

SCHEDULE 1

Definitions

The words and expressions used in this Contract, the Real Property Documents and the Guarantees shall, unless the context otherwise requires, have the meanings assigned to them in this Schedule.

AC means alternating current.

Acceleration Amount means an amount determined in accordance with Section 4 of Part B of Schedule 10 for the purposes of computing a sum payable on an acceleration under Clause 25.6.

Acceptance has the meaning assigned to it in paragraph 1 of Part II of Section 1 of Part B of Schedule 10.

Acceptance of Delivery Tests means the tests to be carried out by the Contractor following the physical delivery of each Train (and its Trainborne Equipment) to the Company to determine whether such Train (and its Trainborne Equipment) complies with the specifications set out in Schedule 6 and is ready for service, use and operation by the Company or LUL on the Northern Line and is fit for the purposes of enabling the Company to discharge its obligations to LUL so as to enable LUL to operate and provide the railway service referred to in Clause 5.1.1 to the extent required by this Contract and any additional tests which the Project Manager may require the Contractor to carry out to satisfy the Project Manager of such compliance and that such Train (and its Trainborne Equipment) is so ready and fit.

Accommodation Licence means any licence entered into by the Contractor in the form of the Draft Accommodation Licence.

Accommodation Properties means the premises which are the subject of the Accommodation Licences pursuant to the Agreement to Lease/Licence.

Accommodation Property means, in respect of each Accommodation Licence, the premises to which that Accommodation Licence relates.

Acknowledgement has the meaning assigned to it in the NLTSC Restructuring Agreement.

Act has the meaning assigned to it in the Draft Depot Leases.

Additional Conditions Precedent has the meaning assigned to it in the NLTSC Restructuring Agreement.

Adjacent Property means, in respect of each Depot Lease, Outstation Licence and the Sidings Licence, all or any part of the land, buildings, structures or other works (including railway track and other rail infrastructure) not included in that Depot Lease, Outstation Licence or the Sidings Licence (as the case may be) but for the time being adjoining, above, below or near the Depot Property which is the subject of that Depot Lease or the Outstation Property which is the subject of that Outstation Licence or the Sidings which are the subject of the Sidings Licence (as the case may be) and in which the Company has or shall have at any time any estate or interest but so that where that Depot Lease, Outstation Licence or the Sidings Licence (as the case may be) grants or reserves rights or contains provisions in favour of the Adjacent Property

then the Adjacent Property shall be construed as such part or parts thereof as are capable of benefiting from such rights or provisions.

Adjudicator means an independent person appointed to act as an adjudicator in accordance with this Contract.

Advance Works Authorisation means the letters dated 23 December 1994, 31 January 1995, 3 March 1995 and 1 April 1995 from the Company to the Contractor authorising the Contractor to proceed with the Advance Works.

Advance Works means the works carried out pursuant to, and in accordance with, the Advance Works Authorisation.

AFM means Assetfinance March (A) Limited (formerly known as Concord Leasing March (A) Limited).

AGC means automatic gain control.

Agreement to Lease/Licence means the agreement of 7 April 1995 originally entered into between LUL and the Contractor to lease the Depot Properties and license use of the Outstation Properties, the Accommodation Properties and the Sidings and pursuant to which the Contractor undertakes to carry out the Enabling Works.

Agreement to Sub-Lease means the agreement of 7 April 1995 originally entered into between the Contractor and the Finance Parties pursuant to which the Contractor has agreed to sub-lease the Depots to the Finance Parties and the Finance Parties have agreed to carry out the Enabling Works or procure that they are carried out.

Agreement to Sub-Sub-Lease means the agreement of 7 April 1995 originally entered into between the Finance Parties and the Maintenance Company pursuant to which the Finance Parties have agreed to sub-sub-lease the Depots to the Maintenance Company.

AH means ALSTOM Holdings whose registered office is at 25 Avenue Kléber, 75116 Paris, France.

AH Guarantee means the guarantee dated 21 June 1998 granted by AH in favour of LUL in respect of the obligations of the Contractor under, inter alia, this Contract as amended from time to time.

Airspace Level means, in respect of each Depot Property, Outstation Property, and the Sidings, in respect of any particular point in that Depot Property or Outstation Property, or the Sidings the level three metres above Surface Level at that point (or if that point is within a pit in a Depot Property the level three metres above the level of the shoulders of the pit (and not of any level within the pit) at that point) or (if higher) the level of the highest point of any building or structure (other than the Railway Superstructure as defined in the Draft Depot Lease) existing at that point at the date of the Depot Lease, Outstation Licence or Sidings Licence relating to that Depot Property or Outstation Property or the Sidings.

ALSTOM S.A. means ALSTOM, a company incorporated in France having its registered office at 25 Avenue Kléber, 75116 Paris, France and registered with the Registry of Commerce and Companies of Paris under registration number 389 058 447.

ALSTOM Guarantee means the guarantee and indemnity of even date herewith between LRT, the Contractor and ATS under which LRT agrees with the Contractor to guarantee the obligations of LUL under (inter alia) the ALSTOM Step-In Agreement and with ATS to guarantee the obligations of LUL under the Connect Amendment Agreement.

ALSTOM Step-In Agreement means the agreement of even date herewith between LUL, the Contractor and the Company pursuant to which LUL agrees to assume the obligations of the Company under (inter alia) this Contract in certain circumstances.

ALSTOM Support Agreements means the ALSTOM Guarantee and the ALSTOM Step-In Agreement.

Amendment Documents means this Contract, the NLTSC Lease Amendment Agreement, the NLTSC Residual Agreement and the NLTSC Real Property Amendment Agreement.

ARL means above rail level.

Associated Contract Dispute means any dispute between parties to the Dispute Resolution Agreement and/or the Connect Amendment Agreement which is to be resolved in accordance with the provisions of the Dispute Resolution Agreement or the Connect Amendment Agreement (as applicable) and which arises out of circumstances which are substantially the same as or are closely connected with those in any Dispute or which raises issues which are substantially the same as or are closely connected with issues raised in any Dispute, where the relevant party or

parties consent(s) to the Dispute being resolved in the same reference as the Associated Contract Dispute.

ATC means automatic train control which is the integrated system covering all equipment (including, without limitation, Trainborne Equipment) that must provide the safe and efficient operation of Trains with minimal human involvement and comprises two sub-systems, ATP and ATO.

ATO means automatic train operation which is the sub-system of ATC which must be responsible for operating each Train by automatically controlling motoring, coasting and braking at the required levels and stopping accurately in station platforms and also carries out a number of ancillary management functions.

ATP means automatic train protection which is the sub-system of ATC which:

- (a) must be responsible for ensuring the safety of the Trains at all times and designed such that it is a Vital System;
- (b) prevents or stops movement of Trains if conditions on the track are not proved safe for their movement;
- (c) ensures that the maximum speed of a Train is not exceeded; and
- (d) provides Non Vital information to other sub-systems for their operation to enable manual or automatic driving of the Trains.

ATS means automatic train supervision which is a centralised function whereby the operation of Trains can be monitored, controlled and automatically regulated and

which provides an integration of various sub-systems and a human interface with the operation of the Company's Railway.

AUKHL means ALSTOM UK Holdings Ltd whose registered office is at Mill Road, Rugby, Warwickshire CV21 1TB.

AUKHL Guarantee means the guarantee granted or, as the case may be, to be granted by AUKHL in favour of the Company in respect of the obligations of the Contractor under, inter alia, this Contract as the guarantee is amended from time to time.

Autocoupler means an item of equipment that is used to connect Units together mechanically, electrically and pneumatically and which is fitted at the outer ends of each Unit.

Average Size Wheels means the mid point between new and scrap wheel sizes.

BCF means bromochlorofluoromethane.

BCIC means brake cylinder isolating cock.

BE means braking effort.

Benefit has the meaning assigned to it in Clause 30.2.1(a).

BIC means brake isolating cock.

Bi-Directional Working means the working of Trains or Existing Trains in both directions, at different times, over a single track of a one or more track railway.

Blockend means the end or start of a signalling block section.

Blockpoint means that position in advance of a Blockend by which the front of a Train or an Existing Train braking to a signal restriction achieves new lower (zero or non zero) target speed.

BRB means the British Railways Board.

British Standard means any standard issued by the BSI from time to time.

BS means a British Standard.

BS EN means a British Standard incorporating a European Standard.

BSI means the British Standards Institution.

BTEC means the British Training and Educational Council.

Call On Lamp means the orange illuminating device on all cabs of all Trains.

Call Point means the location from which a Company Employee or LUL Employee or the Contractor performs the duty that requires attending defective Trains or Existing Trains, or condition monitoring Trains or Existing Trains whilst they are still in Passenger service and carry out repairs on the same or declare the same unfit for further Passenger service.

Call Point Staff Accommodation and Facilities Licence means the licence granted by the Company to the Contractor to share use of the facilities, which facilities are described in Part B of Schedule 3.

Capacity Coupled Interference means interference which a disturbance in a circuit caused by a nearby electric field produced by rate of change of voltage not equal to zero, in the nearfield (less than one sixth of a wavelength).

Car means a single passenger car mounted on two bogies with an Autocoupler or semi-permanent coupler at each end.

Carrier Sequencing means the sequencing of the track circuit carrier frequencies in the layout of the track circuits to minimise interference from similar or the same carrier frequency.

CCTV means closed circuit television.

CENELEC means the European Committee for Electrotechnical Standardisation.

CEPT means the Committee of European Posts and Telecommunications.

Certificate of Substantial Completion means a certificate which shall be issued by the Project Manager pursuant to Clause 10.7, substantially in the form set out in Part BB of Schedule 7.

Certificates of Final Completion means the Morden Certificate of Final Completion and the Golders Green Certificate of Final Completion.

Change in Law means in each case after the date of the Original Contract the introduction, repeal or amendment of any applicable law, regulation, or official practice of general application of any tax authority or any change in the interpretation of any relevant law or regulation by any court, tribunal or other competent authority.

Chopper Equipment means any electrical apparatus which employs solid state devices to switch direct current on and off to control power.

Circuit Breaker means a switching device which has an integral overcurrent trip mechanism and switches only under overcurrent conditions or when powering up/down a Train or an Existing Train.

CMS means control and monitoring system.

COM: COS means compressor cut-out switch.

COMG: COS means compressor governor cut-out switch.

Common Cause Failure means the result of one or more events which causes a coincidence of faults leading to a device, unit of equipment or system failing to perform its intended function.

Common Mode Failure means any form of Common Cause Failure which makes a device, unit of equipment or system fail in the same manner.

Company Employee means any director, officer, authorised agent, servant, or person in the employment, of the Company or any other person acting with the authority of the Company (other than any of the Contractor Parties or their sub-contractors) and references in this Contract to any personnel and/or staff and/or employee of the Company shall be deemed to include references to any such person.

Company Event of Default means any of the events listed in Clauses 27.1(a) to (n) inclusive.

Company Proposed Variation has the meaning assigned to it in paragraph 8.1.1(b) of Schedule 4.

Company Standards means the standards specified as such in Part J of Schedule 6 issued by LUL.

Company's Business means the business undertaking of the Company providing infrastructure and related services to LUL in connection with LUL's Passenger carrying railway service.

Company's Railway means the Northern Line.

Condition Schedule means, in respect of each Depot Lease and Outstation Licence, the condition schedule to be agreed in accordance with Clause 3.3 of the Agreement to Lease/Licence.

Conducted Interference mean interference which is physically coupled from the interfering source to the device, unit of equipment or system in the following ways:

- (a) interference present on the power supply to equipment;
- (b) equipment that shares a common earth return can be subjected to interference from other equipment due to voltage drops across the return path;
- (c) signalling equipment that uses the running rails as conductors to transmit or receive signals will be subject to interference coupled into the running rails as a result of traction return current in the running rails.

Conduits means any and all pipes, sewers, drains, ducts, conduits, downpipes, gutters, wires, cables, channels, watercourses, flues, interceptors, high pressure air systems,

trunking and other conducting media and ancillary apparatus and includes any part of any of them.

Connect Amendment Agreement means the agreement dated on or prior to the date of this Contract between LUL, the Contractor, ATS and the Company relating to radio services for the Northern Line.

Connect Contract means the Transmission and Radio Services Contract dated 19 November 1999 between LUL and the Connect Contractor.

Connect Contractor means CityLink Telecommunications Limited and its successors, assigns and novatees permitted under the terms of the Connect Contract.

