

Volume 2

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SCHEDULE 3: Payment

1. Payment

1.1 **Target Costs**

- 1.1.1 Other than as expressly provided in clause 28 (Compensation Events), the Target Costs remain fixed and shall not be adjusted in respect of any increase or decrease of costs to the Supplier in providing the Services or otherwise.
- 1.1.2 For the certificate following the final Payment Assessment Date for each Budget Period, the Maintenance Services Target Cost and the Maintenance Services Target Cost Breakdown for that Budget Period shall be adjusted in accordance with the provisions stated in Part D (Price Adjustment for Inflation) of this Schedule 3 (Payment).
- 1.1.3 The Target Costs are deemed to be inclusive of all ancillary and other works and expenditure necessary to provide the Services, whether separately or specifically mentioned or described in the Contract or reasonably implied.

1.2 **Application Workflow and Timeline**

The payment application workflow and timeline is set out in Part G (Payment Application Workflow and Timeline) of this Schedule 3 (Payment) but in the event of conflict with the other provisions of this Schedule 3 (Payment), the other provisions of this Schedule 3 (Payment) shall take precedence.

1.3 **Assessing the Amount Due**

- 1.3.1 There shall be a Payment Assessment Date in each Period from the Commencement Date until the Expiry Date in respect of the whole of the Services.
- 1.3.2 The Supplier shall submit its assessment of the amount due in accordance with paragraph 1.3 of this Schedule 3 (Payment) to the Company's Representative not less than fourteen (14) days prior to each Payment Assessment Date (each, a "Payment Application"). The Supplier shall submit any supporting documents that are reasonably necessary to enable the Company's Representative to check the Supplier's assessment of the amount due. The Supplier shall maintain and make available as required by the Company's Representative, with each Payment Application, all timesheets, labour, allocation sheets, invoices, equipment records and all other relevant supporting documents and information as may be reasonably required by the Company's Representative. The Payment Application and supporting documents (if any) shall specify the Supplier's assessment of the amount due to the end of the Period to which the Payment Application relates and the basis upon which that sum is calculated.
- 1.3.3 Each Payment Application by the Supplier shall be broken down in to its constituent elements, including:
 - (A) the relevant Price for Integrated Team Services Provided to Date (including the separate elements applied for in respect of the Defined Cost and the Integrated Team Fee);

- (B) the relevant Price for Maintenance Services Provided to Date (including the separate elements applied for in respect of the Defined Cost and the Maintenance Services Fee) including each element of the foregoing in respect of each Delivery Unit; and
- (C) the relevant Price for Launched Upgrade Work Activities Provided to Date (including the separate elements applied for in respect of the Defined Cost and any Upgrade Work Activity Fee).

1.3.4 The Company shall pay the Supplier the Price for Services Provided to Date as at the relevant Payment Assessment Date less the Price for Services Provided to Date as at the immediately preceding Payment Assessment Date, in accordance with paragraph 1 of this Schedule 3 (Payment), subject to such deductions and additional payments due under the Contract in respect to:

- (A) performance adjustment in accordance with paragraph 5 of this Schedule 3 (Payment);
- (B) the sharing mechanism in accordance with paragraph 3 of this Schedule 3 (Payment);
- (C) adjustments in connection with Variation Orders in accordance with Part A of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services);
- (D) termination payments in accordance with Clause 44;
- (E) Delay Damages; and
- (F) other sums that may be payable by the Company to the Supplier or recoverable by the Company from the Supplier under the Contract.

1.3.5 Any tax which the law requires the Company to pay to the Supplier is included in the amount due. If the amount to be paid to the Supplier is less than the amount to be paid by or retained from the Supplier, the difference is recoverable from the Supplier as a debt due on demand.

1.3.6 Payments of the Price for Services Provided to Date made by the Supplier in a currency other than the currency of this Contract shall be included in the amount due as payments to be made to the Supplier in the same currency.

1.3.7 If any performance bond or parent company guarantee required by this Contract is not procured by the Supplier and delivered to the Company in accordance with Clause 53 (Bonds, Warranties and Guarantees) of this Contract then without prejudice to any other rights and remedies the Company may have, one half of the Price for Services Provided to Date may be retained in assessments of the amount due and shall not be payable to the Supplier until such documents have been delivered.

1.3.8 If any of the warranties required under Clause 53 (Bonds, Warranties and Guarantees) of this Contract are not procured by the Supplier and delivered to the Company in accordance with Clause 53 (Bonds, Warranties and Guarantees) of this Contract then without prejudice to any other rights and remedies the Company may have, one quarter of the relevant Price for Services Provided to Date in respect of the Launched Upgrade Work Activity to which the warranties relate may be retained in assessments of the amount due and shall not be payable to the Supplier until such warranties have been

delivered.

1.3.9 Within forty (40) Working Days of the end of the Budget Period, the Supplier shall submit to the Company's Representative a statement detailing the Price for Services Provided to Date up to the end of the Budget Period. For the purposes of this paragraph 1.4.9, the Price for Services Provided to Date shall be the gross amount assessed prior to any reductions of the Price for Services Provided to Date pursuant to paragraph 5 of this Schedule 3 (Payment). The statement shall be broken down in to its constituent elements as set out in paragraph 1.3.2 of this Schedule 3 (Payment). Within forty (40) Working Days of receipt of the statement the Company's Representative shall advise the Supplier of any corrections to be made to the statement and confirm in writing the agreed amount of the Price for Services Provided to Date up to the end of the Budget Period, such confirmation shall be without prejudice to any further corrections that may be made subsequently by the Company's Representative.

1.4 **HGCRA Requirements**

1.4.1 The Company's Representative shall issue a payment notice to the Supplier within fourteen (14) days of each Payment Assessment Date (or, if the Supplier's Payment Application is received after the Payment Assessment Date, not later than fourteen (14) days after receipt of the Supplier's Payment Application) (a "Payment Notice"). The first payment shall be the amount due. Other payments shall be the change in the amount due since the last payment certificate. A payment shall be made by the Supplier to the Company if the change reduces the amount due. Other payments are made by the Company to the Supplier. Payments shall be in the currency of this Contract unless otherwise stated in this Contract.

1.4.2 For the purpose of Sections 109 to 111 of the HGCRA:

- (A) the Payment Notice shall constitute a payment notice for the purposes of Section 110A of the HGCRA and the Company's Representative shall notify the Supplier of the amount that the Company's Representative considers to be due to the Supplier at the end of the Period to which the Payment Notice relates, if any, and the basis on which the amount is calculated and it is immaterial if the amount referred to in the Payment Notice is zero;
- (B) within seven (7) days of receipt of a Payment Notice, the Supplier shall deliver to the Company's Representative a VAT invoice in the amount of the Payment Notice, with a copy of the Payment Notice attached; and
- (C) the date on which a payment becomes due is fourteen (14) days after the date on which the Company's Representative receives the Payment Application.

1.4.3 The final date for payment of each invoice shall be twenty eight (28) days after the date payment becomes due under paragraph 1.4.2(C) above, except if the Supplier fails to issue a VAT invoice in accordance with the timescales set out in paragraph 1.4.2(B) above (and such failure is not due to any failure by the Company to comply with its obligations under paragraph 1.4.1 above) then the final date for payment shall be extended by the additional number of days taken by the Supplier to issue the VAT invoice.

1.4.4 Subject to paragraphs 1.4.5, 1.4.6, and 3.2 of this Schedule 3 (Payment), the Company shall pay the Supplier the sum referred to in the Payment Notice (or, if the Company's Representative has not served a Payment Notice, the sum referred to in the Supplier's Payment Application under paragraph 1.3.2) (the "notified sum") on or before the final date for payment for each invoice.

1.4.5 If the Company intends to pay less than the notified sum, the Company's Representative shall notify the Supplier no later than one (1) day (the "Prescribed Period") before the final date for payment. The notice shall specify:

- (A) the amount the Company considers to be due for the relevant Period on the date the notice is served and any basis upon which that sum is calculated; or
- (B) if there is more than one basis, each basis and the amount attributed to it.

It is immaterial for the purposes of this paragraph 1.4.5 that the amounts referred to in sub-paragraphs 1.4.5 (A) or (B) may be zero. Where a notice is given under this paragraph 1.4.5, paragraph 1.4.4 applies only in respect of the sum specified pursuant to this paragraph 1.4.5.

1.4.6 Notwithstanding paragraphs 1.4.3 and 1.4.4 and without prejudice to Clause 44.2 if the Supplier is subject to an event set out in Clause 43.1(D) after the Prescribed Period, the Company shall not be required to pay the Supplier the notified sum on or before the final date for payment.

