover Responsibilities**

As from the Transfer Date, the Contractor's defined area and scope of responsibility for the Depot Properties, the Sidings, the Outstations and Accommodation Properties will be (without limitation to the Contractor's obligations under this Contract) as detailed in the Depot Leases, the Sidings Licence, the Outstation Licences and the Accommodation Licences respectively.

### **4.4 Other Responsibilities**

#### **4.4.1 Train Cleaning**

4.4.2 As from the Transfer Date, the Contractor shall perform all cleaning activities in accordance with paragraph 3.9.

4.4.3 Prior to the issue of the first Take Over Certificate or the first Qualified Take Over certificate in respect of a Train, reasonable access to the train cleaning facilities and washing machines at Morden Depot will be made available to the Contractor.

### **4.5 Golders Green Surface Wheel Lathe**

4.5.1 As from the Transfer Date until such time as the Golders Green Depot Lease terminates, in respect of the Company's rolling stock other than Trains or Existing Trains, the Contractor shall provide the Company with a full wheel turning service. Such wheel turning service will be in accordance with Company Standard EO 14-06-01 Part 1, Part 2t, Part 2u, and Part 2v.

4.5.2 The first 1040 wheelsets in any financial year beginning 1 April to which paragraph 4.5.1 applies shall be turned at no additional cost to the Company. For each wheelset turned beyond this number in any calendar year, the Contractor shall be

entitled to charge an additional amount not exceeding £60 (including VAT), upon such wheelsets being returned to the Company following wheel turning.

4.5.3 If the service provided pursuant to paragraph 4.5.1 commences or terminates other than at the beginning or end of a calendar year respectively, the number of wheelsets to be serviced in the first or last year at no additional cost shall be reduced proportionately to the length of the part of the calendar year for which the said service was not continuing.

4.5.4 The additional charge set out in paragraph 4.5.2 shall be adjusted on 31 March in each year by multiplying such charge (as adjusted each year in accordance with this paragraph 4.5.4) by the Indexation Factor in accordance with paragraph 1 of Part A of Schedule 10 throughout the Contract Duration, as if such additional charge constituted the Services Element of the Usage Payments.

## **4.6 Engineers' Trains and Machines**

4.6.1 To effect the maintenance of the Company's infrastructure there is a requirement that Engineers' Trains and other vehicles be stabled at times at Depots, Outstation Properties and Sidings. Additionally provision is also required at some Sites for the storage of fuel, lubricants and engineering spares to support the operation of the Engineers' Trains, vehicles and machines.

4.6.2 As from the Transfer Date, the Contractor shall provide, at no charge, the stabling and storage facilities at the Depot Properties, Outstations and Sidings to meet the Company's Engineers' Trains needs, but this shall not be prejudicial to the delivery of the service. The Contractor will not be required to carry out any maintenance or other work on these vehicles and machines while they are stabled in the Depot Properties or Outstations. The Contractor shall provide pit access as maybe required by the Company for Engineers' Trains maintenance purposes, but this shall not be prejudicial to the delivery of the service.

#### **4.7 Train Recovery in Depots and Outstations**

The physical recovery of Trains and Existing Trains in the Depot Properties and Outstations in any collision or derailment incident shall be the responsibility of the Company unless otherwise agreed with the Contractor.

5. NOT USED.

#### **TRAINING AND CERTIFICATION**

6.1 It is the Company's policy that all operational and maintenance staff are required to hold a basic job licence covering the core competencies needed to do their job. In addition they are required to hold supplementary licences covering specific competencies. The same requirements will apply to all staff of the Contractor throughout the Contract Duration. Certification shall be issued by the Company to Contractor's personnel satisfying the Company's criteria in respect of safety licences. The Contractor shall be responsible for licencing its own staff in respect of the maintenance of the Trains, the Equipment, the Existing Trains and Depot plant.

#### **6.2 Licensing Requirements**

6.2.1 All personnel who are employed to work in Depots and Outstation Properties must be certificated as "Depot Competent" before taking up their posts.

6.2.1A All personnel who are employed to work in the Sidings must be certificated as "Track Competent (Traffic Hours)".

6.2.2 All personnel required to work on the Call Point service must be certificated as "Track Competent (Traffic Hours)" and hold the call point module of the planning staff license before taking up their posts.