Construction Act Contract means a contract (a) which falls within the definition of “construction contract” contained in Part II of the Housing Grants, Construction and Regeneration Act 1996 and (b) to which the application of Part II of the said Act is not excluded either by the terms of Part II of the said Act or by the terms of the Construction Contracts (England and Wales) Exclusion Order 1998.

Construction Act Dispute means any dispute or difference arising under a Construction Act Contract to the extent that such dispute or difference relates to “construction operations” as defined by Part II of the Housing Grants, Construction and Regeneration Act 1996.

Contract means this Contract as it may be amended, modified or supplemented from time to time in accordance with the provisions hereof.

Contract Drawings means the drawings specified in Part J of Schedule 6 and copies of which have been initialled by the parties.

Contract Duration means, subject to earlier termination in accordance with the provisions hereof, the period commencing from the date on which the Contractor commenced carrying out the Advance Works and continuing until the expiry of the Primary Usage Period or (if the Company so requires in accordance with this Contract) the expiry of the Secondary Usage Period, the expiry of the Unextended Tertiary Usage Period or the expiry of the Extended Tertiary Usage Period or the expiry of any Hand Back Extension Period following any of such periods (other than the Extended Tertiary Usage Period).

Contract Manager means the person appointed by the Contractor who has full power and authority to administer, manage and operate this Contract on behalf of the Contractor.

Contractor includes any director, officer, authorised agent, servant or person in the employment, or acting with the authority, of the Contractor (other than any sub-contractor).

Contract Programme means the programme of work to be agreed between the Company and the Contractor in accordance with the provisions of paragraph 1.3 of Schedule 4 and to contain, inter alia, dates for performance and completion of the Contractor's obligations under this Contract which comply with the dates set out in Schedule 5.

Contract Safety Conditions means LUL's contract safety conditions in effect at the date of the Original Contract (a controlled copy of which was in the Contractor's possession as at the date of the Original Contract) and, in relation to sections 2 and 3 thereof, those clauses specified in the list set out in Part A of Schedule 8 and includes

any amendments to such conditions as have been or are issued by the Company or LUL from time to time and notified in writing by the Company or LUL to the Contractor.

Contract Schedule Target Completion Dates means the dates specified in the table set out in paragraph 2 of Schedule 5 (or such later dates as may be determined by the Project Manager in accordance with Clause 12 or the variation procedure set out in paragraph 8 of Schedule 4).

Contractor Event of Default means any of the events listed in Clauses 28.1.1(a) to (k) (inclusive).

Contractor Parties means, collectively, the Contractor, the Guarantors, the Train Manufacturer and the Maintenance Company.

Contractor Proposed Variation has the meaning assigned to it in paragraph 8.1.1(c) of Schedule 4.

Contractor's Conduits means, in respect of each Depot Property and Outstation Property and the Sidings, those Conduits (if any) at or outside that Depot Property or Outstation Property or the Sidings used exclusively by that Depot Property or Outstation Property or the Sidings (to the extent that they are not or do not become adopted or public Conduits).

Controlling Position means a cab or Shunt Control Position where the control key has been turned on to enable a Train's or an Existing Train's operational modes to be selected.

Control Supply means the batteries, and associated battery charging equipment, which together provide a direct current supply for control and monitoring of the Trains and the Existing Trains, and in certain cases, for power supply and the characteristics of which are set out in Company Standard RSE/STD/019 - Part 1.

Corporation Tax means the tax levied pursuant to Section 6 of the Income and Corporation Taxes Act 1988 or any similar tax in addition to or replacing the same.

COSHH means Control of Substances Hazardous to Health Regulations 1988 as amended.

Cross Talk means airborne interference from adjacent track circuits or any other radiating source.

CRT means cathode ray tube.

Crush Load or **Crush Laden** means the state of a Train when it is in the condition specified in paragraph 4.4 of Standard RSE/STD/016 - Part 5 (referred to in paragraph 6.2 of Part J of Schedule 6).

CSDE means correct side door enable.

CSR is the customer satisfaction rating for Train and Existing Train cleanliness as determined at four weekly intervals by the customer satisfaction survey which forms part of the Company's key performance indicators.

Date of Appointment means the date of posting of written confirmation to the parties to a Dispute of the appointment of the Adjudicator pursuant to paragraph 1 of Schedule 14 of this contract.

DC means direct current.

DDM means duty Depot manager.

Deadman Alarm means the Radio signal automatically initiated when the Deadman Device is released and not reset within 60 seconds of it being released.

Deadman Device means the safety device located in the cab of the Trains held set by the Train Operator during manual driving which, if released, automatically applies the emergency brake of the Train.

Defective means any one or more of the following:

- (a) not fit for operation and/or use on the Northern Line for the purposes of enabling the Company to discharge its obligations to LUL so as to enable LUL to operate and provide the railway service referred to in Clause 5.1.1 or (in respect of Existing Trains) Clause 5.1.2 to the extent required by this Contract;
or
- (b) not otherwise being in accordance with this Contract.

Defects has the meaning assigned to it in Clause 14.6.3.

De-icing Equipment means any equipment mounted on the car body and bogie involved in clearing and/or preventing the formation of sleet and/or ice on the conductor rails.

De-icing Unit means a semi-permanently coupled group of Cars that contains a de-icing Car.

Delivery Period has the meaning assigned to it in the notional financial schedule in Part II of Section I of Part B of Schedule 10.

Depot Direct Agreement means the agreement of 7 April 1995 originally entered into between the Finance Parties, LUL, the Contractor and the Maintenance Company.

Depot Leases has the meaning set out in the NLTSC Real Property Amendment Agreement.

Depot Properties and *Depot* and *Depots* mean the Depot Property which is the subject of the Depot Leases, namely Morden and Golders Green depots.

Depot Property means, in respect of each Depot Lease, the premises specified in paragraph 1.5 of the Particulars to that Depot Lease (subject to the second and ninth schedules to that Depot Lease, if applicable) and includes:

- (a) all such buildings, structures, the Contractor's Conduits and other works as are at the Depot Property on the date of that Depot Lease and any alterations or additions to such buildings, structures, Contractor's Conduits or other works; and
- (b) the Existing Depot Equipment, the New Equipment and the Trackside Equipment located from time to time at the Depot Property;

but not anything above Airspace Level or below Surface Level and where the context so admits Depot Property includes any part of the items referred to above but excludes the Excluded Depot Equipment.

Depot Repair/Renewal means, in respect of each Depot Lease, in relation to each part of the Depot Property which is subject to that Depot Lease, the carrying out of:

- (a) any work which is necessary to be carried out as a result of the carrying out of the Enabling Works and is so identified in the Condition Schedule;
- (b) any other work required to keep that Depot Property (but not every individual element of it) in no worse general a state than evidenced by the Condition Schedule;
- (c) any work required so that that Depot Property is safe for operation and/or use and so that all train movements at that Depot Property can be conducted safely and efficiently and in compliance with the requirements of any Act for any lawful purpose permitted by that Depot Lease;
- (d) any renewal that shall be undertaken where this is reasonably necessary but only to the extent required for the Contractor to comply with its obligations under paragraphs (a), (b) and (c) of this definition;
- (e) any treatment, operation or work of a routine and foreseeable nature whether necessary at regular or irregular intervals which is required by any current statutory or other code of practice or by any current railway industry standard practice or which is otherwise known (in all the circumstances) to be required from time to time to facilitate the efficient and safe operation and/or use of the relevant item in compliance with the requirements of any Act for any lawful purpose permitted by that Depot Lease;

- (f) the replacement of elements which require the work referred to in paragraph (e) of this definition regularly or are designed for replacement;
- (g) or arranging of, any inspection or certification required by an Act or for the purpose of any treatment, operation or works described in paragraphs (e) and (f) of this definition; and
- (h) in relation to the Existing Depot Equipment, the Trackside Equipment and the New Equipment at that Depot Property, the carrying out of all treatment, operations and works which are recommended in a current manufacturer's operating or maintenance manual at the intervals and in the manner so recommended;

but:

- (i) does not include the carrying out of, firstly, (in relation to an obligation of the Company under that Depot Lease) any work to that Depot Property which is the responsibility of any third party now or in the future entitled to occupy any part of that Depot Property under any of the Existing Agreements or any future agreement or agreements or, secondly, renewal of any item so long as repair still may reasonably be undertaken and the cost of performance by the Company of its obligations under that Depot Lease are not in consequence increased above a reasonable level and the obligation of any party under that Depot Lease to carry out Depot Repair/Renewal in respect of any part of that Depot Property shall be construed accordingly; and

- (ii) provided that the prescription of a minimum Depot Repair/Renewal standard shall not preclude any party to that Depot Lease from performing its obligations to a higher standard if it so desires.

Design and Development Target Completion Dates means the dates specified in the table set out in paragraph 3 of Schedule 5 (or such later dates as may be determined by the Project Manager in accordance with Clause 12 or the variation procedure set out in paragraph 8 of Schedule 4).

DEV means double element vane.

DFIL means door fault indicator lamp.

Direct Agreements means the Trains Direct Agreement and the Depot Direct Agreement.

Direct Arrangements has the meaning assigned to it in the Trains Direct Agreement.

Direct Transaction Documents has the meaning given to it in the Finance Parties Step-In Agreement.

Dispute means any dispute of any kind whatsoever arising between the Company and the Contractor arising under, out of or in connection with this Contract or any Real Property Documents (including any question of the breach, interpretation, validity, effect performance or termination of this Contract or the Real Property Documents, any decision, opinion, instruction, direction, certificate or valuation of the Project Manager and any claims for set-off or counterclaims).

Dispute Resolution Agreement means the agreement entered into between LUL and the Company governing the procedure for resolving disputes arising out of any contract entered into between LUL and the Company.

DM means driving motor.

DMMS means the Company's existing depot maintenance management system which includes the Kvaerner asset management system.

Documentation means the specifications, drawings, networks, programmes of work, computer standards, listings, programs, software, data, test scripts, test procedures, test plans, test certificates, quality plans, quality programmes, quality certification, operating manuals, maintenance manuals and all information whether on paper or magnetic format or in any other form which is prepared by the Contractor in accordance with or in relation to this Contract and including, but not in any way limited to, documents, plans, manuals, diagrams, statements, handbooks, procedures and other items which the Contractor is required to prepare and provide in accordance with the provisions of Schedules 4, 6 and 13.

Documentation Target Delivery Dates means the dates specified in Column 2 of the table set out in paragraph 6 of Schedule 5 (or such later dates as may be determined by the Project Manager in accordance with Clause 12 or the variation procedure set out in paragraph 8 of Schedule 4).

Dormant Failure means a Failure which does not result in:

- (a) an indication to the Operator or system user in a fashion enabling him to take immediate corrective action or follow alternative working procedures; or

(b) automatic disablement of related system functions to a safe state.

Draft Accommodation Licence means the draft licence of Accommodation Properties approved by the Contractor and LUL, a copy of which was annexed to the Agreement to Lease/Licence and initialled by the parties thereto.

Draft Depot Leases means the draft leases of the Depot Properties approved by the Contractor and the LUL, copies of which were annexed to the Agreement to Lease/Licence and initialled by the parties thereto.

Draft Outstation Licences means the draft licences of the Outstation Properties approved by the Contractor and LUL, copies of which were annexed to the Agreement to Lease/Licence and initialled by the parties thereto.

Draft Real Property Documents means the Draft Accommodation Licence, the Draft Depot Leases, the Draft Outstation Licences and the Draft Sidings Licence.

Draft Sidings Licence means the draft licence of the Sidings approved by the Contractor and LUL, a copy of which is annexed to the Agreement to Lease/Licence and initialled by the parties thereto.

Drawn Up means when a Train or an Existing Train has the collector shoes of its leading car only in contact with the current rails. Some Trains and Existing Trains are stabled on Shed Roads which have no current rails. When these Trains or Existing Trains are offered for service they are moved forward on the shed plug until the first collector shoes on the leading car make contact with the current rails. A Train or Existing Train will then be said to be Drawn Up. In this condition, the Train or

Existing Train is ready for service with all systems operating but power is only available on the leading Unit. The remaining Units are Gapped.

DTI means the Department of Trade and Industry.

Duty Operations Manager means the LUL Employee(s) so designated who liaise(s) with the Depot management on a 24 hour basis and deal(s) with, inter alia, enquiries relating to the rolling stock, Depot safety procedures and the maintenance of a safe and reliable service.