1.4.7 The Company's Representative shall correct any wrongly assessed amount due in a later payment certificate.

1.4.8 The amount due is exclusive of any VAT. For the avoidance of doubt, notwithstanding the other terms of this clause, the Company shall be under no obligation to make any payment to the Supplier whatsoever in respect of VAT until the Supplier has provided to the Company a VAT invoice in the relevant amount. To the extent that any VAT paid by the Company in respect of any goods or services supplied by the Supplier under the Contract has been charged in error, is charged at a higher rate of VAT than is properly applicable, or there is an agreed reduction in the value of the supply between the Supplier and the Company, the Supplier shall without delay (and in any event within one (1) month of the mistake being discovered or a reduction being agreed) issue a valid credit note to the Company in respect of such VAT and the Supplier shall repay to the Company any such VAT paid by the Company to the Supplier in error in respect of supplies made under the Contract.

1.4.9 Any payment made by the Company under the Contract, including any final payment, shall not prevent the Company from recovering any amount overpaid or wrongfully paid, however such payments may have arisen including, but not limited to, those amounts paid to the Supplier by mistake of law or fact. The Company's Representative shall be entitled to withhold from any sums due or which may become due to the Supplier from the Company any amount which the Company's Representative considers to be due or which may become due from the Supplier assessed on the basis of the Company's Representative's bona fide estimate, provided that an appropriate written notice to pay less has been served by the Company's Representative on the Supplier. Such estimates shall bind the Supplier unless varied by agreement between the Parties or by any award, decision, order or judgement, whichever is the earlier.

1.5 **Defined Cost**

1.5.1 All the Supplier's costs which are not included in the Defined Cost are treated as included in the Fees. Defined Cost includes only amounts calculated in accordance with Part A (Pricing Preamble) of this Schedule 3 (Payment) and using:

- (A) the percentages stated in Schedule 1 (Contract Data); and
- (B) other amounts at open market or competitively tendered prices with deductions for all discounts, rebates and taxes which can be recovered.

1.5.2 Without prejudice to its obligations in Clause 13, the Supplier shall keep the following records:

- (A) accounts of payments of Defined Cost;
- (B) proof that such payments have been made;
- (C) communications about and assessments of any compensation events for Sub-Contractors in accordance with any relevant Sub-Contract;
- (D) information used to compile forecasts of Defined Cost; and
- (E) any other records as stated in this Schedule 3 (Payment).

1.5.3 Notwithstanding the definition of Disallowed Cost, the Company may at its sole discretion allow payments for profit to an Affiliate sub-contractor to be included as Defined Cost where the Company is satisfied that this represents best value for the Company and that the requirements of Clause 54 (Assignment and Sub-Contracting) have been satisfied.

1.5.4 The Supplier shall permit the Company and its authorised representatives to inspect at any time the accounts and records the Supplier is required to keep by. Such accounts and records shall be retained for the period stated in Clause 13.2.

1.6 Late Payment

- 1.6.1 If any payment is not made in full by the final date for payment no effective pay less notice is issued to the Supplier, the Supplier may suspend the performance of this Contract.
- 1.6.2 The Supplier shall not exercise his right to suspend performance of this Contract for late payment unless he has given notice to the Company stating:
 - (A) his intention to suspend the performance of this Contract, and
 - (B) the grounds for suspending the performance of this Contract.
- 1.6.3 The Supplier shall notify the Company not less than 7 days before the date on which he intends to suspend the performance of this Contract.
- 1.6.4 Suspended performance shall be ended when the amount that should have been paid to the Supplier is paid to him in full. The Supplier shall resume performance on the next Working Day after payment is made unless the Company instructs otherwise.
- 1.6.5 If a certified payment is late, or if a payment is late because the Company's Representative does not issue a certificate which he should issue, interest is paid on the late payment. Interest is assessed from the final date for payment until the date when the late payment is made, and shall be included in the first assessment after the late payment is made.

2. Adjustment following Termination

Where this Contract is terminated in part pursuant to any of Clauses, 42, 43, or 46, the Target Costs, Fees and Defined Cost will be adjusted in accordance with this Schedule 3 (Payment) to reflect the extent of such termination in part.

3. Sharing Mechanism

3.1 The sharing mechanism shall operate as follows:

- 3.1.1 Within five (5) Working Days of agreement of the Price for Services Provided to Date pursuant to paragraph 1.3.9, the Company's Representative shall assess the Supplier's share of the difference between:
 - (A) the Maintenance Services Target Cost for that Budget Period (as adjusted in accordance with the Contract) and the Price for Maintenance Services Provided to Date for that Budget Period; and
 - (B) the Launched Upgrade Work Activity Target Cost for that Budget Period (as adjusted in accordance with the Contract) and the Price for Launched Upgrade Work Activities Provided to Date for that Budget Period but only in respect of Launched Upgrade Work Activities that have achieved Launched Upgrade Work Activity Completion during that Budget Period.
- 3.1.2 The Company's Representative shall correct any incorrect assessment of the Supplier's share in a later Payment Notice or assessment of the Supplier's share.
- 3.1.3 On expiry or termination of the Contract, the Company's Representative shall include in his assessment of the final amount due his assessment of the

Supplier's share for the Budget Period in which expiry or termination occurs. The Company's Representative's assessment of the Supplier's share shall be added to the final amount due to the Supplier if there has been a saving, or deducted if there is an excess.

3.1.4 If:

- (A) the Price for Maintenance Services Provided to Date for a Budget Period is less than the Maintenance Services Target Cost for that Budget Period, the Supplier shall be paid fifty percent (50%) of the saving; and
- (B) the Price for Launched Upgrade Work Activities Provided to Date for a Budget Period is less than the Launched Upgrade Work Activity Target Cost for that Budget Period (but only in respect of Launched Upgrade Work Activities that have achieved Launched Upgrade Work Activity Completion during that Budget Period), the Supplier shall be paid fifty percent (50%) of the saving.

3.1.5 If:

- (A) the Price for Maintenance Services Provided to Date for a Budget Period is greater than the Maintenance Services Target Cost but less than the Maintenance Maximum Cost for that Budget Period, the Supplier shall be responsible for fifty percent (50%) of the excess between the Maintenance Services Target Cost and the Maintenance Maximum Cost and the Supplier shall therefore pay to the Company in accordance with this Contract an amount equal to fifty percent (50%) of such excess; and
- (B) the Price for Launched Upgrade Work Activities Provided to Date for a Budget Period is greater than the Launched Upgrade Work Activity Target Cost but less than the Launched Upgrade Work Activity Maximum Cost for that Budget Period (but only in respect of Launched Upgrade Work Activities that have achieved Launched Upgrade Work Activity Completion during that Budget Period), the Supplier shall be responsible for fifty percent (50%) of the excess between the Launched Upgrade Work Activity Target Cost and the Upgrade Work Activity Maximum Cost and the Supplier shall therefore pay to the Company in accordance with this Contract an amount equal to fifty percent (50%) of such excess.

3.1.6 If:

- (A) the Price for Maintenance Services Provided to Date for a Budget Period is greater than the Maintenance Maximum Cost for that Budget Period, the Supplier shall pay all of the excess above the Maintenance Maximum Cost in addition to paying fifty percent (50%) of the excess between the Maintenance Services Target Cost and the Maintenance Maximum Cost as set out in paragraph 3.1.5 (A) above; and
- (B) the Price for Launched Upgrade Work Activities Provided to Date for a Budget Period is greater than the Upgrade Work Activity Maximum Cost for that Budget Period (but only in respect of Launched Upgrade Work Activities that have achieved Launched Upgrade Work Activity Completion during that Budget Period), the Supplier shall pay all of the excess above the Upgrade Work Activity Maximum Cost in addition to paying fifty percent (50%) of the excess between the Launched Upgrade

Work Activity Target Cost and the Upgrade Work Activity Maximum Cost as set out in paragraph 3.1.5 (B) above.

- 3.1.7 The certificate for the next payment due to the Supplier shall include the Supplier's share of any saving or excess for that year as the case may be, as calculated pursuant to this paragraph 3.1. Should this result in the certification of a negative balance, this shall become a debt due from the Supplier to the Company and be deductible or recoverable from any monies due or which may become due to the Supplier under the Contract.
- 3.2 Following expiry or termination of the Contract, any outstanding amounts owed from either Party to the other Party in respect of the Company's Representative's final assessment in accordance with paragraph 3.1 shall be paid within thirty (30) days of receipt of a VAT invoice by the paying party from the receiving party, in respect of any such amount owed.
- 3.3 Without limiting paragraphs 3.1 and 3.2, if the Company's Representative (acting reasonably) assesses prior to the expiry of each Budget Period that (having regard to the Price for Services Provided to Date at the relevant time):
 - (A) the Price for Maintenance Services Provided to Date at the date of expiry of the relevant Budget Period is likely to exceed the Maintenance Services Target Cost; and/or
 - (B) the Price for Launched Upgrade Work Activities Provided to Date at the date of expiry of the relevant Budget Period is likely to exceed the Launched Upgrade Work Activity Target Cost;

the Company's Representative may deduct from sums otherwise due to the Supplier a sum equivalent to the Company's Representative's reasonable assessment of the likely Supplier's share of the excess of the aggregate of the amounts in (A) and (B). Any sum so deducted shall be taken into account in assessing the amounts due under Clauses 32.1, 32.2 and/or Clause 44.