6.2.3 All personnel required to shunt trains or control the shunting of trains within the Depot Properties, Outstations and Sidings must hold the shunting module of the planning staff licence before taking up their posts.

6.2.4 All personnel required to carry out Train and Existing Train preparation must hold the train preparation module for the appropriate stock of the planning staff licence before taking up their posts.

6.2.5 All personnel required to maintain Trackside Equipment must be certificated as track competent (traffic hours) and track competent (engineering hours).

### **6.3 Training Requirements**

6.3.1 NOT USED.

6.3.2 NOT USED.

6.3.3 NOT USED.

6.3.4 NOT USED.

6.3.5 The Contractor's staff will require training in the specific tasks to be undertaken by them on Existing Trains. They will also require training to obtain the necessary licences and certificates to enable them to work in the Depot Properties, Outstations and Sidings and on the Northern Line. This training shall include, inter alia:

- (a) Depot competency;
- (b) Depot competency - Outstation endorsements;
- (c) track competent (Traffic Hours);
- (d) rules and regulations;

- (e) Call Point training;
- (f) 1959/1972 Tube Stock familiarisation;
- (g) 1959/1972 Tube Stock preparation;
- (h) 1959/1972 Tube Stock minor fault rectification;
- (i) Depot shunting and reformation;
- (j) shunting at Edgware Outstation;
- (k) operation of surface wheel lathe at Golders Green Depot; and
- (l) operation of De-icing Equipment.

6.3.6 Where training is delivered by Company instructors for either Contractor's or the Company's staff and where such training requires the use and/or possession of a Train or Existing Train, the Contractor shall make Trains or Existing Trains available such that the required training timescales are met. Prior to the Transfer Date, where such training requires the use of Existing Trains, the Company shall make Existing Trains available such that the required training timescales are met, provided that nothing in this paragraph shall oblige the Company to make available an Existing Train if to do so would prejudice the service.

#### **ADVERTISING/COMPANY SIGNAGE**

7.1 Subject to paragraph 7.2, the Contractor shall provide all necessary assistance to the Company or its nominees, including, but not limited to, access to the Depot Properties, Outstation Properties and the saloons of Trains and Existing Trains, in relation to the installation and/or removal of advertisements.

7.2 The Contractor shall not be required to give assistance pursuant to paragraph 7.1 where such assistance would be inconsistent with the Contractor's other

duties under this Contract, provided that the Contractor shall use all reasonable endeavours to ensure that such inconsistency does not arise.

7.3 The Contractor shall replace and/or install on the Trains and Existing Trains such signs and posters as may be provided from time to time by the Company for the purpose of informing Passengers about the Company's railway services, provided that, if the Project Manager requires all such signs or posters to be replaced or altered other than as part of a phased programme of installation and/or replacement as agreed with the Project Manager, the Project Manager shall issue a Notice of Required Variation or a Notice of Company Proposed Variation in respect thereof.

## **Appendix 1 to Part G of Schedule 6**

The documents set out in the Appendix shall be to the issue current at the date of this Contract, unless otherwise noted. The Contractor shall be responsible for ensuring that all the applicable documents, to the issue as listed in Part J of Schedule 6, are in its possession.

1. Not Used
2. Not Used
3. Not Used
4. Not Used
5. Not Used
6. RSE-DEP-805-PRO - Regulatory Notices
7. LUL-RS-505-PRO- Notification and Investigation of Alleged Train Safety Irregularities
8. Typical LUL Minimum Condition Standard
9. Zone Identity System for LUL Audit Control Master Index of Zones for Rolling Stock
10. RSE-ST-04001 Minimum Routine Testing Requirements: Part 1 24 Hour Train Preparation
11. RSE-ST-04001 Minimum Routine Testing Requirements Part 2, Maintenance Level 2 Examination
12. EO 14-06-01 Part 1, Part 2t, Part 2u, and Part 2v Equipment Overhaul Specification - Wheelsets
13. Contract C P001 (Existing Train cleaning contract)

**Appendix 2 to Part G of Schedule 6**

**Appendix 3 to Part G of Schedule 6**

**SCHEDULE 6**

**Part G**

**Support Services Specification**