Dynamic Data means data that will vary depending on the conditions of the Company's Railway or a Train or Existing Train.

Effective Time means the time at which each of the conditions specified in Clause 5.2 of the NLTSC Restructuring Agreement have been satisfied or waived in accordance with the provisions of such agreement.

Electrical System means the complete electrical network which controls the flow and storage of electrical and magnetic energy within the Trains and Existing Train.

Electromagnetic Compatibility or ***EMC*** means the ability of a device, unit of equipment or system to operate to specification in its designated environment in the presence of Electromagnetic Interference and the ability of a device, unit of equipment or system to operate without producing Emissions in excess of the limits specified in Schedule 6.

Electromagnetic Disturbance means any electromagnetic phenomenon which may affect or degrade the performance of a device, unit of equipment or system.

Electromagnetic Interference or ***EMI*** has the same meaning as assigned to ***Electromagnetic Disturbance***.

Electrostatic Discharge or ***ESD*** means interference which occurs under dry atmospheric conditions when the human body can become charged to several thousand volts. If a person touches an earthed conductor, then the body will discharge itself in the form of an arc. If the conductor is a piece of equipment containing sensitive components, this discharge can result in the loss of data or may physically damage the equipment.

Elements of the Depot Property means, in respect of each Depot Lease, those constituent parts of the Depot Property which is the subject of that Depot Lease which are listed in the eighth schedule to that Depot Lease.

Elements of the Outstation Property means, in respect of each Outstation Licence, those constituent parts of the Outstation Property which is the subject of that Outstation Licence which are listed in the eighth schedule to that Outstation Licence.

Emissions means the introduction of dust, noise, gas, fluid(s), Electromagnetic Disturbances or Electromagnetic Interferences into the environment by a device, unit of equipment or system.

EMU means electric multiple unit.

EN means a European Standard.

Enabling Works means the works carried out or to be carried out to enable the Contractor to comply with its service obligations under this Contract and described more particularly in Part I of Schedule 6.

Enabling Works Element of the Usage Payments and ***Enabling Works Element*** mean that part of any Usage Payment which is identified in Schedule 9 as being attributable to the Enabling Works (as adjusted or adjustable in accordance with this Contract).

Enabling Works Target Acceptance Dates means the dates specified in Column 2 of the table set out in of paragraph 5 of Schedule 5 opposite sections (g) and (h) thereof (or such later dates as may be determined by the Project Manager in accordance with Clause 12 or the variation procedure set out in paragraph 8 of Schedule 4).

Enabling Works Target Completion Dates means the dates specified in Column 2 of the table set out in paragraph 5 of Schedule 5 opposite sections (a) to (f) (inclusive) thereof (or such later dates as may be determined by the Project Manager in accordance with Clause 12 or the variation procedure set out in paragraph 8 of Schedule 4).

Enabling Works Total Fixed Price has the meaning assigned to it in paragraph 9 of Section 2 of Part E of Schedule 10.

Engineering Hours means the period of time between:

- (a) the later of the Published Time (as defined in the Rule Book) or actual time for traction current to be switched off, providing this is later than the Published Time in the supplement to Appendix 2 to the Rule Book; and
- (b) the Published Time for traction current to be switched on, providing this is no later than the Published Time in the supplement to Appendix 2 to the Rule Book;

save that there are no Engineering Hours in respect of Non-Electrified Track and Track (each as defined in the Rule Book) within the Depots, the Outstations or other sidings where traction current is normally on at all times.

Engineering Instructions means the set of Company and/or LUL documentation referred to in Part J of Schedule 6 that sets out mandatory requirements for various activities that the Contractor must comply with in performing its obligations under this Contract, as amended or revised by the Company or LUL from time to time and notified in writing by the Company to the Contractor.

Engineers' Trains means any train run for engineering or similar work.

Enhanced Existing VHF Train Radio means the Existing VHF Train Radio as upgraded by the Contractor in accordance with this Contract.

Environmental Approvals means, and shall include, all permits, consents, licences and other authorisations and approvals required under Environmental Laws to be obtained in connection with the use of the Properties or the conduct of the business of LUL or the Company or the Contractor whether under this Contract or otherwise.

Environmental Audit means, and shall include, any evaluation, measurement, sampling, inspection, study, test, review or other analysis of whatsoever nature and whether carried out by or on behalf of either party relating to compliance with Environmental Approvals or Environmental Laws or otherwise relating to Environmental Matters or the Properties.

Environmental Consultants means a reputable firm of environmental consultants who have been approved in writing by the Company and the Contractor in advance of

their appointment and with whom the Company or the Contractor as appropriate has entered into a contract of appointment, of which the terms of appointment and scope the works have been agreed in advance with the other party and which in any event establishes that any report produced by the Environmental Consultants in relation to the Environmental Audit is addressed to and made available to the Company as well as to the Contractor and that the Environmental Consultants owe an equal duty of care to both the Company and the Contractor in carrying out the Environmental Audit and reporting on their findings.

Environmental Laws means, and shall include, the following.

- (a) all EU, national or local statutes, codes, directives, notes or other laws or legislation concerning Environmental Matters including, for the avoidance of doubt, the Environment Bill HC85 if and when enacted which are applicable to this Contract, the Properties or the business of the Contractor or the Company and all rules, regulations, ordinances, orders, notices and directives made thereunder which is applicable to the Properties and the business of the Company and the Contractor during the relevant Term or Licence Period, as the case may be; and
- (b) judicial and administrative interpretation of each of the foregoing.

Environmental Liabilities means, and shall include, liability under Environmental Laws in relation to Environmental Matters including without limitation monetary claim, award, fine, sums agreed by way of settlement, legal and/or consultants' costs, liability to make good, repair, reinstate, treat or clean up the Properties and/or any

liability to carry out remedial and/or other works under the provisions contained in the Environment Bill HC85 if and when enacted.

Environmental Matters means, and shall include, in relation to this Contract, the Properties and the business of the Company, LUL or the Contractor, all matters related to pollution or protection of the environment but including noise, emissions, deposits, discharges and releases of any Hazardous Substances or potentially Hazardous Substances into air, water, sewage systems and land, and the manufacture, processing, distribution, use, treatment, storage, disposal, transport, transmission and handling of any Hazardous Substances or potentially Hazardous Substances.

Environmental Regulatory Authority means any central or local government department or other statutory or EU agency, body, authority or organisation which has regulatory or enforcement powers in relation to Environmental Matters or under Environmental Laws.

EP means electro-pneumatic.

EPROM means erasable programmable read only memory.

Equipment means the plant, components and systems hardware, software (including software not specifically prepared by the Contractor in accordance with or in relation to this Contract), facilities, materials, goods, devices to be supplied, installed and commissioned by the Contractor in accordance with this Contract and anything else provided or utilised by the Contractor under, or in connection with the performance of its obligations under, this Contract (including, without limitation, anything included in the definition of Documentation) to ensure that the Trains and, from the Transfer Date

for the period during which the Contractor is required to provide the Existing Train Services, the Existing Trains, are capable of running on the Northern Line for the purposes of enabling the Company to discharge its obligations to LUL so as to enable LUL to operate and provide the railway service referred to in Clause 5.1.1 or (in respect of Existing Trains) Clause 5.1.2 to the extent required by this Contract:

- (a) including, without limitation, the New Equipment, the Further Equipment, the Trackside Equipment, the Trainborne Equipment and the Existing Equipment;
and
- (b) excluding the Excluded Depot Equipment, the Excluded Outstation Equipment and the Excluded Sidings Equipment.

Equipment Direct Lease means the direct lease dated 7 April 1995 between RBLM, AFM and ALSTOM in respect of certain equipment as amended from time to time (including, without limitation, as amended by the NLTSC Lease Amendment Agreement).

Equipment Element of the Usage Payments and ***Equipment Element*** mean that part of any Usage Payment which is identified in Schedule 9 as being attributable to the Trackside Equipment, the Trainborne Equipment (other than that specified in paragraph (a) of the definition of Trainborne Equipment), the Substantial Completion New Equipment and the Final Completion New Equipment (as adjusted or adjustable in accordance with this Contract).

Equipment Head Lease means the lease dated 7 April 1995 between RBLM, AFM and ALSTOM in respect of certain equipment as amended from time to time

(including, without limitation, as amended by the NLTSC Lease Amendment Agreement).

ERP means effective radiated power.

Escrow Agreement means the escrow agreement to be entered into pursuant to Clause 32.5 between the Contractor, the Company, LUL and NCC Escrow International Limited substantially in the form set out in Schedule 17 subject to such amendments as are required by NCC Escrow International Limited and agreed between the parties with the consent of LUL.

ETA means quantitative event tree analysis.

ETSI means the European Telecommunications Standards Institute.

EU means European Union.

European Standard means any standard issued by CENELEC from time to time.

Excluded Depot Equipment means, in respect of each Depot Lease, the items of equipment and other plant, machinery and apparatus referred to in paragraph 1.20 of the Particulars to that Depot Lease.

Excluded Existing Agreements means, in respect of each Depot Lease and Outstation Licence:

- (a) those agreements (if any) listed in paragraph 1.15.2 of the Particulars to that Depot Lease or Outstation Licence;

(b) all existing wayleaves, easements or licences relating to the passage of services or the Conduits affecting the Depot Property which is the subject of that Depot Lease or Outstation Property which is the subject of that Outstation Licence (whether or not so listed in paragraph 1.15.2 of such Particulars) granted by the Company or its predecessors to:

(i) any public or local authority or public utility company or other company carrying out the function of provision of gas, electricity, water, telecommunication, or other services; or

(ii) any other person.

Excluded Outstation Equipment means, in respect of each Outstation Licence, the items of equipment and other plant, machinery and apparatus referred to in paragraph 1.20 of the Particulars to that Outstation Licence.

Excluded Representation means in relation to LUL, LRT and/or TfL, any representation in any of the NLTSC Documents, which if proved to be incorrect would be a Supervening Event within Clauses 25.1.1(b)(i) or 25.1.1(c)(i).

Excluded Sidings Equipment means the items of equipment and other plant, machinery and apparatus referred to in paragraph 1.6 of the Particulars to the Sidings Licence.

Existing Agreements means, in respect of each Depot Lease and Outstation Licence and the Sidings Licence, those agreements (if any) listed in paragraph 1.15 of the Particulars to that Depot Lease or Outstation Licence or in paragraph 1.4 of the Particulars to the Sidings Licence.

Existing Depot Equipment means, in respect of each Depot Lease, the items of equipment and other plant, machinery and apparatus as were at the Depot Property which is the subject of that Depot Lease on the date thereof including, without limitation, those items listed in Part A of the seventh schedule to that Depot Lease and the asset schedule appended to such seventh schedule and any items (other than Equipment) which may be added to or substituted for such items at any time during the Term but excluding, for the avoidance of doubt, the Excluded Depot Equipment.

Existing Equipment means the Existing Depot Equipment, the Existing Outstation Equipment and the Existing Sidings Equipment.

Existing Outstation Equipment means, in respect of each Outstation Licence, the items of equipment and other plant, machinery and apparatus as were at the Outstation Property which is the subject of that Outstation Licence on the date thereof which are listed in Part A of the seventh schedule to that Outstation Licence and any items (other than Equipment) which may be added to or substituted for such items at any time during the Licence Period but excluding, for the avoidance of doubt, the Excluded Outstation Equipment.

Existing Sidings Equipment means, in respect of the Sidings Licence, the items of equipment and other plant, machinery and apparatus as were at the Sidings which is the subject of the Sidings Licence on the date thereof and any items (other than Equipment) which may be added to or substituted for such items at any time during the Licence Period but excluding, for the avoidance of doubt, Excluded Sidings Equipment.

Existing Train means any train which is of 1959 TS, 1962 TS or 1972 TS owned by LUL and formed part of LUL's fleet of trains on the Northern Line at the Transfer Date.

Existing Train Service Payments means the amounts payable by the Company to the Contractor after the Transfer Date in respect of the Existing Train Services calculated in accordance with Part E of Schedule 12 (as adjusted or adjustable in accordance with this Contract).

Existing Train Services means the services, work and activities to be carried out by the Contractor, to the extent provided for in this Contract, in, inter alia, inspecting, cleaning, maintaining, repairing, servicing, rectifying, and remedying defects in, the Existing Trains, and in offering Existing Trains for service to the Company in accordance with Clauses 5.1.2 and 5.2.2(a), the said services, work and activities being more particularly described in Schedule 6 and the other provisions of this Contract.