4. Value Management Bonus

- 4.1 For each Released Upgrade Work Activity the Company states the Upgrade Activity Maximum Budget as part of the Integrated Team Requirements.
- 4.2 In respect of each Launched Upgrade Work Activity where the Upgrade Activity Maximum Cost is less than the Upgrade Activity Maximum Budget the Company shall pay the Supplier a bonus (the "Value Management Bonus") calculated as fifteen percent (15%) of the difference between the amount of the Upgrade Activity Maximum Budget and the amount of the Upgrade Activity Maximum Cost.
- 4.3 The Value Management Bonus applicable to each Launched Upgrade Work Activity is included in the Price for Integrated Team Services Provided to Date at the next Payment Assessment Date following the issue by the Company of a Stage 5 Notice.

5. Performance Measurement

- 5.1 The Company shall assess the Supplier's performance under this Contract in accordance with Schedule 18 (Performance Measurement).
- 5.2 The Company shall have the right to:
 - (A) levy Abatements in accordance with the provisions of Schedule 18 (Performance Measurement); and/or
 - (B) use the Escalation Procedure to rectify any unsatisfactory performance by the Supplier in its performance of this Contract or any failure by the Supplier to meet the performance standards set out in Schedule 18 (Performance Measurement).

SCHEDULE 3 - PART A: PRICING PREAMBLE

- 1.1 The Defined Cost shall be in £ sterling, shall exclude VAT and shall be calculated using the rates set out in matrices 1 and 2 of Part C (Target Costs and Other Pricing Information) in this Schedule 3 (Payment). Such Defined Cost, together with the Fees, shall be inclusive of all costs and expenses (including, but not limited to, labour, materials, equipment, profit, overhead and travel time) of whatsoever nature and howsoever incurred by the Supplier in consideration of the provision of the Services and the performance of the Supplier's obligations in accordance with the Contract, including as detailed in this Schedule 3 (Payment).
- 1.2 The Fees include (but are not limited to):
 - (A) head office overhead;
 - (B) managerial and supervisory staff where required in addition to Supplier Personnel (including members of the Off Site Maintenance Team and the Principal Upgrade Team);
 - (C) all training costs (including non-productive attendance time) except for safety training required in accordance with the Contract;
 - (D) all insurance costs (including but not limited to Employer's Liability insurance, public liability insurance, professional indemnity insurance, travel insurance, vehicle insurances, but excluding medical insurance relating to Supplier Personnel engaged in the delivery of the Services);
 - (E) all other costs which are not Defined Costs; and
 - (F) profit.
- 1.3 In respect of any of: the Maintenance Services Target Cost Breakdown; a Launched Upgrade Work Activity Target Cost Breakdown or the Integrated Team Budget Breakdown where the Defined Cost of Supplier Personnel is shown as:
 - (A) a cost per Shift, payment is made for the full Shift that each member of Supplier Personnel attends the Sites, the Off Site Maintenance Team Locations or the Principal Upgrade Team Locations, notwithstanding any rest breaks or time spent travelling to, from and between the Sites, the Off Site Maintenance Team Locations or Principal Upgrade Team Locations; or
 - (B) a cost per hour, payment is made for each hour that each member of Supplier Personnel is physically present at the Sites, Off Site Maintenance Team Locations or Principal Team Locations and the Defined Cost per hour is fully inclusive of non-productive time including rest breaks and travel time.
- 1.4 The cost of the Supplier's vehicles used in the delivery of the Services is allowable in accordance with the Defined Cost of Plant and Equipment.
- 1.5 The cost of fuel and consumables for the operation of Plant and Equipment is allowable in accordance with the Defined Cost of Materials.
- 1.6 At the date of commencement of each Budget Period (commencing at the start of Budget Period Two) (the "Adjustment Date"), the Maintenance Services Target Cost and the Maintenance Services Target Cost Breakdown and the rates in Part C (Target Costs

and Other Pricing Information) in this Schedule 3 (Payment) shall be indexed in accordance with Part D (Price Adjustment for Inflation) of this Schedule 3 (Payment). The adjustments shall take effect on each Adjustment Date and shall apply for the duration of that Budget Period.

- 1.7 Defined Cost arising from variations made in accordance with Part A (Contract Variation Procedure) of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) to the Contract shall be calculated using the rates set out in Part C (Target Costs and Other Pricing Information) in this Schedule 3 (Payment).
- 1.8 The rates referred to in Part B (Maintenance Renewal Services) of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) to the Contract shall be calculated on the basis of Defined Cost in accordance with Part B (Schedule of Cost Components) in this Schedule 3 (Payment).
- 1.9 Bank Holidays, Public Holidays and leap years have been accounted for in the Target Costs and so no further adjustment to the Target Costs to take account of such days is required.

SCHEDULE 3 - PART B: SCHEDULE OF DEFINED COST COMPONENTS

1. Supplier Personnel

1.1 The following components for the cost of:

- (A) Supplier Personnel who are directly employed by the Supplier and whose normal place of working is within the Sites;
- (B) Supplier Personnel in the Off Site Maintenance Team and the Principal Upgrade Team;
- (C) Supplier Personnel (including Off Site Maintenance Team and Principal Upgrade Team members) who are directly employed by the Supplier and whose normal place of working is not within the Sites but who are working in the Sites for a period of not less than one week;
- (C) Supplier Personnel (including Off Site Maintenance Team and Principal Upgrade Team) members who are not directly employed by the Supplier but are paid by the Supplier according to the time worked while they are within the Sites;
- (D) wages and salaries and amounts paid by the Supplier for Supplier Personnel (including Off Site Maintenance Team members and Principal Upgrade Team members) paid in accordance with the time worked in the delivery of the Services within the Sites, the Off Site Maintenance Team Locations and the Principal Upgrade Team Locations;
- (E) payments to Supplier Personnel and (including Off Site Maintenance Team and Principal Upgrade Team members) in respect of:
 - (1) bonuses and incentives (where specifically provided for in the employment contract terms of individual Supplier Personnel);
 - (2) overtime (where authorised beforehand in writing by the Company);
 - (3) working in special circumstances (only applicable for working at heights, working in exposed conditions, trade supplements, plus rates, shift allowance, tool allowance, local allowance and food allowance);
 - (4) special allowances (only applicable for working at heights, working in exposed conditions, trade supplements, plus rates, shift allowance, tool allowance, local allowance and food allowance);
 - (5) absence due to sickness and holidays (including maternity and paternity leave); and
 - (6) severance related to work on this Contract;
- (F) payments made for Supplier Personnel (including Off Site Maintenance Team and Principal Upgrade Team members) in respect of:
 - (1) travelling to and from the Sites in the course of performing the Services (where the unit of charge is per hour);
 - (2) subsistence and lodging where operatives are required to stay overnight in order to perform the Services;

- (3) medical examinations;
- (4) passports and visas;
- (5) protective clothing;
- (6) hand tools and equipment;
- (7) complying with Applicable Laws;
- (8) superannuation and life assurance including:
 - a. employers contributions to employee pensions to the extent they are part of a pension scheme available to all employees (additional contributions made to individuals are deemed to be part of the Fee);
 - b. applicable for taxes in respect of employees;
 - c. National Insurance contributions;
 - d. payment under employment law;
- (9) levies for industrial training (if required by law) in so far as they are applicable to Supplier Personnel in the performance of the Services;
- (10) medical insurance relating to Supplier Personnel (including Off Site Maintenance Team and Principal Upgrade Team members) in the performance of the Services;
- (11) death benefit;
- (12) occupational accident benefits;
- (13) medical aid;
- (14) a vehicle provided as part of contracted remuneration;
- (15) safety training;
- (16) costs of training TfL and third parties nominated by it pursuant to clause 30.5(C) of the Contract.

2. **Plant and Equipment**

2.1 The following component for the cost of usage of the Supplier's equipment used within the Sites:

(A) For Maintenance Services the following cost components apply

(A1) amounts for Supplier's equipment are the rates stated in Part C (Target Costs and Other Pricing Information) in this Schedule 3 (Payment), multiplied by the time for which the Supplier's equipment is required.

(A2) The rates are inclusive of the cost of:

- transporting the Supplier's equipment to and from the Sites (where applicable);
- erecting and dismantling the Supplier's equipment;
- maintaining the Supplier's equipment; and
- servicing and maintenance.

(A3) The rates are inclusive of the purchase price (or any replacement cost) and the hire charge for the Supplier's equipment.

(B) For all other Services other than Maintenance Services the following cost components apply

(B1) Payments for hire or rent of plant and equipment not owned by

- the Supplier or an Affiliate of the Supplier;
- at hire or rental rates multiplied by the time plant and equipment is required.

(B2) Payments for plant and equipment owned by the Supplier; purchased by the Supplier under a hirer purchase or lease agreement or hired by the Supplier from an Affiliate of the Supplier

- At open market rates, multiplied by the time the plant or equipment is required.

(B3) Payments for plant or equipment purchased by the Supplier specifically for the delivery of the Services:

- the change in value over the period for which the plant and equipment is required; and
- time related servicing costs for the period for which the plant and equipment is required.

The change in value is the difference between the purchase price and either the sale price or the open market sale price at the end of the period that the plant or equipment is required. Interim payments in the change in value are included at each Payment Assessment Date

(B4) Payments for the purchase of plant or equipment which is consumed in the delivery of the Services

(B5) Unless included in hire or rental rates payments for:

- transporting equipment to and from the Sites (where applicable);
- erecting, modifying and dismantling plant and equipment
- the cost of operators (included as the Supplier Personnel)

(B6) Payments for materials used to construct or fabricate plant and equipment

2.2 The time required is expressed in Working Days, weeks or Periods. For idle and standby time, the following times shall be deducted:

- (A) the first half Working Day for items paid at a daily rate;
- (B) the first third of a week for items paid at a weekly rate; and
- (C) the first quarter of a Period for items paid at a Period rate.

3. **Materials and Charges**

3.1 The following components for the cost of materials:

- (A) Payments:
 - (1) for delivery to Sites of materials and consumables;
 - (2) for providing and removing packaging;
 - (3) for samples and tests;
 - (4) to utilities for the provision and use of water, gas, electricity and other services (where these services are not provided by the Company);
 - (5) to public authorities, utilities and other properly constituted authorities of charges which they are authorised to make in respect of the Services and where such charges are not paid directly by the Company;
 - (6) for accommodation and rest rooms, including associated servicing costs where such facilities are not provided by the Company and the Company has instructed the Supplier to provide such facilities; and
 - (7) for fuel and consumables in respect of Plant and Equipment used in the delivery of the Services.
- (B) Cost is credited with payments received for the disposal of material.

4. **Sub-Contractors**

The component for cost of Sub-Contractors is the invoice cost of work which is sub-contracted net of all trade discounts.

SCHEDULE 3 - PART C: TARGET COSTS AND OTHER PRICING INFORMATION

Part C is the document titled "Schedule 3 - Part C: Target Costs and Other Pricing Information" and stored on the CD-ROM at Schedule 23 (Documents on CD-ROM).

SCHEDULE 3 - PART D: PRICE ADJUSTMENT FOR INFLATION

1. Definitions

For the purposes of this Part D (Price Adjustment for Inflation) of Schedule 3 (Payment), the following terms have the following meanings:

- 1.1 the “Base Date” used in the calculation of the Price Adjustment Factor is 31 March 2020;
- 1.2 the Base Date Index (“**B**”) is the latest available Index before the Base Date;
- 1.2 the Latest Index (“**L**”) is the latest available Index at the Adjustment Date;
- 1.3 the “Adjustment Date” is the date of commencement of each Budget Period (commencing at the start of Budget Period Two);
- 1.4 the “Price Adjustment Factor” is $(L-B)/B$ expressed as a percentage + 100% for the Index linked to it, and may be negative; and
- 1.5 the “Index” is the Consumer Price Index (“CPI”) published by the Office for National Statistics.

2. Price Adjustment Factors

- 2.1 If an Index is changed after it has been used in calculating a Price Adjustment Factor but before the next Adjustment Date, the calculation is repeated and a correction made.
- 2.2 If any of the indices referred to in the Index ceases to be published, the Parties shall use such alternative index or publication or information which produces the same, or as nearly as possible the same, result. If the reference date used in the compilation of any such alternative index, publication or information shall change, the figure taken to be shown in such index, publication or information shall be the figure which would have been shown in the index or information if the original reference date had been retained.
- 2.3 If there has been a material change in the basis of information from which the Index is compiled which produces a significant change to the indexation provisions contained in the Contract, or it becomes impossible (by reason or any change after the date hereof in the method used to compile any such Index or information or for any other reason, whatever) to calculate the amounts due by reference to any such Index or information or any alternatives thereto, the parties shall use such alternative method of indexation under the Contract as a basis for the making of subsequent payments under the Contract as most closely reflects the intent of the Index or information in question.
- 2.4 If any Dispute shall arise between the Parties as to the construction or effect of paragraphs 1 to 2 of this Part D (Price Adjustment for Inflation) of Schedule 3 (Payment) or as to the calculation of any sum calculated in accordance with the provisions of paragraphs 1 to 3 of this Part D (Price Adjustment for Inflation) of Schedule 3 (Payment), the matter may be referred by either party for resolution under the dispute resolution procedure set out in Schedule 5 (Dispute Resolution Procedure) of the Contract.

3. **Time of calculation**

The Maintenance Services Target Cost and the Maintenance Services Target Cost Breakdown, the rates in Part C (Target Costs and Other Pricing Information) in this Schedule 3 (Payment) and the prices in Clause 36.4(G)(ii) shall be adjusted annually for inflation in accordance with this Part D (Price Adjustment for Inflation) of Schedule 3 (Payment) by multiplying them by the relevant Price Adjustment Factor. Adjustments shall take effect on each Adjustment Date and shall apply for the duration of that Budget Period using the Price Adjustment Factor applicable at the relevant Adjustment Date and applying that to the rates listed in Part C of Schedule 3.

SCHEDULE 3 - PART E: AUDIT PLAN

- 1.1. This audit plan is designed to demonstrate that the assessment of the Defined Cost has been completed in accordance with the provisions of Clause 18 (Price and Payment) and this Schedule 3 (Payment) and satisfy the requirements of third party or external auditors.
- 1.2. Clause 13 of the Contract provides the Company with the right to undertake regular audits of Defined Cost and will therefore require full access to the entire Supplier's records of Defined Cost.
- 1.3. Part of the audit process will be to verify the Defined Cost inputs, and part focused towards the testing of the Supplier's cost account procedures for robustness, accuracy and protection against false or inaccurate accounting.
- 1.4. The Supplier shall prepare an audit plan in the format and level of detail of the template plan provided in Annex 1 of Part E (Audit Plan) of this Schedule 3 (Payment).
- 1.5. The template plan is indicative and the Supplier shall amend all sections (as highlighted in red font) as necessary to reflect its own systems and processes to demonstrate compliance with the Supplier's obligations under this Contract.
- 1.6. The Company's Representative may utilise the Supplier's audit plan to audit Defined Cost. For the avoidance of doubt the use of the Supplier's audit plan by the Company shall not limit the Company's audit rights as set out in Clause 13 of this Contract.
- 1.7. The Supplier shall submit a draft audit plan within eight (8) weeks of the date of this Contract.
- 1.8. The Company's Representative may accept the Supplier's audit plan or require the Supplier to make amendments as may be deemed necessary.

Part E: Annex 1 - Audit Plan Template

CONTENTS

- Section A - The Audit Plan - General
- Section B - Maintenance Operatives and Principal Team
- Section C - Equipment
- Section D - Materials
- Section E - Sub-Contractors

Section A

The Audit Plan – General

A.1 Introduction

[Example text

[This plan dated _____ has been prepared by the Supplier to assist the Company in the audit of Defined Costs for the Services.

This audit plan is designed to demonstrate that the assessment of the Defined Cost has been completed in accordance with the provisions of the Contract and satisfy the requirements of Company, third party or external auditors.

The Company, the Company's Representative and the Supplier are jointly committed to ensuring the control of Defined Cost].

A.2 Basis of Audit Plan and Procedures

[Example Text

This procedure is devised on the basis that there is a joint commitment towards minimising costs due to the Target Costs and incentive mechanisms incorporated within the Contract.

With the joint incentive to minimise the cost, it is proposed relatively uncomplicated audit procedures can be adopted.

The Supplier's intention is that the audit plan should avoid the need for auditing all costs and endeavours to minimise cost of implementing the procedures].

A.3 Main Audit Objectives

[Example Text

The intention of the audit plan is to allow an auditor appointed by the Company to provide a monthly report based on a systematic analysis of the records of Defined Cost.

This audit plan is intended to provide the Company with the maximum confidence in the accuracy of the Defined Cost paid whilst employing the minimum practical resource to implement the procedures.

The Audit Plan is divided into four key audit task sections:

- *Supplier Personnel*
- *Construction plant and equipment*
- *Materials*
- *Subcontractors*

A.4 Reporting

[Example Text

The Company as a result of carrying out the audit will generate a number of reports/comments. A pro-forma “Audit Comment Sheet” is enclosed in Appendix 1 of this section A.]

A.5 Audit Report

[Example Text

Each section refers to the issue of an audit report which is closed out when it has been signed-off by authorised signatories.

Recommendations contained in audit reports will provide direction to the audit tasks for subsequent audits. The audit plan will be reviewed on a regular basis.

Comments and proposals to amend the audit plan will be discussed and agreed by the Suppliers representative and the Company’s Representative.]

A.7 Cost Accounting

[Example Text

The Supplier will use its [insert description] cost accounting system in conjunction with payroll records to record, collect and establish Defined Costs for the contract.

The Supplier will set up specific cost centres, maintenance contracts, Contract numbers and service orders on the system which will allow the collection of costs into the correct areas for both renewal works and maintenance.

Timesheets will be completed by operatives and staff, which will accurately record the work carried out so that it may be properly recorded.

All invoices and timesheets will be properly coded to cost centres, Contract and financial codes so that costs are accurately recorded.