Existing Units means Units of Existing Trains

Existing VHF Train Radio means the train radio system in operation on the Company's Railway at the date of the Original Contract.

Expenditure Schedule means the expenditure schedule set out in Schedule 19 or, as the context requires, Schedule 19A.

Extended Tertiary Usage Period means, subject to earlier termination in accordance with the provisions of this Contract, the period from (and including) the day following

the last day of the Unextended Tertiary Usage Period until (and including) the last day of the Tertiary Usage Period.

Failure means the cessation of the ability of a device, functional unit of equipment or system to perform its intended function provided that:

(a) a temporary malfunction shall not, subject to paragraph (b) of this definition, be considered a Failure within this definition if:

(i) the malfunction is not in equipment performing a Vital Function; or

(ii) the device, unit of equipment or system will recover normal operation automatically following such malfunction; or

(iii) the operational performance of any Train or Existing Train is not affected; or

(iv) the malfunction is not apparent to a Train Operator or Operator and no fault indication is given; and

(b) a temporary malfunction shall be considered a Failure where the device, unit of equipment or system requires any form of manual reset to restore normal operation following such malfunction.

Failure Mechanism means the physical, chemical or other process which has lead to a Failure.

Failure Mode means one of the possible states of a faulty item for a given required function.

Fault Tolerant means that the relevant device, unit of equipment or system shall be designed to ensure that any Single Failure affects the minimum part of that device, unit of equipment or system and does not prejudice the ability of any Train or Trains or Existing Train or Existing Trains to continue normal service.

FDR means final design review.

FDS means functional design specification.

Feedthrough means interference in the track circuit signal fed through from abutting track circuits.

FHA means fault hazard analysis.

Final Acceptance of Delivery Date means the date on which the Project Manager issues the 106th Take Over Certificate or Qualified Take Over Certificate in respect of Trains.

Final Completion Enabling Works means the Morden Final Completion Enabling Works and the Golders Green Final Completion Enabling Works.

Final Completion Enabling Works Acceptance Tests means the tests to be carried out by the Contractor to determine whether the Final Completion Enabling Works comply with the specification set out in Part I of Schedule 6 and are ready for use on or in relation to the Northern Line and fit for the purposes of enabling the Company to discharge its obligations to LUL so as to enable LUL to operate and provide the railway service referred to in Clause 5.1.1 to the extent required by this Contract and any additional tests which the Project Manager may require the Contractor to carry

out to satisfy the Project Manager of such compliance and that the Final Completion Enabling Works are so ready and fit.

Final Completion New Equipment means the Morden Final Completion New Equipment and the Golders Green Final Completion New Equipment.

Final Leasing Date means 30 September 1999.

Final Train means the 106th Train to be delivered by the Contractor to the Company in accordance with Clause 8.1.1.

Final Train Radio Certificate means the certificate which shall be issued by the Project Manager pursuant to Clause 9.A.8, substantially in the form set out in Part X of Schedule 7, when the Project Manager is satisfied that the Final UHF Trunked Radio has completed and passed the Trackside Equipment Acceptance of Delivery Tests in respect thereof.

Final Train Radio Total Fixed Price has the meaning assigned to it in paragraph 9 of Section 1 of Part E of Schedule 10.

Final Transfer Scheme means a transfer scheme to be entered into pursuant to Section 409 of the GLA Act and pursuant to which all of LRT's shareholding in LUL will be transferred to TTL and all the rights, assets and liabilities of LRT under the Restructuring Guarantees and the NLTSC Restructuring Agreement will be transferred to TfL.

Final UHF Trunked Radio means the radio system (as described more fully in Part C of Schedule 6) to be provided by the Contractor pursuant to this Contract and the Optical Fibre Cable Network.

Finance Documents means the Purchase Agreement, the Further Equipment Purchase Agreement, the NL Purchase Agreement, the Trains Head Lease, the Equipment Head Lease, the Agreement to Sub-Lease, the Agreement to Sub-Sub-Lease and, once they have been entered into, the Sub-Lease and the Sub-Sub-Lease as amended (where relevant) by the provisions of the NLTSC Lease Amendment Agreement and the NLTSC Real Property Amendment Agreement.

Finance Parties (and ***Finance Party***) have the meaning assigned to them in the NLTSC Restructuring Agreement.

Finance Parties Guarantee means the guarantee and indemnity of even date herewith between LRT and the Finance Parties under which LRT agrees with the Finance Parties to guarantee the obligations of LUL under (inter alia) the Finance Parties Step-In Agreement.

Finance Parties Step-In Agreement means the agreement of even date herewith between LUL, the Finance Parties and the Company pursuant to which LUL agrees to assume the obligations of the Company under (inter alia) the Direct Transaction Documents in certain circumstances.

Finance Parties Support Agreements means the Finance Parties Guarantee and the Finance Parties Step-In Agreement.

Financial Indebtedness means, in relation to any person, any obligation for the payment or repayment of money, whether present or future, actual or contingent incurred as a result of:

- (a) monies borrowed or raised by such person;

- (b) any liability of such person under any debenture, bond note or other security;
- (c) any liability of such person under any acceptance credit facility, finance lease, deferred purchase consideration arrangement or any other agreement or instrument having the commercial effect of a borrowing or raising of money by such person; and
- (d) any guarantee, indemnity or other assurance against financial loss given by such person in respect of any of the foregoing;

provided that, for the purposes of this Contract, Financial Indebtedness shall not include:

- (i) any trade indebtedness incurred by such person in the normal course of business; or
- (ii) in relation to LUL and only during such period as LUL is owned by the Crown (as defined in Clause 25.1.1(a)I(i)), any amount owing to any party which is owned by the Crown;

First Train means the first Train to be delivered by the Contractor to the Company pursuant to Clause 8.1.1.

Fleet Contract Manager means the Company Employee appointed by the Company in accordance with paragraph 1.1.2 of Schedule 4 or such other Company Employee discharging the duties of that office from time to time.

FMEA means Failure Modes and effects analysis.

FMECA means Failure Modes, effects and criticality analysis.

FMLIC means filtered main line isolating cock.

Force Majeure Event means any of the events listed in Clause 21.1.1.

Forward means when the Controlling Position of a Train or an Existing Train is in the leading car and the Train or Existing Train is moving.

FTA means quantitative fault tree analysis.

Full Duplex means a channel that has the capabilities of transmitting data in both directions at the same time.

Full Load or **Fully Laden** has the same meaning as assigned to **Crush Load** or **Crush Laden** where the number of passengers is 1056.

Further Equipment means Equipment acquired by the Finance Parties pursuant to the Further Equipment Purchase Agreement.

Further Equipment Purchase Agreement means the purchase agreement dated 29 September 2000 between the Finance Parties and ALSTOM Transport Ltd.

Gap Jumper means a device used to enable the Traction Supply from an adjacent location to be used by a Train or an Existing Train if the Traction Supply to its collector shoes is unavailable.

Gapped means a car whose collector shoes are separated from the Traction Supply. This occurs quite normally when a Train or an Existing Train passes over gaps in the current rails. It is unusual for a car to remain Gapped for more than a few seconds whilst in service. A whole Train or Existing Train can become Gapped if it should run on to a dead section or on to a Shed Road in a depot or outstation.

GLA Act means the Greater London Authority Act 1999.

Golders Green Certificate of Final Completion means a certificate which shall be issued by the Project Manager pursuant to Clause 10.10, substantially in the form set out in Part CC of Schedule 7, when the Project Manager is satisfied that the Golders Green Final Completion Enabling Works have been completed and have passed the Final Completion Enabling Works Acceptance Tests and any final test that may be prescribed by statute.

Golders Green Final Completion Enabling Works means the works specified in paragraph 3 of Part I of Schedule 6 (other than those items marked # in such paragraph that the Contractor is unable to carry out prior to the Enabling Works Target Completion Date for the issue of the Golders Green Certificate of Final Completion due to constraint imposed by the scope of work required under this Contract) together with any part of the Golders Green Substantial Completion Enabling Works that is not carried out prior to the issue of the Certificate of Substantial Completion.

Golders Green Final Completion New Equipment means those items of New Equipment listed in Column 1 of the table set out in Schedule 20 that have set out, opposite such item, the letter G in Column 2, the letters FC in Column 3 and the letter E in Column 4, of such table together with any part of the Golders Green Substantial Completion New Equipment that is not delivered and/or installed prior to the issue of the Certificate of Substantial Completion.

Golders Green Substantial Completion Enabling Works means the works specified in paragraph 2 of Part I of Schedule 6.

Golders Green Substantial Completion New Equipment means those items of New Equipment listed in Column 1 of the table set out in Schedule 20 that have set out, opposite such item, the letter G in Column 2, the letters SC in Column 3 and the letter E in Column 4, of such table.

Government means the present or any succeeding government acting in the United Kingdom, any department thereof or any body, agency or instrumentality representing, or established under the authority of, such government, or any local government acting therein.

Ground Conditions means any ground or sub-soil condition including, without limitation, any environmental or archaeological risk associated therewith.

GRPh means glass reinforced phenolic.

Guarantees means, collectively, the AUKHL Guarantee and the AH Guarantee and ***Guarantee*** means either one of them.

Guarantors means, collectively, ALSTOM Holdings and AUKHL and ***Guarantor*** means either one of them.

Hand Back Date has the meaning assigned to it in paragraph 1.1 of Part II of Section 1 of Part B of Schedule 10 save that the reference in such paragraph to "any Leased Trainset re-delivered in accordance with Clause 19" shall be deemed to be a reference to "termination of this Contract in respect of a New Train".

Hand Back Extension Period means a period of not more than 5 years, following the expiry or non-renewal of the Primary Usage Period, the Secondary Usage Period or the Unextended Tertiary Usage Period or upon termination by the Company pursuant

to Clauses 26.1.1, 26.2.1 or 28.1, of the Contractor's obligation under this Contract to provide all the Trains, for which the Company may elect to extend the Contract Duration in accordance with the terms of this Contract.

Handshaking means any method of control over a data link such that the sending end only transmits data when the receiver end indicates that it is in a state to receive that data.

Hazan means system risk analysis.

Hazardous Substances shall mean and include all pollutants, contaminants and hazardous, flammable and toxic, explosive, corrosive or caustic substances or otherwise hazardous substances (including petroleum, its derivatives, by-products and other hydrocarbons) or any substance having constituent elements displaying any of the foregoing characteristics, materials and Waste whether solid, liquid, gaseous or vapour and whether alone or in combination with any substances and whether or not such pollutant, contaminant, substances, material or Waste is referred to specifically in or regulated under any of the Environmental Laws.

HAZOP means hazard and operability study.

High Integrity Component means any component affecting safety and life, the failure of which would be classified as critical in accordance with Standard RSE/STD/022 - Pt 2 (as referred to in paragraph 6.2 of Part J of Schedule 6) and **High Integrity System** and **High Integrity Function** shall have corresponding meanings.

High Speed Circuit Breaker means a Circuit Breaker which has the ability to limit the fault current before it reaches its prospective value and before it reaches a level dangerous to the equipment it is protecting.

HMRI means Her Majesty's Railway Inspectorate, any statutory authority having the power to investigate accidents or any successor thereto.

Holding Company has the meaning assigned to it in section 736 of the Companies Act 1985.

HVAC means heating, ventilation and air conditioning.

I/O means input/output.

IEC means the International Electrotechnical Commission.

IHA means interface hazard analysis.

Immunity means the ability of a device, unit of equipment or system to perform in the presence of an Electromagnetic Disturbance without degradation of quality, safety, performance or loss of function.

Improper Use means, in respect of any Train or Existing Train or item of Equipment or the Enabling Works, any misuse, abuse or other use other than in accordance with the Rule Book, the Engineering Instructions, the Contract Safety Conditions, any other LUL or Company procedures or regulations published from time to time and/or any relevant specification, operating manuals or instructions provided that:

- (a) where required under this Contract, the same have been provided to the Company by the Contractor in accordance with the Contract; and

(b) there shall be deemed not to have been any Improper Use in any case where, in respect of any Train or Existing Train or item of Equipment or the Enabling Works, the same has been used in accordance with the Rule Book, the Engineering Instructions, the Contract Safety Conditions and/or any other LUL or Company procedures or regulations notwithstanding that it has not been used in accordance with the relevant specification, operation manuals or instructions.