The system will operate on a ‘real time’ basis so that it can be interrogated at any time].

A.8 Amendments to audit plan

[Example Text

The Audit Plan is divided into four (4) sections. These are drafted to enable each section to be self-contained and therefore general information is included within each section.

The Audit Plan shall be given a new revision letter upon amendment].

Section A: Appendix 1 - Audit Comment Sheet

AUDIT COMMENT SHEET

Contract Title:

ACS Reference No.: <Contract Ref. / ACS / ***>

Company

Company's Representative

Supplier:

Details of Audit:

< Description of audit to be carried out >

Date of Audit:

< Insert Date >

Auditor:

< Insert Name >

Audit Findings:

Auditor

Date

Copies to:

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Section B

Supplier Personnel

[Example Text

For the purposes of this procedure, Defined Cost relating to Supplier Personnel is described in paragraph 1 (Supplier Personnel) of Part B (Schedule of Defined Cost Components) of Schedule 3 (Payment) of the Contract]

B.1 Audit Objectives

[Example Text

B1.1 Examination of individual payslips of persons who are paid in full (or in part) on a time basis to verify:

- *rates of pay are in accordance with conditions of employment;*
- *payslips relate to labour and staff allocation/timesheets; and*
- *payments relate to work executed on this Contract.*

B1.2 Examination of individual payslips of persons paid in full (or in part) on a productivity basis to verify:

- *payslips tie up with weekly payroll summary provided by the Supplier; and*
- *productivity payments tie up with productivity records.*

B1.3 Examination of average Supplier Personnel costs to:

- *ensure Supplier Personnel cost reviews have been held at the prescribed dates;*
- *payment records for individuals carried to a single employment category; and*
- *payment records used only for individuals employed in the category at the date of Supplier Personnel cost review.*

B1.4 Spot check on overall labour costs to:

- *compare costing records against actual pay records provided by the Supplier in order to verify hours worked on Site;*
- *compare payments made to the Supplier (using the hours derived from the accounting system) and the average Supplier Personnel costs;*
- *produce trend tables to show changes in costs and workforce levels; and*
- *ensure that Disallowed Costs have not been included in payments.*

B.2 Procedures

[Example Text

B.2.1 Generally

B.2.1.1 The auditor shall be supplied with or given access to all information necessary for compliance with the procedures contained within this audit plan.

B.2.1.2 Due to the number of persons working on the Sites and the nature of the Contract, it is impractical to check the pay records of each person employed by the Supplier under the Contract. The audit, therefore, must be based on a selective cross section that is representative of the Defined Cost incurred.

B.2.1.3 Supplier Personnel shall complete weekly timesheets to accurately record work carried out.

B.2.1.4 Timesheet data shall be posted to the Supplier's accounting and payroll systems in accordance with the Supplier's normal procedures.

B.2.1.5 The Supplier shall maintain a schedule of staff included in the Fees.

B.2.1.6 The Supplier Personnel records shall be checked to ensure that none of the individuals included in the assessed amount of Supplier Personnel are listed on the schedule of staff included in the Fees.

B.2.2 Audit Objective B.1.1 & B.1.2

B.2.2.1 The auditor shall determine the time periods to be audited and select 10 names (or varying number as may be determined from time to time by the auditor) from the list of names of Supplier Personnel employed on the Sites.

B.2.2.2 The auditor shall determine and record the basis of selection.

B.2.2.3 The auditor shall inspect their allocation sheets/timesheets to ensure there are no discrepancies. The rates included in assessment of payment shall be checked against the average Supplier Personnel costs.

B.2.2.4 Any overtime payments or travelling and subsistence payments are also checked for accuracy against the basis for calculation of such payment provided by the Supplier.

B.2.2.5 Payslips are also compared with weekly payroll summaries.

B.2.3 Audit Objective B.1.3

B.2.3.1 The auditor determines the time period to be audited and how regularly calculations are to be made and uses the total Defined Cost of Supplier Personnel:

- to check the average Supplier Personnel costs supplied by the Supplier;*
- to calculate the average hourly cost during the period and enter onto a 'trend' chart;*
- to calculate the total numbers of persons employed and enter onto a 'trend' chart; and*

- *to check to ensure any Disallowed Cost has not been paid.*

B2.4 Audit Objective B.1.4

B2.4.1 The auditor determines how regularly spot checks are to be made and the sample size:

- *to check the accuracy of the Defined Cost of Supplier Personnel;*
- *to check the accuracy of the Supplier's time recording systems; and*
- *to produce trend tables to show worsening or improvements in accuracy.]*

B.3 Audit Records

[Example Text

B3.1 Generally

B3.1.1 Full audit records of Supplier Personnel shall be kept and filed in accordance with this procedure.

B3.1.2 It is anticipated that the Supplier Personnel "trend" tables referred to in section B3.4 below, as well as the Supplier Personnel audit reports, shall be of use both to the auditor and the Company's Representative.

B3.2 Supplier Personnel audit report

B3.2.1 The auditor shall issue a Supplier Personnel audit report to the Company's Representative for each Period. It shall identify positive findings as well as items needing further action and consideration.

B3.2.2 The Supplier Personnel audit report shall not be deemed completed until it has been signed off by:

- *the auditor;*
- *the Company's Representative or his authorised representative; and*
- *the Supplier's Representative or his authorised representative.*

B3.3 Supplier Personnel record of audit

B3.3.1 The record of audit is prepared by the auditor to record all tasks undertaken since the cut-off date of the previous Supplier Personnel audit report. It is retained by the auditor for review by the Company's Representative and third party or external auditors.

B3.3.2 The record of audit shall summarise the records examined during the Period and it shall note the following:

- *Period;*
- *basis of selection;*

- *names of Supplier Personnel records audited;*
- *payroll numbers;*
- *grade of labour and work location;*
- *that the individuals carried to Defined Cost are not included in the schedule of staff included in the Integrated Team Fee and the relevant Upgrade Work Activity Fee;*
- *if allocation sheets/timesheet records are consistent; and*
- *if payslips tie up with weekly payroll records.*

B3.3.3 The record of audit shall be signed off by the auditor as a true record and forms the basis of the Supplier Personnel audit report.

B3.4 Trend Tables

The trend table(s) (which shall include the following) shall supplement the record of audit:

- *wage bill for current and previous Periods;*
- *average labour cost per man for this Period and previous Periods; and*
- *number of persons employed during this Period and previous Periods.*

B3.5 Filing

A file shall be established entitled _____ - Supplier Personnel Audit Records”].

B.4 Information to be provided by the Supplier

[Example Text

In order to meet the audit objectives, the Supplier shall be required to make available for inspection information including, but not limited to, the following:

- *weekly payroll build-up;*
- *payslips;*
- *allocation sheets;*
- *schedule of Supplier Personnel included in the Fees;*
- *productivity records;*
- *grading of Supplier Personnel; and*
- *agreed rates of pay and basis of agreement].*

Section C

Plant and Equipment

[Example text

For the purposes of this procedure, Defined Cost relating to equipment is described in paragraph 2 (Plant and Equipment) of Part B (Schedule of Defined Cost Components) of Schedule 3 (Payment) of the Contract].

C.1 Audit Objectives

[Example text

The audit objectives are divided into two main areas to verify:

Pre-order

- *orders or purchases are based upon accurate documentation and competitive prices.*

Post-order

- *equipment orders are properly administered and payments made relate to usage on this Contract.*

C.1.1 Pre-Order

C.1.1.1 Confirm that requisitions and purchase orders identify the Period of hire and that requisitions have been authorised.

C.1.2 Post Order

C.1.2.1 Verify equipment deliveries are checked and align with orders.

C.1.2.2 Check a procedure is in place to ensure equipment is off hired in a timely manner.

C.1.2.3 Check that a procedure is place to ensure that contemporary Site records are kept of equipment employed (as distinct to present) in the Sites and that these are verified by the Company.

C.1.2.4 Verify that site records for usage of equipment align with payments made to the Supplier and that payments are made at the appropriate time and that any Disallowed Costs have been taken into account.

C.1.2.5 Verify that the Supplier's cost is charged at the amount of invoice for the Period that the equipment is employed in the Sites.

C.2 Procedures

[Example Text

C.2.1 Generally

C.2.1.1 The auditor shall be supplied with or given access to all information necessary for compliance with the procedures contained within this audit plan.

C.2.1.2 *Electronic requisitions and purchase orders shall be raised by the Supplier on the accounting system.*

C.2.1.3 *Each order shall contain specific codes so that invoiced costs are allocated accurately against sub-divisions of Target Cost Breakdowns.*

C.2.2 Audit Objectives C.1.1.1, C.1.2.1 & C.1.2.6

C.2.2.1 *The auditor shall review a list of equipment orders placed.*

C.2.2.2 *The auditor shall select orders and view documentation and resultant reports and recommendations, spot check that where possible competitive prices have been received and that costs incurred relate to the Contract.*

C.2.3 Audit Objective C.1.2.2

C.2.3.1 *The auditor shall select orders at random and view requisitions relating thereto.*

C.2.3.2 *The auditor shall carry out spot checks to verify:*

- *requisitions have been approved in accordance with the Supplier's relevant procedure; and*
- *requisitions and equipment orders identify the estimated period of hire.*

C.2.4 Audit Objectives C.1.2.1, C.1.2.2 & C.1.2.3

C.2.4.1 *The auditor shall select orders at random and review relevant delivery notes to ascertain that equipment has been checked and received and is intended for use on the Contract.*

C.2.4.2 *The auditor shall select orders at random to carry out spot checks. These checks shall include checking that payments are compatible with deliveries, periods of hire and invoices received. That the correct rates have been used for calculation of payment due, all discounts are disclosed and that periods of additional hire are backed up by revised requisitions based on site assessments.*

C.2.5 Audit Objective C.1.2.4

C.2.5.1 *The auditor shall carry out spot checks determine that procedures are in place to monitor the use/need for equipment and that equipment is being returned in a timely manner where it is being hired.*

C.2.5.2 *The auditor shall check requisition forms, electronic or otherwise, and compare these with monitoring procedures.*

C.2.6 Audit Objectives C.1.2.5

C.2.6.1 *The auditor shall spot check that amounts certified by the Supplier align with total payments made in respect of equipment].*

C.3 Audit Records

[Example Text

C.3.1 Generally

Full audit records of equipment shall be kept and filed in accordance with this procedure.

C.3.2 Plant and Equipment Audit Report

The auditor shall issue a plant and equipment audit report to the Company's Representative on a four (4) weekly basis. It shall identify positive findings as well as items needing further action and consideration.

The plant and equipment audit report shall not be deemed completed until it has been signed off by:

- *the auditor;*
- *the Company's Representative or his authorised representative; and*
- *the Supplier's Representative or his authorised representative.*

C.3.3 Equipment record of audit

C.3.3.1 The record of audit is prepared by the auditor to record all tasks undertaken since the cut-off date of the previous plant and equipment audit report. It is retained by the auditor for review by the Company's Representative and third party or external auditors.

C.3.3.2 The record of audit shall summarise the records examined during the period and it shall note the following:

- *Period;*
- *basis of selection;*
- *items of equipment audited;*
- *equipment identification numbers;*
- *if requisitions correlate with orders and invoices; and*
- *if procedures for hiring equipment have been operated in the Period.*

C.3.3.3 The record of audit shall be signed off by the auditor as a true record and forms the basis of the equipment audit report.

C.3.4 Filing

A file shall be established entitled with the _____ – Plant and Equipment Audit Records".

C.3.5 Timescales

The auditor shall initially carry out an audit within three (3) months of the Services Commencement Date.

Subsequent audits shall be carried out for each Period.

C.4 Information to be provided by the Supplier

[Example Text

In order to meet these objectives, the Supplier shall provide all necessary information including, but not limited to, the following:

- *list of orders raised and estimated values;*
- *summary of payments made in the Period;*
- *quotations from suppliers;*
- *access to invoices and delivery note records;*
- *schedule of total equipment on Sites;*
- *assessments/recommendations carried out by the Supplier prior to placing orders; and*
- *site assessment of schedules of equipment.*

Section D

Materials

[Example Text

For the purposes of this procedure, Defined Cost relating to materials is described in paragraph 3 (Materials and Charges) of Part B (Schedule of Defined Cost Components) of Schedule 3 (Payment) of the Contract.

D.1 Audit Objectives

[Example Text

The audit objectives are divided into two main areas to verify:

Pre-order

- *orders are based upon accurate documentation and competitive prices are obtained.*

Post-order

- *that materials orders are properly administered and that payments are accurate and timely.*

D.1.1 Pre-order

D.1.1.1 Confirm that where possible competitive prices are obtained for the purchase of materials.

D.1.1.2 Confirm orders are, where applicable, based upon a reasonable assessment of quantities required.

D.1.1.3 Confirm a maximum order value based upon required quantities is ascertained and recorded.

D.1.1.4 Confirm orders detail payment periods and terms.

D.1.1.5 Confirm the final location of materials can be identified from the order and requisition.

D.1.1.6 Confirm details on orders match those on the requisition raising the order.

D.1.2 Post Order

D.1.2.1 Verify payments made are based upon materials delivered and agreed rates and payments exclude any Disallowed Cost.

D.1.2.2 Verify material delivery notes are being accurately checked.

D.1.2.3 Verify total delivery of materials corresponds with orders.

D.1.2.4 Confirm payments made for materials align with payments made to Supplier for same purpose and payments are made at the appropriate time.

D.1.2.5 All payments for materials held outside the Sites are accompanied by a vesting certificate providing indemnity to the Company against proof of ownership.

D.2 Procedures

[Example Text

D.2.1 Generally

D.2.1.1 The auditor shall be supplied with or given access to all information necessary for compliance with the procedures contained within this audit plan.

D.2.1.2 Electronic requisitions and purchase orders shall be raised by the Supplier on the accounting system.

D.2.1.3 Each order shall contain specific codes so that invoiced costs are allocated accurately against each sub-division of Target Cost Breakdowns.

D.2.2 Audit Objectives D.1.1.1 & D.1.1.5

D.2.2.1 The auditor shall select orders and view requisitions and purchase orders indents and verify competitive prices have been received and that the location for materials can be ascertained.

D.2.2.2 The basis of selection shall be recorded.

D.2.3 Audit Objective D.1.1.2

D.2.3.1 The auditor shall select an order at random and review quantities against ascertained required quantities.

D.2.3.2 The auditor shall carry out spot checks to determine that:

- latest specifications have been used; and*
- quantities have been used as the basis for enquiries and are in alignment with ascertained required quantities.*

D.2.4 Audit Objective D.1.1.3

D.2.4.1 The auditor shall carry out spot checks to verify that maximum prices recorded coincide with quotes received.

D.2.5 Audit Objective D.1.1.4

D.2.5.1 The auditor shall carry out spot checks on selected enquiries and orders to determine whether payment terms/payment periods are recorded and reasonable.

D.2.6 Audit Objective D.1.1.5 and D.1.1.6

D.2.6.1 The auditor shall carry out spot checks on selected orders to determine whether requisition details match those on orders.

D.2.7 Audit Objectives D.1.2.1, D.1.2.2 & D.1.2.3

D.2.7.1 The auditor shall select orders and request access to delivery notes and invoices and shall carry out spot checks using selected delivery notes to ascertain that materials have been received and checked and that reconciliation has been carried out against the order.

D.2.7.2 *The auditor shall select orders to carry out spot checks that payments made are consistent with actual deliveries made and that correct rates have been used for this purpose, and that all discounts are disclosed.*

D.2.8 *Audit Objective D.1.2.4*

D.2.8.1 *The auditor shall carry out spot checks that amounts certified by the Company for payment align with total payments made.*

D.2.9 *Audit Objective D.1.2.5*

D.2.9.1 *The auditor shall carry out spot checks that the amounts for materials held off Site are certified as vested for this Contract.*

D.3 *Audit Records*

[Example Text

D.3.1 *Generally*

D.3.1.1 *Full audit records of materials shall be kept and filed in accordance with this procedure.*

D.3.2 *Materials Audit Report*

D.3.2.1 *The auditor shall issue a materials audit report to the Company's Representative on a four (4) weekly basis. It shall identify positive findings as well as items needing further action and consideration.*

D.3.2.2 *The materials audit report shall not be deemed completed until it has been signed off by:*

- *the auditor;*
- *the Company's Representative or his authorised representative; and*
- *the Supplier's Representative or his authorised representative.*

D.3.3 *Materials record of audit*

D.3.3.1 *The record of audit is prepared by the auditor to record all tasks undertaken since the cut-off date of the previous materials audit report. It is retained by the auditor for review by the Company and third party or external auditors.*

D.3.3.2 *The record of audit shall summarise the records examined during the period and it shall note the following:*

- *Period;*
- *basis of selection;*
- *items of materials audited; and*
- *if requisitions correlate with orders and invoices.*

D.3.3.3 *The record of audit shall be signed off by the auditor as a true record and forms the basis of the materials audit report.*

D.3.4 *Filing*

D.3.4.1 *A file shall be established entitled with the “[] – Materials Audit Records”.*

D.3.5 *Timescales*

D.3.5.1 *The auditor shall initially carry out an audit within three (3) months of the Services Commencement Date.*

D.3.5.2 *Subsequent audits shall be carried out for each Period.*

D.4 Information to be provided by the Supplier

[Example Text

In order to meet these objectives, the Supplier shall provide all necessary information including, but not limited to, the following:

- *materials requisitions;*
- *list of orders raised and values of orders;*
- *vesting certificates;*
- *register of delivery notes for the period and access to invoices and records; and*
- *invoices received.*

Section E

Sub-contractors

[Example Text

Defined Cost in respect of Sub-Contractors is defined in paragraph 4 (Sub-Contractors) of Part B (Schedule of Defined Cost Components) of Schedule 2 (Payment)].