Incident includes, without limitation, any event that results in, or could have resulted in, injury to persons, loss of, or damage to, property or, loss to process and/or loss of service.

Incident Investigation Report or **IIR** means the report prepared by either the Company or LUL or both following the occurrence of an Incident that catalogues the systematic examination of an Incident and the circumstances related to that Incident and the primary purposes of which are to determine the causes of such Incident and to assist the Company in developing controls to prevent reoccurrence.

Included Existing Agreements means, in respect of each Depot Lease and Outstation Licence and the Sidings Licence, those agreements (if any) listed in paragraph 1.15.1 of the Particulars to that Depot Lease or Outstation Licence or in paragraph 1.4.1 of the Particulars to the Sidings Licence.

Indexation Factor has the meaning assigned to it in paragraph 6.3.1 of Part A of Schedule 10.

Induced Interference means interference due to a magnetic coupling between the interfering source and the device, unit of equipment or system.

Infraco means any one of Infraco Sub-Surface Limited, Infraco BCV Limited, or Infraco JNP Limited and ***Infracos*** means, collectively, all of them.

Initial Transfer Scheme means a transfer scheme entered into on the Initial Vesting Date pursuant to sections 9(6) and 27 of the London Regional Transport Act 1984 as amended by the GLA Act and pursuant to which, inter alia, LRT transferred to the Company all of LUL's property, rights and liabilities which previously formed part of the business of the Jubilee, Northern and Piccadilly Lines (other than in respect of the NLTSC).

Initial Vesting Date means the date being 1 April 2000 on which the Initial Transfer Scheme took effect.

Intellectual Property Rights means any registered or unregistered letters patent, patented articles, designs, trade marks, service marks, trade names, copyright in all specifications, drawings and technical descriptions, software, inventions whether or not capable of protection by patent or registration, rights in commercial information and technical information, including know-how, research and development data, manufacturing methods and data, specifications and drawings, formulae, algorithms, prototypes and research materials, any applications for the grant of assets of the foregoing descriptions and any other intellectual property rights connected with the use of the Trains, the Existing Trains and the Equipment and/or provision of the Services or the Existing Train Services and/or carrying out of the Enabling Works in accordance with or in relation to this Contract or necessary for the performance of this

Contract and in particular for the Company's use and operation of the Trains, the Existing Trains and the Equipment for the purposes of enabling the Company to discharge its obligations to LUL so as to enable LUL to operate and provide the railway service referred to in Clause 5.1.1 or (in respect of Existing Trains) Clause 5.1.2.

Interference Mechanism means any of the following interference mechanisms, namely Radiated Interference, Induced Interference, Conducted Interference, Capacity Coupled Interference and Electrostatic Discharge.

Interference Monitor means a device which detects and/or prevents Chopper Equipment operating if stated electrical interference levels from such equipment exceed specified limits.

International Standard means any standard issued by the ISO from time to time.

ISO means the International Standards Organisation.

Isolating Contactor means a device capable of providing appropriate isolation which shall be able to carry a fault until the associated protection device operates but which shall not be used to break current under any operating condition.

ITU-R means the International Telecommunications Union - Radio Telecommunications.

ITU-T means the International Telecommunications Union - Telecommunications.

Joint Environmental Audit shall mean the Stage I Environmental Audit (unless otherwise agreed by the Company and the Contractor) to be carried out by

Environmental Consultants at the end of the Term or Licence Period at the joint expense of the Company and the Contractor prior to the Contractor returning the Properties to the Company or LUL, as the case may be.

LCD means liquid crystal display.

LEB means the London Electricity Board.

LED means light emitting diode.

LFDA means the London Fire & Civil Defence Authority.

Licence Period means, in respect of each Outstation Licence and the Sidings Licence, the period created by, or the period of, that Outstation Licence or the Sidings Licence, respectively, as stated in the Particulars thereto and references to the determination of the Licence Period shall be construed as references to any termination, determination, expiry, surrender or other ending of that Licence Period.

Line Breaker means a Circuit Breaker which may have a non-integral electro-mechanical overload relay, or similar device as its overcurrent trip mechanism, but has the switching endurance of a Line Contactor.

Line Contactor means a switching device capable of clearing non-overload maximum line currents and providing appropriate isolation, which is capable of switching frequently during a Train's or an Existing Train's daily service, and shall be capable of making onto a fault.

Line Controller means the LUL Employee(s) responsible for the immediate operation of the Northern Line who is located in the Northern Line Main Control Centre with

sufficient communication facilities to monitor and control the operation of the Northern Line.

Line Voltage means the voltage measured at a Train's or an Existing Train's collector shoes derived from the Traction Supply.

Longitudinal Redundancy Check or **LRC** means a transmission error checking system whereby identical algorithms at both transmission and reception points generate additional characters, called block check characters. The validity of the message transmission is shown by proving that both sets of block check characters are identical.

London Regional Transport or **LRT** means London Regional Transport as constituted under the London Regional Transport Act 1984.

Look-Out Man means a person certificated by the Company or LUL to provide Protection (as defined in the Rule Book) and warn staff who may be exposed to danger from moving trains or vehicles.

LRT Transfer Date means the date after the PPP Transfer Date on which the Final Transfer Scheme shall take effect.

LSC means local system controller.

LSNH and **LSOH** and **LZNH** mean low smoke no halogen.

LUL Continuing Obligations means the obligations contained in or referred to in Schedule 5 of the NLTSC Restructuring Agreement together with the obligations

contained in or referred to in Clause 14 of the NLTSC Real Property Amendment Agreement.

LUL Employee means any authorised agent, servant or person in the employment of LUL or any other person acting with the authority of LUL (including without limitation, the Connect Contractor).

LUL Timetable has the meaning assigned to it in Clause 5.2.1(b).

LVAC means low voltage alternating current.

Maintenance Company means ALSTOM Transport Service Ltd (formerly known as ALSTOM Train Services Ltd and, prior to that, GEC Alsthom Railway Maintenance Services Limited).

Materials Inventory means the document to be produced and maintained by the Contractor for the Contract Duration that provides information in respect of the materials comprising the Trains and the Equipment and the form of which is specified in paragraph 4.10.1.2.7 of Part A of Schedule 6.

Mayor of London shall mean such member of the Greater London Authority as elected to that office in accordance with Part I of the Greater London Authority Act 1999, Chapter 29 as amended from time to time.

MCB means miniature Circuit Breaker.

MCS means the master control switch which is used to select the state and mode of a Train.

MDT means maintainability demonstration testing.

Mean Time Between Failures or **MTBF** means the mean time between Failures.

Mean Time Between Right Side Failure or **MTBRSF** means the mean time between Right Side Failures.

Mean Time Between Wrong Side Failure or **MTBWSF** means the mean time between Wrong Side Failures.

MLIC means main line isolating cock.

MLPS means main line pressure switch.

MLPSIS means main line pressure switch isolating switch.

month means a calendar month.

Morden Certificate of Final Completion means a certificate which shall be issued by the Project Manager pursuant to Clause 10.10, substantially in the form set out in Part CC of Schedule 7, when the Project Manager is satisfied that the Morden Final Completion Enabling Works have been completed and have passed the Final Completion Enabling Works Acceptance Tests and any final test that may be prescribed by statute.

Morden Final Completion Enabling Works means the works specified in paragraph 5 of Part I of Schedule 6 (other than those items marked # in such paragraph that the Contractor is unable to carry out prior to the Enabling Works Target Completion Date for the issue of the Morden Certificate of Final Completion due to constraints imposed by the scope of work required under this Contract) together with any part of

the Morden Substantial Completion New Equipment that is not delivered and/or installed prior to the issue of the Certificate of Substantial Completion.

Morden Final Completion New Equipment means those items of New Equipment listed in Column 1 of the table set out in Schedule 20 that have set out opposite such item, the letter M in Column 2, the letters FC in Column 3 and the letter E in Column 4, of such table together with any part of the Morden Substantial Completion Enabling Works that is not carried out prior to the issue of the Certificate of Substantial Completion.

Morden Substantial Completion Enabling Works means the works specified in paragraph 4 of Part I of Schedule 6.

Morden Substantial Completion New Equipment means those items of New Equipment listed in Column 1 of the table set out in Schedule 20 that have set out, opposite such item, the letter M in Column 2, the letters SC in Column 3 and the letter E in column 4, of such table.

Mortgage means the chattel mortgage of the NL Trains granted by the Contractor in favour of LUL on the date of the Original Contract substantially in the form set out in Schedule 16.

MSC means main system controller.

MSS means LUL's existing maintenance support system which is depot based and which stores and collates fault information, assists Depot staff in fault finding and routine maintenance and provides management information.

MTTR means mean time to repair.

Mute means to reduce in sound volume, but not completely silence.

NAMAS means the National Measurement Accreditation Service.

NDT means non-destructive testing.

Net Insurance Proceeds means, in respect of the relevant Train or Car forming a part of that Train, the amount of property insurances received by the person entitled thereto pursuant to the contracts of insurance placed in respect of that Train (or Car forming a part of that Train) in accordance with Clause 22, the terms of the Trains Head Lease or, as the case may be, the terms of the Trains Direct Lease following the occurrence of a Total Loss or Partial Loss of that Train (or Car forming part thereof) provided that for the purpose of clauses 23.5(b) and 23.5(d) and 23.10, there shall be deducted from the relevant amount the amounts contemplated as being and actually deducted therefrom by the Finance Parties in the definitions of **Net Insurance Proceeds** in the Trains Head Lease and the Trains Direct Lease for the purposes of construing that term in those Clauses.

New Equipment means all items of Equipment (other than the Trackside Equipment, the Trainborne Equipment and the Existing Equipment), provided or utilised by the Contractor to enable it to comply with its obligations under this Contract and the Real Property Documents which shall include, but not be limited to, the Substantial Completion New Equipment and the Final Completion New Equipment.

New Trains means the 6-Car trains provided or to be provided by the Contractor in accordance with this Contract other than the NL Trains and the Existing Trains.

NL Purchase Agreement means the sale and purchase agreement entered into on 7 April 1995 between the Contractor and the Train Manufacturer.

NL Trains means the 6-Car trains provided or to be provided by the Contractor in accordance with this Contract that are to be owned by the Contractor and are to be the subject of the Mortgage.

NLTSC means, collectively, the contractual arrangements which are evidenced by the documents dated 7 April 1995 between (inter alia) LUL, the Contractor and the Finance Parties which record the terms of the transactions described in Recital (A) of the NLTSC Restructuring Agreement and certain other matters ancillary thereto, including (but not limited to) those documents more particularly identified in Schedule 1 of the NLTSC Restructuring Agreement as such documents have been amended in accordance with their terms and as further amended by the Amendment Documents and the NLTSC Restructuring Agreement.

NLTSC Documents means each of the documents that contain the contractual arrangements that comprise the NLTSC, the NLTSC Restructuring Agreement, NLTSC Lease Amendment Agreement, the NLTSC Real Property Amendment Agreement, the Finance Parties Support Agreements and the ALSTOM Support Agreements.

NLTSC Lease Amendment Agreement means the agreement of even date herewith between LUL, the Company, the Contractor and the Finance Parties which amends the Trains Direct Lease, Equipment Direct Lease, Trains Head Lease and Equipment Head Lease upon the occurrence of the Effective Time or as otherwise provided therein.

NLTSC Real Property Amendment Agreement means the agreement of even date herewith between (inter alia) LUL, the Company, the Contractor and the Finance Parties which amends (amongst other things) the Real Property Documents.

NLTSC Residual Agreement means the agreement of even date herewith between (inter alia) LUL, the Company, the Contractor and the Finance Parties relating to the amendment upon the occurrence of the Effective Time (or as otherwise provided therein) of certain documents which comprise part of the NLTSC.

NLTSC Restructuring Agreement means the restructuring agreement dated on or about the date of this Contract between, inter alia, the Company, the Contractor, LUL, LRT, the Finance Parties and the Guarantors.

Nominating Authority means the President or Vice President or other duly authorised officer of the London Court of International Arbitration.

Non Vital means having the quality of not affecting safety in the event of Failure.

Normal Modes of Operation means all operating states of a fault free Train, Existing Train or Equipment.

Northern Line means the line upon which LUL operates the timetabled customer metro service known as “Northern Line”, as more particularly described in Schedule 6.

Northern Line Business Unit or ***NLBU*** means the management team and staff who have responsibility for the Passenger service on the Northern Line including the running of trains and stations and the maintenance thereof and of the infrastructure.