E.1 Audit Objectives

[Example Text

The sub-contractor audit objectives are divided into (1) pre award and (2) post award tasks to verify that:

Pre Award

- *Sub-Contract tender documentation is accurate;*
- *contractually fair and reasonable;*
- *competitive prices are obtained;*
- *Sub-Contracts are fairly awarded; and*
- *Sub-Contracts are not awarded to organisations within the Supplier's group, i.e. subsidiaries, owned or part owned companies.*

Post Award

- *Sub-Contracts are properly administered;*
- *interim payments made to sub-contractors are fair and reasonable;*
- *final accounts are completed;*
- *pricing remains competitive; and*
- *payments in respect of sub-contract labour relate to timesheets verified on site by the Supplier's supervisor.*

E.1.1 Pre-Award

When requested by the Company's Representative, the audit shall be undertaken to:

E.1.1.1 Confirm compilation of proposed sub-contract tender list is in accordance with the Supplier's contractual obligations and includes sub-contractors who are included on its approved list of tenderers. The approved list of tenderers shall in no event include sub-contractors from within the Supplier's group without the written approval of the Company.

E.1.1.2 Verify:

- *consistency in contractual terms between the various sub-contract tenders*

- issued for this Contract;
- tender enquiries are based on current specification documents;
- terms and conditions are fair and reasonable, take cognisance of the main contract conditions and comply with current legislation regarding sub-contracts; and
- reasonable price breakdowns have been requested.

E.1.1.3 Confirm that sub-contract tender enquiries are competitively sought or determine reasons for single tender action.

E.1.1.4 Confirm that sub-contract tenders are sent out and received back.

E.1.1.5 Confirm that tenders are being sought at an appropriate time and that tender periods are reasonable.

E.1.1.6 Confirm that tender returns are compared reasonably and that tender qualifications are withdrawn as far as possible.

E.1.1.7 Confirm that tenders have been fairly assessed and that the lowest price has generally been accepted (taking cognisance of any outstanding qualifications).

E.1.1.8 Confirm that there is full disclosure of discounts.

E.1.1.9 Confirm that the tender to be accepted has a reasonable breakdown of prices to facilitate evaluation of variations.

E.1.1.10 Confirm that the tenders are awarded on the basis of latest information.

E.1.1.11 Purchase orders shall be placed for Sub-Contracts and formal Sub-Contract documentation shall be completed.

E.1.2 Post Award

The audit shall be undertaken to verify:

E.1.2.1 Changes to the sub-contract are being instructed properly in a timely manner and procedures are in place to ensure that sub-contractors have the latest specification issued by the Company's Representative.

E.1.2.2 Payments made to sub-contractors are based upon:

- work done and/or materials on-site or off-site;
- sub-contract rates and prices;
- reasonable rates and prices (in respect of variations where sub-contract rates and prices do not apply).

E.1.2.3 All payments for materials held outside the Sites are accompanied by a vesting certificate providing indemnity to the Company against proof of ownership.

E.1.2.4 All payments prepared by the Supplier are for work carried out or for materials

supplied for the Contract and do not include Disallowed Cost.

E.1.2.5 That payments made to sub-contractors align with payments made to the Supplier for the same purpose.

E.1.2.6 That periodic market reviews are undertaken to ensure that sub-contract prices remain competitive.

E.1.2.7 That in respect of sub-contract labour, operatives have completed weekly timesheets and that these have been verified by the Supplier's Representative to accurately record their time expended on the Contract.

E1.2.8 [That periodic reviews are undertaken to ensure that, in any period, amounts of invoice in respect of payments for sub-contracted labour do not exceed 12% of the Defined Cost of Maintenance Operatives and Principal Team.]

E.2 Procedures

[Example Text

E.2.1 Generally

The auditor shall be supplied with or given access to all information necessary for compliance with the procedures contained within this audit plan.

E.2.2 Audit Objectives E.1.1.1 & E.1.1.3

E.2.2.1 For sub-contract enquiries issued on the Contract, the auditor shall have made available for inspection a signed off list of tenderers.

E.2.2.2 Reasons for single tender actions shall be provided.

E.2.3 Audit Objectives E.1.1.2, E.1.1.4 & E.1.1.5

E.2.3.1 For all sub-contract enquiries to be issued on the Contract, the auditor shall have made available for inspection a copy of the draft tender documentation. The auditor may undertake a spot check of the documentation at any time. The auditor shall verify that the tender documentation:

- *includes the latest specification by reference to document control records; and*
- *is consistent for all enquiries and main contractual terms are relevant and clear.*

E.2.3.2 Any review by the auditor shall not be allowed to delay/affect the issuing of the enquiry documents.

E.2.3.3 The auditor shall be advised of any subsequently issued documents detailing:

- *any amendments made to the draft tender documents or price; and*
- *amendments to be made but currently excluded and how they are to be incorporated in the future.*

E.2.4 Audit Objectives E.1.1.6 to E.1.1.10

E.2.4.1 For all sub-contract enquiries to be issued on this Contract, the auditor shall receive an initial summary of the tender offers, together with a summary of any significant qualifications included therein.

E.2.4.2 The Supplier shall assess the tenders in more detail, endeavour to remove qualifications and shall make available for inspection by the auditor a copy of their recommendation together with their reconciliation of prices and outstanding qualifications.

E.2.4.3 The auditor may review documents at any time and provide any comments on the Supplier's recommendation to the Company's Representative.

E.2.5 Audit Objective E.1.2.1

E.2.5.1 When requested by the auditor, the Supplier shall provide a schedule listing all instructions issued to sub-contractors.

E.2.5.2 The auditor shall carry out random checks by comparison to the contract document control records.

E.2.6 Audit Objectives E.1.2.2, E.1.2.3 & E.1.2.4

E.2.6.1 The auditor shall carry out spot checks on payment certificates. When requested by the auditor, the Supplier shall provide a copy of the latest payment certificate together with a breakdown of the latest or previous valuations as may be necessary.

E.2.6.2 The auditor may request further support documentation such as:

- *site notes/measurements;*
- *measurements from drawings/final accounts;*
- *build-ups for new rates;*
- *copies of sub-contract documentation;*
- *vesting certificates;*
- *invoices;*
- *delivery tickets; and*
- *schedule of Disallowed Cost.*

E.2.6.3 The auditor shall carry out spot checks to verify:

- *rates or prices used are Contract rates or prices or compatible therewith;*
- *work has been executed in relation to the Contract;*
- *the value included for materials relates to materials on-site for the Contract;*
- *the value for materials held outside the Sites are certified as vested for the*

Contract;

- *the value of variations is identified; and*
- *consideration has been made for Disallowed Cost.*

E.2.6.4 On completion of the draft final account, the auditor may review the final account and carry out spot checks as referred to above.

E.2.7 Audit Objectives E.1.2.5

E.2.7.1 The auditor shall carry out spot checks that payments made to the Supplier in respect of sub-contractors have also been made to the Sub-Contractors.

E.2.7.2 The Supplier's sub-contract payment authority shall be endorsed with details of the form of payment to the sub-contractor e.g. cheque number, date of payments etc.

E.2.8 Audit Objectives E.1.2.6

E.2.8.1 The auditor shall carry out spot checks that the Supplier:

- *has reviewed prices contained within the Sub-Contract; and*
- *has satisfied himself that the prices, at the date of his review, remain competitive in comparison to alternative providers.*

E.2.9 Audit Objectives E.1.2.7 and E.1.2.8

E.2.9.1 The auditor shall determine the time periods to be audited and select 10 names (or varying number as may be determined from time to time by the auditor) from the list of names of sub-contract individuals employed on the Sites.

E.2.9.2 The auditor shall determine and record the basis of selection.

E.2.9.3 The auditor shall inspect their timesheets to ensure there are no discrepancies and that it has been signed by the Supplier.

E.2.9.4 Amounts of Invoice, cleared to pay shall be checked to ensure that invoiced hours are consistent with hours recorded on the weekly timesheets and to ensure that they do not include Disallowed Cost.

E.2.9.5 Amounts of payment shall be checked to ensure they match the amount of cleared to pay invoices

E.3 Audit Records

[Example Text

E.3.1 Generally

Full audit records of Sub-Contractors shall be kept and filed in accordance with this procedure.

E.3.2 Sub-contractor Audit Report

The auditor shall issue a sub-contractor audit report to the Company's

Representative and Supplier for each Period. It shall identify positive findings as well as items needing further action and consideration.

The sub-contractor audit report shall not be deemed completed until it has been signed off by:

- *the auditor;*
- *the Company's Representative or his authorised representative; and*
- *the Supplier Representative or his authorised representative.*

E.3.3 Sub-contractor record of audit

The record of audit is prepared by the auditor to record all tasks undertaken since the cut-off date of the previous sub-contractor audit report. It is retained by the auditor for review by the Company's Representative and third party or external auditors.

The record of audit shall be the back-up document to the sub-contractor audit report.

E.3.4 Filing

A file shall be established entitled with the “[] – Sub-Contractor Audit Records”.