Northern Line Emergency Control Centre means the location on the Northern Line of the remote set of signalling and communications equipment and which is currently situate at Warren Street Station, Euston Road, London NW1 2HA.

Northern Line Main Control Centre means the location on the Northern Line of the centralised signalling and communications equipment within which location there is a room containing the signalling and control human interfaces for those personnel who are required to manage the operations and communications of the Northern Line and which is currently situate at 72 Euston Street, London NW1 2HA.

Northern Line Restructuring means the restructuring of the Original Contract to reflect the proposals to establish a public private partnership for London's Underground Network.

Northern Line Transfer Scheme means a transfer scheme pursuant to sections 9(6) and 27 of the London Regional Transport Act 1984 as amended by the GLA Act pursuant to which LRT will transfer all of LUL's property, rights in and liabilities under the NLTSC (other than (a) the Depot Leases and the other Real Property Documents and the other documents and agreements listed in Schedule 2 to the Northern Line Transfer Scheme, (b) the LUL Continuing Obligations, (c) such matters as are addressed in Schedule 12 Parts A-D of the Original Contract and (d) LUL's payment obligations under the NLTSC) to the Company.

Notice of Adjudication means an notice given by a party to a Dispute to the other party or parties thereto requiring reference of a Dispute to an Adjudicator in accordance with clause 47.3 of this contract. Every Notice of Adjudication shall contain:

- (a) a statement indicating under which clause or clauses of the contract the Dispute arises; and
- (b) a concise summary of the nature and background of the Dispute and the issues arising and a statement of the relief or remedy claimed.

Notice of Company Proposed Variation means a notice delivered by the Project Manager to the Contractor pursuant to paragraph 8.2.1 of Schedule 4, substantially in the form set out in Part QQ of Schedule 7.

Notice of Construction Act Adjudication means a notice given by a party to a Construction Act Dispute to the other party thereto requiring reference of a Construction Act Dispute to an Adjudicator in accordance with Clause 47.5 of this Contract. Every Notice of Construction Act Adjudication shall contain:

- (a) a statement indicating under which Clause or Clauses of the Contract the Construction Act Dispute arises; and
- (b) a concise summary of the nature and background of the Construction Act Dispute and the issues arising and a statement of the relief or remedy claimed.

Notice of Contractor Proposed Variation means a notice delivered by the Contractor to the Project Manager pursuant to paragraph 8.4.1 of Schedule 4, substantially in the form set out in Part SS of Schedule 7.

Notice of Required Variation means a notice delivered by the Project Manager to the Contractor pursuant to paragraph 8.3.1 of Schedule 4, substantially in the form set out in Part RR of Schedule 7.

Notice of Variation means a Notice of Required Variation, Notice of Company Proposed Variation or Notice of Contractor Proposed Variation.

Notices means each of the notices of assignment given, or as the context may require, to be given pursuant to the Security Assignment, in each case in the form set out in the schedules to the Security Assignment or in such other form as the Finance Parties may agree.

ODL means operational data link.

Operator means any Company Employee or LUL Employee employed in operational duties on or in relation to the Northern Line (including, for the avoidance of doubt, any Train Operator).

Operator's Handbook means the manuals to be produced and maintained by the Contractor in accordance with paragraph 7.3 of Schedule 13.

Operating Manual means a manual prepared by the Contractor relating to the operation of the Trains and/or any Equipment, the requirements of which are set out in paragraph 7.2 of Schedule 13.

Optical Fibre Cable Network and **OFCN** have the meaning assigned to them in paragraph 1 of Section 5 of Part E of Schedule 10.

OPO(T) means one person operation (tube).

ORE means the Office for Research and Experiments.

Original Contract means the Usage Contract TT250 dated 7 April 1995 between LUL and GEC ALSTHOM NL Service Provision Limited.

Original Documents means the Original Contract, the Real Property Documents, the Guarantees, the Direct Agreements, the Finance Documents and the letter on or about the date of the Original Contract from the Train Manufacturer to the Contractor and LUL.

Original NLTSC has the meaning given to NLTSC but excluding for the purposes of this definition any amendments effected to the NLTSC (a) on or after the Effective Time and/or (b) pursuant to the Restructuring Documents.

OSI means open systems interconnection.

Outstation Licences means the licences entered into by the Contractor and the LUL in the form of the Draft Outstation Licences pursuant to the Agreement to Lease/Licence.

Outstation Properties and **Outstations** mean the Outstation Property which is the subject of the Outstation Licences, namely the outstations at Edgware, Highgate and High Barnet.

Outstation Property means, in respect of each Outstation Licence, the premises specified in paragraph 1.5 of the Particulars to that Outstation Licence (subject to the ninth schedule to that Outstation Licence, if applicable) and includes:

- (a) all such buildings, structures, the Contractor's Conduits and other works as are at the Outstation Property on the date of that Outstation Licence and any alterations or additions to such buildings, structures, Contractor's Conduits or other works; and

- (b) the Existing Outstation Equipment, the New Equipment and the Trackside Equipment located at the Outstation Property from time to time;

but not anything above Airspace Level or below Surface Level and where the context so admits Outstation Property includes any part of the items referred to above but excludes the Excluded Outstation Equipment.

Outstation Repair/Renewal means, in respect of each Outstation Licence, in relation to the relevant item of Existing Outstation Equipment or Trackside Equipment at the Outstation Property which is subject to that Outstation Licence, the carrying out of:

- (a) any work required to keep that item in no worse a state than evidenced by the Condition Schedule;
- (b) any work required so that that item is safe for operation and/or use and so that all train movements at that Outstation Property can be conducted safely and efficiently and in compliance with the requirements of any Act for any lawful purpose permitted by that Outstation Licence;
- (c) any renewal that shall be undertaken where this is reasonably necessary but only to the extent required for the Contractor to comply with its obligations under paragraphs (a) and (b) of this definition;
- (d) any treatment, operation or work of a routine and foreseeable nature whether necessary at regular or irregular intervals which is required by any current statutory or other code of practice or by any current railway industry standard practice or which is otherwise known (in all the circumstances) to be required from time to time to facilitate the efficient and safe operation and/or use of the

relevant item in compliance with the requirements of any Act for any lawful purpose permitted by that Outstation Licence;

- (e) the replacement of elements which require the work referred to in paragraph (d) of this definition regularly or are designed for replacement;
- (f) or arranging of, any inspection or certification required by an Act or for the purpose of any treatment, operation or works described in paragraphs (d) and (e) of this definition; and
- (g) the carrying out of all treatment, operations and works which are recommended in a current manufacturer's operating or maintenance manual at the intervals and in the manner so recommended;

but

- (i) does not include the renewal of that item as long as repair may still reasonably be undertaken and the cost of performance by the Company of its obligations under that Outstation Licence is not in consequence increased above a reasonable level and the obligation of any party under that Outstation Licence to carry out Outstation Repair/Renewal in respect of that item shall be construed accordingly;
- (ii) provided that the prescription of a minimum Outstation Repair/Renewal standard shall not preclude any party to that Outstation Licence from performing its obligations to a higher standard if it so desires.

O&SHA means operating and support hazard analysis.

PA means public address.

PABX means private automatic branch exchange.

PAC means the platform ATO communicator which allows data communication to take place between the Train mounted ATO equipment and the station mounted ATS equipment when a Train has stopped at a station.

Parent Letters means the letters dated 7 April 1995 to LUL from RBS and Midland Bank plc relating to their ownership of the Finance Parties.

Partial Loss has the meaning assigned to it in Clause 23.7.

Passenger means a member of the travelling public, a person, an item of baggage, goods or mail or any other thing carried or capable of being carried on Trains or Existing Trains operating on the Northern Line.

Passive means non-active, not requiring an external power supply.

PC means personal computer.

PCB means printed circuit board.

PDH means plesiochronous digital hierarchy.

PDM means platform display monitor.

PEA means Passenger emergency alarm.

PEAU means Passenger emergency alarm unit.

Permanent Way means the track and associated items in the Depots, Outstations and Sidings including, but not limited to, the running rails, the points and switches (including their operating mechanisms and operating supply cables or pipes or levers), the sleepers (either wooden or concrete), the chairs (including keys and retaining screws) or clips, the conductor rails, the porcelain insulators (including fastening clips and retaining screws), the insulated block joints, the signalling cables and/or wires connected to the running rails, the traction feeder cables and associated connectors (up to and including the first section switch from the sub-station feeder cables), the drainage structures and fittings, and ballast and earth sub-strata.

PHA means preliminary hazard analysis.

Planning Acts means the Planning Acts as defined in section 336 of the Town and Country Planning Act 1990 and the Planning and Compensation Act 1991 and any other Act of a similar nature.

Police Control Centre means the British Transport Police network operations and communication control room which is located at 55 Broadway, London SW1H 0DB.

Possession means control over a designated section of the Company's Railway on to which the unauthorised movement of a Train or an Existing Train is prevented by the application of the rules in Section P of the Rule Book.

Possession Master means a person certified by the Company or LUL to take Possession for the purpose of carrying out engineering and similar work.

Post-Delivery Period means the period from (and excluding) the last day of the Delivery Period to (and including) the last day of the Primary Usage Period.

Potential Delay Event has the meaning assigned to it in Clause 12.1.2.

PPP Contract means the contract to be made between LUL and the Company for the provision of infrastructure and related services for the Jubilee, Northern and Piccadilly Lines as the same may be amended from time to time.

PPP Transfer Date means the date after the Initial Vesting Date on which (a) the Northern Line Transfer Scheme shall take effect; and (b) LUL will dispose of all its shareholding in the Company (other than a special share to be retained by LUL) to, or to the order of, the successful bidder as private partner under the public private partnership in respect of the Jubilee, Northern and Piccadilly Lines.

Primary Usage Period means, subject to earlier termination in accordance with the provisions of this Contract, the period of 20 years from (and excluding) the last day of the month in which the date on which the Project Manager issues the first Take Over Certificate or Qualified Take Over Certificate in respect of a Train occurs to (and including) the earlier of the last day of the month in which the date which is 20 years after such date occurs and the commencement date of any Hand Back Extension Period.

Project Documents has the meaning assigned to such term in the NLTSC Restructuring Agreement.

Project Manager means the Company Employee appointed by the Company as its project manager or such Company Employee for the time being discharging the duties of that office and, following the notification to the Contractor that the Project Manager's duties and responsibilities have been assumed by the Fleet Contract

Manager pursuant to paragraph 1.1.2 of Schedule 4, references in this Contract to the Project Manager shall be deemed to be references to the Fleet Contract Manager and the provisions hereof shall be interpreted and applied accordingly.

PROM means programmable read only memory.

Properties means the premises comprised in all or any of the Depot Properties, the Outstation Properties, the Accommodation Properties or the Sidings.

Protection Master means any person assigned the responsibility of ensuring protection of any personnel on or about the Northern Line.

PSU means power supply unit.

Purchase Agreement means the purchase agreement entered into on 7 April 1995 between the Train Manufacturer and the Finance Parties.

Push Out means when a Train or an Existing Train becomes stalled and the running circumstances permit, a following Train or an Existing Train moves up and couples to the trailing end of the stalled Train or Existing Train and propels the stalled Train or Existing Train which does not have its parking brakes applied to a destination determined by the Line Controller.

Push Through has the same meaning as assigned to the expression **Push Out** except that the parking brakes on the stalled Train or Existing Train are applied.

Put and Call Option Agreement means the agreement entered into on 7 April 1995 between the Finance Parties and LUL.

PVC means polyvinylchloride.

PWM means pulse width modulation.

QA means quality assurance.

QAP means quality assurance programme.

Q Type Relay means a special relay designed to fail-safe signalling standards which is used as an interface between the ATP equipment and other Train circuitry.

Qualified Take Over Certificate means a certificate issued by the Project Manager substantially in the form set out, in relation to a Train, in Part M, and, in relation to the Trackside Equipment, in Part S of Schedule 7.

Quarter Date means paragraph 1.1 of Part II of Section 1 of Part B of Schedule 10.

Radiated Interference means any unintentional electromagnetic coupling.

Radio means the Enhanced Existing VHF Train Radio system, the Final UHF Trunked Radio system or any replacement therefor, as the context may require.

Radioactive Substances shall mean any substance defined as radioactive in the Radioactive Substances Act 1993.

Ramped Off means a controlled rate of change of a signal level or system parameter from an existing level to fully off and **Ramped On** shall be construed accordingly.

RAMS means reliability, availability, maintainability and safety.

RBLM means RB Leasing (March) Limited.

RBR means remote brake release.

RBS means The Royal Bank of Scotland plc.

RDT means reliability demonstration testing.

Real Property Documents means, collectively, the Agreement to Lease/Licence, the Depot Leases, the Outstation Licences, the Accommodation Licences, the Call Point Staff Accommodation and Facilities Licence and the Sidings Licence as amended by the NLTSC Real Property Amendment Agreement and the NLTSC Restructuring Agreement.

Rejection Notice means a notice issued by the Project Manager substantially in the form set out, in relation to a Train, in Part N, and, in relation to the Trackside Equipment, in Part T, of Schedule 7.

Referring Party means, in relation to a Dispute, the party who wishes to invoke the relevant provisions of clauses 47.1 to 47.6 of this Contract.

Relevant Document means the relevant one of the Draft Depot Leases, the Draft Outstation Licences, the Draft Accommodation Licence and the Draft Sidings Licence.

Relevant Transfer Date has the meaning assigned to it in Clause 3.8 of the NLTSC Restructuring Agreement.

Remedial Works means any works to the Properties required or carried out by any Environmental Regulatory Authority or as a result of third party action or to forestall any such action or requirement which is reasonably anticipated to remedy any actual or continuing or potential breaches of Environmental Laws or Environmental Approvals or to remedy the state of land or controlled waters (as defined in s104(1)

Water Resources Act 1991) and shall include works to remove, clean up, remedy, treat, reinstate, abate, contain or ameliorate the presence or effect of Hazardous Substances or Radioactive Substances or any other Environmental Liabilities including any liability in relation to contaminated land under the Environmental Bill HC85 if and when enacted.

Replacement Equipment means any item of equipment installed by LUL or an LUL Employee (including the Connect Contractor) as a replacement for any Trainborne Equipment.

Required Variation has the meaning assigned to it in paragraph 8.1.1(a) of Schedule 4.

Resolution means a *decision*, opinion, instruction, direction, certificate or valuation of a Project Manager under the Contract.

Restructuring Documents means the Acknowledgements, the Amendment Documents, the Notices, the NLTSC Restructuring Agreement, the Finance Parties Support Agreements, the ALSTOM Support Agreements and the Security Assignment.

Restructuring Guarantees means the ALSTOM Guarantee and the Finance Parties Guarantee.

Return Condition means, in respect of a Train or an item of Equipment, in no worse condition in any material respect than that Train or that item of Equipment on the date on which the Contractor's obligation to carry out the Services ceases as a result of the

Company exercising its rights under Clause 6.6.2 (save in respect of fair wear and tear).

Reverse means when the Controlling Position of a Train is not in the leading car and the Train is moving.

Reversing means if, after a Train or an Existing Train has been driven into a terminal station, Depot Property, Outstation Property or a siding, it is necessary for the Train or Existing Train to be driven out in the opposite direction.

RF means radio frequency.

RFI means radio frequency interference.

RGM means reliability growth management.

RIA means the Railway Industry Association.

Right Side Failure or **RSF** means any Failure that could cause a Vital Component, Vital Function or Vital System to fail to a safe condition.

RM means restricted manual.

RME means Railway Mechanical Engineering.

RMS means root mean squared.

ROM means read only memory.

Round Train Circuit is one of a Train's circuits having a Vital Function which is checked by the Safety Brake Circuit, and is part of the Train's safety proving sub-

system the function of which is to prove that a Train formation is complete by establishing end to end electrical continuity through wiring and devices which inherently prove their freedom from false or defective elements to check the correct setting of all couplers, the correct settings of the state of the Train at all Positions and the status of particular safety devices (including emergency stop devices at all Positions).

RSE means Rolling Stock Engineering.

RSS means root sum of square.

Rule Book means LUL's rule book as in effect at the date of this Contract and a copy of which is in the possession of the Contractor as amended from time to time by LUL or the Company (including, without limitation, by any LUL published traffic circulars) and notified in writing by the Company to the Contractor.

Rules of Engagement means the rules set out in Part A of Schedule 3 as amended or revised from time to time by the Company or LUL and notified in writing by the Company or LUL to the Contractor.

RX means receive.

S&CSE means Signals and Control Systems Engineering.

Safety Brake Circuit means the circuit which electrically checks Vital Components and certain circuits of a Train which are of Vital Function, has control of the Train's emergency brake and is duplicated and is part of the Train's safety proving sub-system.

Safety Standards means the provisions of this Contract relating to safety including but not limited to the procedures, legislation and instructions referred to in Schedule 8.

SAP means system assurance programme.

SAPB means spring applied parking brake.

SCADA means supervisory control and data acquisition.

SCIL means safety critical items list.

SDH means synchronous digital hierarchy.

Secondary Usage Period means, subject to earlier termination in accordance with the provisions of this Contract, the period of 10 years from (and including) the day following the last day of the Primary Usage Period to (and including) the earlier of the last day of the month in which the date which is 10 years after such day occurs and the day prior to the commencement date of any Hand Back Extension Period.

Security Assignment means the security assignment dated 7 April 1995 granted by the Contractor in favour of the Company substantially in the form set out in Schedule 21 except in the case of the definitions of (1) Acknowledgement, (2) Restructuring Documents, and (3) Notices, where it means an assignment and charge by way of security of even date herewith between the Contractor and the Finance Parties in respect of certain of the Contractor's rights under the Project Documents.

Senior Management Review and **SMR** mean the investigation process arising out of the occurrence of serious incidents, such process being more particularly described in section 2.5 of the Contract Safety Conditions.

Senior Representatives means representatives of the parties to a Dispute at senior executive level appointed in accordance with Clause 47.2 of this contract.

Service Failure means any Failure which, while a Train or an Existing Train is in service, causes an Operator or another of the Company's Employees to isolate, adjust, repair or modify any Train or Existing Train system or sub-system, or vary their expected work by detrainning Passengers, in either case, curtailing a Train's or Existing Train's scheduled duty or implementing any form of non-routine procedure and each Service Failure shall be attributable to its original cause and not to any consequential Failure.

Service Performance Failure has the meaning assigned to it in paragraph 1 of Part C-3 of Schedule 10.

Services means the services, work and activities to be carried out by the Contractor in, inter alia, supplying, testing, commissioning, installing, inspecting, cleaning, maintaining, supporting, repairing, servicing, rectifying, and remedying Defects in, the Trains, the Equipment, the Enabling Works, the Depots and the Outstations, and in offering Trains for service to the Company or to LUL for and on behalf of the Company in accordance with Clauses 5.1.1 and 5.2.2(a), the said services, works and activities being more particularly described in Schedule 6 and the other provisions of this Contract including, without limitation, executing all works of repair and making good all Defects and other faults including those arising from any act, omission or

neglect of the Contractor or arising as a consequence of the Contractor's performance or non-performance of its obligations under or in connection with this Contract.

Services Element of the Usage Payments and ***Services Element*** mean that part of any Usage Payment which is identified in Schedule 9 as being attributable to Services (as adjusted or adjustable in accordance with this Contract) but which shall also be deemed to include the amount payable by the Company to the Contractor after the Transfer Date in respect of the Existing Train Services.

Settlement Agreement means the agreement dated 27 August 1999 between LUL and ALSTOM NL Service Provision Ltd relating to the settlement of certain disputes relating to the Original Contract, and any agreement contemplated therein.

SHA means sub-systems hazard analysis.

Shed Road means a section of track with no current rails inside or outside or adjacent to a shed where maintenance activities are carried out.

Short Circuiting Device and ***SCD*** mean an item of equipment used to discharge traction current.

Shunt Control Position means a position on a Train where an Operator can move a Unit at the non-cabbed end.

Sidings means the premises specified in paragraph 1.5 of the Particulars to the Sidings Licence and includes the Existing Sidings Equipment and the Trackside Equipment located from time to time at the Sidings but not any thing above Airspace Level or below Surface Level and where the context so admits includes any part of the items referred to in this definition but excludes the Excluded Sidings Equipment.

Sidings Licence means the licence entered into by LUL and the Contractor in the form of the Draft Sidings Licence.

Single Failure means any Failure which results from a single event.

Site means:

- (a) each or all of the actual places on LUL's premises (including, without limitation, the Northern Line) as the Contractor shall use in connection with this Contract;
- (b) the Depots, the Outstations, the Accommodation Properties, and the Sidings;
and
- (c) so much of the area surrounding the said places as the Contractor shall with the consent of the Project Manager actually use in connection with this Contract.

Speech Pair means a highway consisting of a twin-conductor, twisted and screened, cables for carrying analogue electrical signals transmitting speech.

Stabled means when a Train or an Existing Train is parked in the shut down condition.

Stage I Environmental Audit shall mean a review of available environmental regulatory and compliance information and an inspection of the site in question and Adjacent Property and (to the extent that the Contractor or the Company has any right to grant the same) other adjoining land.

Standards means Company Standards, the standards specified in Part J of Schedule 6 and all British Standards (whether or not incorporating European Standards), European Standards and International Standards at the date of the Original Contract applicable to the Trains and/or the Existing Trains and/or the Services and/or the Existing Train Services and/or the Enabling Works and as such standards, British Standards, European Standards and International Standards may be amended from time to time.

Static Data means data held within a PROM that will not vary.

Statutory Documents means, in respect of each Depot Property and Outstation, any licence or consent required under the Railways Act 1993 to enable the Contractor to operate that Depot Property or Outstation, and/or its business there and all other documents forming part of, or referred to in, them or any of them or any exemption from obtaining any such licence or consent.

STD means a Standard.

Stopping Mark means a marker or specified location on the track in a station where a Train or an Existing Train stops in a station during normal Passenger service.

Stopping Zone means the tolerance around the Stopping Mark which is plus or minus 3.5 metres.

Sub-Lease means the sub-lease to be entered into by the Contractor and the Finance Parties pursuant to the Agreement to Sub-Lease.

Subsidiary has the meaning assigned to it in section 736 of the Companies Act 1985.

Substantial Completion Enabling Works has the meaning assigned to it in paragraph 10(a) of Section 2 of Part E of Schedule 10.

Substantial Completion Enabling Works Acceptance Tests means the tests to be carried out by the Contractor to determine whether the Substantial Completion Enabling Works comply with the specification set out in Part I of Schedule 6 and are ready for use on or in relation to the Northern Line and fit for the purposes of enabling the Company to discharge its obligations to LUL so as to enable LUL to operate and provide the railway service referred to in Clause 5.1.1 to the extent required by this Contract and any additional tests which the Project Manager may require the Contractor to carry out to satisfy the Project Manager of such compliance and that the Substantial Completion Enabling Works are so ready and fit.

Substantial Completion New Equipment means those items of New Equipment listed in Column 1 of the table set out in Schedule 20 that have set out, opposite such item, the letters SC in Column 3, and the letter E in Column 4, of such table.

Sub-Sub-Lease means the sub-sub-lease to be entered into by the Finance Parties and the Maintenance Company pursuant to the Agreement to Sub-Sub-Lease.

Supervening Event has the meaning assigned to it in Clause 25AA.1.1 or Clause 25.1.1 or Clause 25A.1.1.

Surface Level means in respect of each Depot Property and Outstation Property and the Sidings, the level at any part of that Depot Property or Outstation Property or the Sidings of the ground or soil (if any) and, at a pit in a Depot Property, the level of the bottom of the pit or (where appropriate) the level at which the bottom of the new pit

to be constructed as part of the Enabling Works will be situated and "the bottom" includes but does not extend below any drainage or other works at the foot of the pit and, at a pit in an Outstation Property, the level of the shoulders of the pit (and not of any level within the pit).

T means Trailer.

Take Over Certificate means a certificate issued by the Project Manager substantially in the form set out, in relation to a Train, in Part L, and, in relation to the Trackside Equipment (other than the Final UHF Trunked Radio), in Part R, of Schedule 7.

Tare Load or ***Tare Laden*** has the same meaning as assigned to ***Crush Load*** or ***Crush Laden***.

Target Completion Dates means the Contract Schedule Target Completion Dates, the Design and Development Target Completion Dates, the Documentation Target Delivery Dates, the Enabling Works Target Acceptance Dates, the Enabling Works Target Completion Dates, the Trackside Equipment Target Acceptance Date, the Trackside Equipment Target Completion Dates and the Train Target Delivery Dates.

TAS Sheet means the trains available for service sheet, detailing the location and composition of serviceable Trains and Existing Trains.

Tax means corporation tax, advance corporation tax, income tax, capital gains tax, inheritance tax, value added tax, national insurance contributions, capital duty, stamp duty, stamp duty reserve tax, duties of customs and excise, local authority rates and charges, all taxes, duties or charges replaced by or replacing any of them, and all other taxes on gross or net income, profits or gains, distributions, receipts, sales, use,

occupation, franchise, value added, and personal property, and all levies, imposts, duties, charges or withholdings of any nature whatsoever chargeable by any tax authority, together with all penalties, charges and interest relating to any of the foregoing or to any late or incorrect return in respect of any of them.

TCCOS means traction control cut-out switch.

TCF means technical construction file.

TCIS means tripcock isolating switch.

TE means tractive effort.

Term means, in respect of each Depot Lease, the term created by, or the term of, that Depot Lease, as stated in the Particulars thereto and references to the determination of the Term shall be construed as references to any termination, determination, expiry, surrender, merger, forfeiture or other ending of that Term.

Termination Amount means an amount determined in accordance with Section 4 of Part B of Schedule 10 for the purposes of computing a sum payable on a termination of this Contract.

Tertiary Usage Period means, subject to earlier termination in accordance with the provisions of this Contract, the period from (and including) the day following the last day of the Secondary Usage Period until (and including) the earlier of:

- (a) the last day of the Unextended Tertiary Usage Period or, as the case may be, the Extended Tertiary Usage Period; and
- (b) the day prior to the commencement date of any Hand Back Extension Period.

TfL means Transport for London, a statutory body corporate established pursuant to the GLA Act.

Timetable means the timetable set out in Schedule 15 as the same may be amended or revised by the Company from time to time in accordance with Clause 5.2.1(b).

Total Loss means in relation to any Car which constitutes part of a New Train;

- (a) damage beyond repair (regardless of whether such damage shall give rise to a payment under the insurances); or
- (b) damage (not being damage beyond repair) which is uneconomic to repair; or
- (c) requisition of title, sequestration, forfeiture or any compulsory acquisition or title whatsoever; or
- (d) theft resulting in loss of possession by the Contractor or the Company for a period of ninety (90) consecutive days; or
- (e) detention, confiscation, restraint or seizure resulting in loss of possession by the Contractor or the Company for a period of ninety (90) consecutive days;

and such Total Loss shall be deemed to occur on:

- (i) the date of such damage beyond repair; or
- (ii) the date on which it is declared by the Contractor that such damage is uneconomic to repair; or
- (iii) the date on which such requisition of title, confiscation, sequestration, forfeiture or other compulsory acquisition takes place; or

- (iv) the expiration of such period of ninety (90) consecutive days' loss of possession following theft; or
- (v) the expiration of such period of ninety (90) consecutive days' loss of possession following detention, confiscation, restraint or seizure.

Trackside Equipment means any Equipment (including, without limitation, any Further Equipment) installed or to be installed in a station or in the trackbed or adjacent to the trackbed in the Depots, Outstations, Sidings or on the Northern Line and shall include, but not be limited to the following:

- (a) the optical fibre cable network as shown on drawing 6235/03/250/N001/999/21/DRG00-160, including, without limitation, all necessary optical fibre cable, cable splice boxes, splice box protection cabinets, optical fibre distribution cabinets and panels, supports and fixings and fibre optic order wire;
- (b) the track-to-train CCTV system at each station on the Northern Line including, without limitation, all necessary platform cameras, platform camera brackets and poles, picture combining and transmission equipment, radiating cables, interconnecting and power supply cables, and supports and fixings, to transmit the specified pictures to Trains and/or Existing Trains throughout the area and to the quality specified in this Contract;
- (c) the equipment required to upgrade the Existing VHF Train Radio in accordance with this Contract and the Final UHF Trunked Radio system including, without limitation, all necessary radiating cables throughout all

running tunnels and other areas (as required), radio base stations and local control and switching equipment, area control and switching equipment, central control and switching equipment, fixed terminals in control centres, Depots and stations, transmission equipment as necessary to interconnect the other items, engineering order wire facility, cable management equipment, interconnecting and power supply cables, supports and fixings, portable terminals (as required), to form a system which performs in accordance with the requirements of this Contract and is integrated into LUL's trunked radio network and any equipment replacing any of the same;

- (d) all necessary track-to-train data transmission equipment consisting of passive transponders installed in the track at stations and other locations, as required, including all supports, fixings and ramps; and
- (e) all necessary cable routing facilities comprising trunking, tray, on the routes necessary for the above systems, mainly but not exclusively on stations, and which is to include capacity for the Company's use.

Trackside Equipment Acceptance of Delivery Tests means the tests to be carried out by the Contractor to determine whether the Trackside Equipment complies with the specifications set out in Parts B to F (inclusive) of Schedule 6 and is ready for use on or in relation to the Company's Railway and fit for the purposes of enabling the Company to discharge its obligations to LUL so as to enable LUL to operate and provide the railway service referred to in Clause 5.1.1 to the extent required by this Contract and any additional tests which the Project Manager may require the

Contractor to carry out to satisfy the Project Manager of such compliance and that the Trackside Equipment is so ready and fit.

Trackside Equipment Target Acceptance Dates means the dates specified in Column 2 of the table set out in paragraph 4 of Schedule 5 opposite sections (g) and (h) thereof (or such later date as may be determined by the Project Manager in accordance with Clause 12 of the variation procedure set out in paragraph 8 of Schedule 4).

Trackside Equipment Target Completion Dates means the dates specified in Column 2 of the table set out in paragraph 4 of Schedule 5 opposite sections (a) to (f) (inclusive) thereof (or such later dates as may be determined by the Project Manager in accordance with Clause 12 or the variation procedure set out in paragraph 8 of Schedule 4).

Traction Supply has the meaning assigned to it in paragraph 5.2 of Standard RSE/STD/019 - Part 1 (referred to in paragraph 6.2 of Part J of Schedule 6).

Traffic Hours means the period of time between:

- (a) the Published Time (as defined in the Rule Book) for traction current to be switched on; and
- (b) the Published Time, or actual time (if this is later), for traction current to be switched off;

save that there are no Traffic Hours in respect of Non-electrified Track and Track within the Depots, the Outstations or other sidings as traction current is normally on at all times in Traffic Hours.

Trainborne Equipment means any Equipment (including, without limitation, any Further Equipment) fitted pursuant to this Contract to a Train or an Existing Train necessary for the service operation of that Train or Existing Train and shall include, but not be limited to:

- (a) saloon CCTV;
- (b) Radio handsets, transceivers and control units, aerials and interconnecting cabling;
- (c) track to train datalink receivers and control equipment and associated cabling; and
- (d) CCTV monitors, aerials, receivers and control units and interconnecting cabling.

Train Manufacturer means ALSTOM Transport Ltd.

Train Milestone Dates means the dates specified in Column 2 of the table set out in paragraph 1.2 of Schedule 5 (or such later dates as may be determined by the Project Manager in accordance with Clause 12 or the variation procedure set out in paragraph 8 of Schedule 4).

Train Operator means any person employed by LUL to carry out duties consistent with the safe running of the Trains or the Existing Trains in Passenger service, shunting, test running or movement.

Train Radio means the two way voice and data link for Trains and Existing Trains described in Part C of Schedule 6.

Trains means, collectively, the New Trains, the NL Trains and any other trains provided or to be provided by the Contractor in accordance with this Contract and references to a Train shall be construed as references to any of such Trains.

Trains Direct Agreement means the agreement dated 7 April 1995 entered into between the Finance Parties, LUL and the Contractor.

Trains Direct Lease means the direct lease dated 7 April 1995 between RBLM, AFM and ALSTOM in respect of up to 103 trainsets as amended from time to time (including, without limitation, as amended by the NLTSC Lease Amendment Agreement).

Trains Element of the Usage Payments and **Trains Element** mean that part of any Usage Payment which is identified in Schedule 9 as being attributable to Trains (as adjusted or adjustable in accordance with this Contract).

Trains Head Lease means the lease dated 7 April 1995 between RBLM, AFM and ALSTOM in respect of up to 103 trainsets as amended from time to time (including, without limitation, as amended by the NLTSC Lease Amendment Agreement).

Train Target Delivery Dates means the dates specified in the table set out in paragraph 1.1 of Schedule 5 (or such later dates as may be determined by the Project Manager in accordance with Clause 12 or the variation procedure set out in paragraph 8 of Schedule 4).

Transfer Date has the meaning assigned to it in Clause 24, being the date on which relevant employees of LUL have transferred into the employment of the Contractor.

Transferring Employees means such of the employees of the Company at the Transfer Date who transfer to the employment of the Contractor on the Transfer Date as envisaged by Part A of Schedule 12 (excluding, for the avoidance of doubt, employees of the Company's contractors).

Transparency means any method by which control characters which occur within a message are treated as data and not acted upon as control.

TRV or Track Recording Vehicle means a rail vehicle fitted with equipment and systems utilised to measure and record a limited number of parameters related to track quality and for the reporting of a limited number of types of track fault.

TS means tube stock.

TSM means the LUL Employee who is the train service manager and who is responsible for the operation and management of the Trains and the Existing Trains and the control and regulation of the service on the Northern Line.

TTL or Transport Trading Limited means Transport Trading Limited, a wholly owned subsidiary of TfL.

Tunnel Telephone means an independent communication system between Trains and Existing Trains and the Line Controller for use when the Traction Supply in a tunnel section is required to be removed by an Operator, or for when any component of the Train Radio has failed.

TX means transmit.

UHF means ultra high frequency.

Uncoupler means the device which controls the Autocoupler and the functions of which are defined in Company Standard RSE/STD/006 (as referred to in paragraph 6.2 of Part J of Schedule 6).

Underground Network means the assets, systems, track, stations, depots and other buildings which are used in the maintenance and provision of the underground service known as “London Underground”;

UNDM means uncoupling non-driving motor.

Unextended Tertiary Usage Period means, subject to earlier termination in accordance with the provisions of this Contract, the period of 6 years from (and including) the day following the last day of the Secondary Usage Period to (and including) the earlier of the last day of the month in which the date which is 6 years after such day occurs and the day prior to the commencement date of any Hand Back Extension Period.

Unit means a self-contained portion of a Train or an Existing Train which can move independently and consists of (in the case of Trains) 3 Cars and (in the case of Existing Trains) 3 Cars or 4 Cars, in any case connected by a semi-permanent coupling which can only be disconnected by maintenance staff, with the outer ends of each Unit having Autocouplers.

UPS means uninterruptible power supply.

Usage Payments means the payments paid or to be paid by the Company in accordance with Clause 18 and Schedule 9 in respect of LUL’s or the Company’s use

of the Trains and/or Equipment and/or Enabling Works and/or Services provided in accordance with this Contract.

UV means ultra-violet.

Value Added Tax and **VAT** mean value added tax as provided for in the Value Added Tax Act 1994 and legislation (whether delegated or otherwise) supplemental thereto or in replacement thereof or in any primary or subordinate legislation promulgated by the European Union or any body or agency thereof and any tax replacing the same and any tax similar or equivalent to value added tax imposed by any country other than the United Kingdom.

Variation means any Required Variation, Company Proposed Variation or Contractor Proposed Variation.

Variation Order means an order issued by the Project Manager pursuant to paragraphs 8.2.3(a), 8.3.3(a) or 8.4.2(a) of Schedule 4, substantially in the form set out in Part QQ of Schedule 7.

VDU means visual display unit.

VHF means very high frequency.

Vital Component means any component affecting safety and life, the failure of which would be classified as catastrophic in accordance with Standard RSE/STD/022 - Pt 2 (as referred to in paragraph 6.2 of Part J of Schedule 6) and **Vital**, **Vital System** and **Vital Function** shall have corresponding meanings.

VS means video switch.

Waste means any waste as defined in Article 1(a) of Directive 91/156/EC, as amended, including any and all of the substances referred to in that Directive.

Week means 7 calendar days commencing on any day.

Working Day means any day but excluding Saturdays, Sundays, English bank holidays and public holidays.

Wrong Side Failure or **WSF** means any Failure that could cause a Vital Component, Vital Function or Vital System to fail to an unsafe condition or an indeterminable condition.

WSP means wheelspin/slide protection.