E.3.5 Timescales

The auditor shall initially carry out an audit within three (3) months of the Services Commencement Date.

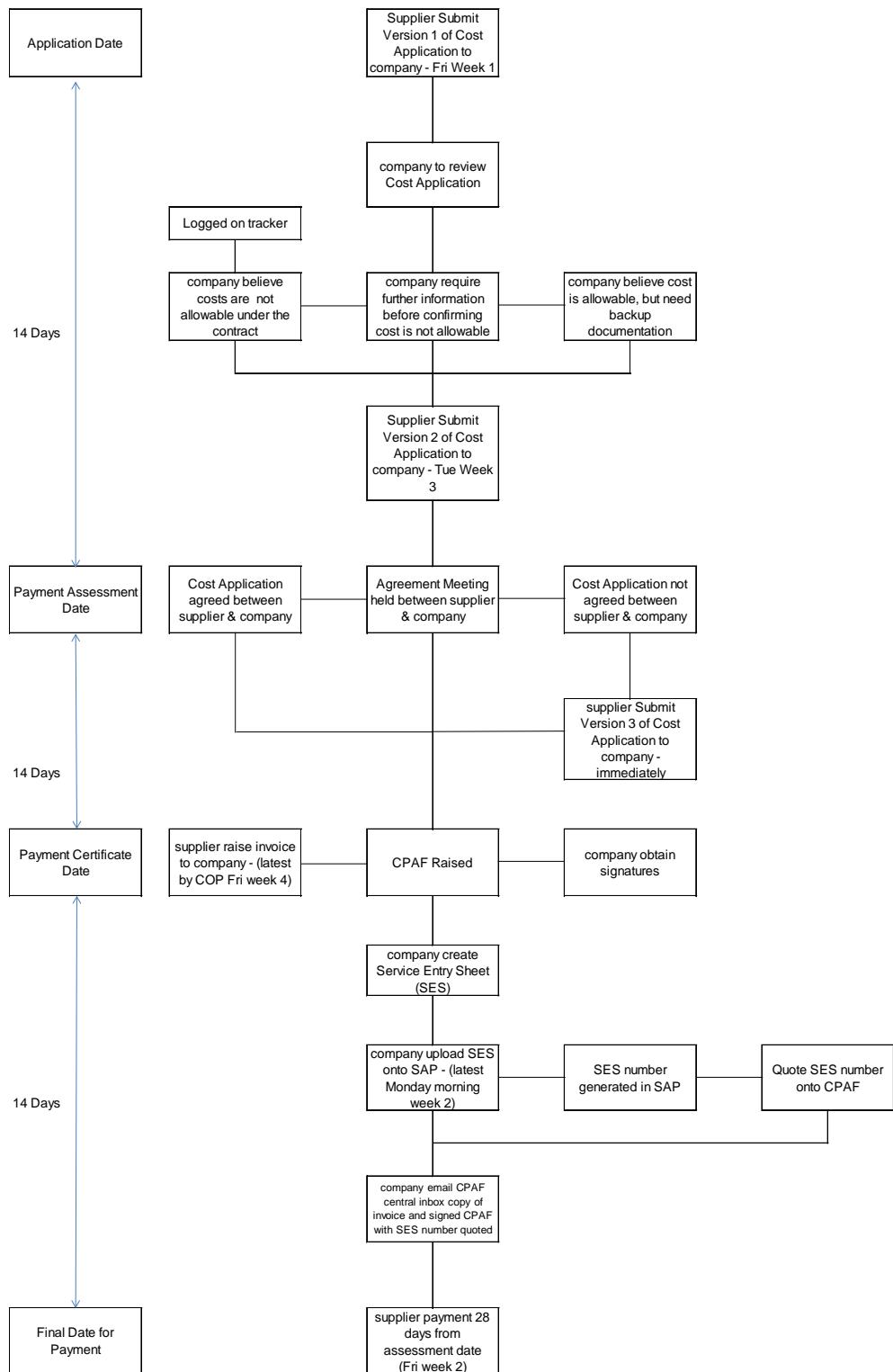
Subsequent audits shall be carried out for each Period].

SCHEDULE 3 - PART F: PAYMENT ASSESSMENT DATES (BUDGET PERIOD ONE)

Activity			Latest date for completion						
			Payment Application issued	Payment Application review meeting	Payment Certificate issued	Due date for payment	Invoice raised	Final Date for Payment	
Owner			Supplier	Company and Supplier	Company	Company	Supplier	Company	
Financial Year	Period	Week one start date							
Budget Period one	2019/20	11	05/01/2020	10/01/2020	17/01/2020	24/01/2020	24/01/2020	31/01/2020	07/02/2020
		12	02/02/2020	07/02/2020	14/02/2020	21/02/2020	21/02/2020	28/02/2020	06/03/2020
		13	01/03/2020	06/03/2020	13/03/2020	20/03/2020	20/03/2020	27/03/2020	03/04/2020
	2020/21	1	01/04/2020	06/04/2020	13/04/2020	20/04/2020	20/04/2020	27/04/2020	04/05/2020
		2	03/05/2020	08/05/2020	15/05/2020	22/05/2020	22/05/2020	29/05/2020	05/06/2020
		3	31/05/2020	05/06/2020	12/06/2020	19/06/2020	19/06/2020	26/06/2020	03/07/2020
		4	28/06/2020	03/07/2020	10/07/2020	17/07/2020	17/07/2020	24/07/2020	31/07/2020
		5	26/07/2020	31/07/2020	07/08/2020	14/08/2020	14/08/2020	21/08/2020	28/08/2020
		6	23/08/2020	28/08/2020	04/09/2020	11/09/2020	11/09/2020	18/09/2020	25/09/2020
		7	20/09/2020	25/09/2020	02/10/2020	09/10/2020	09/10/2020	16/10/2020	23/10/2020
		8	18/10/2020	23/10/2020	30/10/2020	06/11/2020	06/11/2020	13/11/2020	20/11/2020
		9	15/11/2020	20/11/2020	27/11/2020	04/12/2020	04/12/2020	11/12/2020	18/12/2020
		10	13/12/2020	18/12/2020	25/12/2020	01/01/2021	01/01/2021	08/01/2021	15/01/2021
		11	10/01/2021	15/01/2021	22/01/2021	29/01/2021	29/01/2021	05/02/2021	12/02/2021
		12	07/02/2021	12/02/2021	19/02/2021	26/02/2021	26/02/2021	05/03/2021	12/03/2021
		13	07/03/2021	12/03/2021	19/03/2021	26/03/2021	26/03/2021	02/04/2021	09/04/2021

SCHEDULE 3 - PART G: PAYMENT APPLICATION WORKFLOW AND TIMELINE

Payment Application Workflow and Timeline



SCHEDULE 4: Contract Variation Procedure and Maintenance Renewal Services

SCHEDULE 4 – Part A: Contract Variation Procedure

- 1.1 Without prejudice to paragraph 3 below, the cost of any Variation Order shall be agreed between the Parties taking account of the reasons why the Variation Order was required.
- 1.2 The Company's Representative may propose a variation by completing Appendix 1 (Form of Variation Proposal/ Order) of this Part A of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) and supplying three (3) copies of it to the Supplier. Within five (5) Working Days of receipt, or such other time as may be agreed by the Company, the Supplier shall complete Part B of the Variation Proposal and shall supply two (2) copies of the Variation Proposal to the Company's Representative. The Company's Representative shall be entitled, at any time within twenty (20) Working Days of receipt, to instruct and authorise the Supplier to proceed with the variation on the terms so set out by each Party by completing and signing Part C of one (1) copy of the Variation Proposal (which, following such signature, will be referred to as a "Variation Order") and supplying such Variation Order to the Supplier. The relevant part(s) of this Contract shall thereupon be varied accordingly.
- 1.3 For the avoidance of doubt, the Supplier shall carry out the variation in accordance with the Variation Order on the terms determined by the Company's Representative and such variation shall commence no later than five (5) Working Days (unless otherwise instructed by the Company's Representative) following receipt of the signed Variation Order by the Supplier. Where the terms are not agreed by the Supplier, or where the Supplier fails to provide Part B of the Variation Proposal to the Company's Representative within the timescales set out in paragraph 2 above, the variation shall be deemed to be agreed and the Supplier shall proceed, at the request of the Company's Representative, to implement the variation in accordance with the specified terms within five (5) Working Days (unless otherwise instructed by the Company's Representative) of receipt of the original Variation Proposal by the Supplier. Where such Variation Order is disputed by the Supplier, the Supplier may refer this dispute at any time to the Core Group for determination in accordance with the provisions set out in paragraph 2.4(A)(4) of Schedule 10 (Contract Management) but is required to implement the variation pending the outcome of the Dispute.
- 1.4 The Supplier may propose a variation, after requesting the issue by the Company's Representative of a Variation Proposal variation number, by completing Parts A and B of a Variation Proposal and supplying two (2) copies of it to the Company's Representative. The Company's Representative shall be entitled, at any time within twenty (20) Working Days of receipt, to instruct the Supplier to proceed with the variation on the terms so set out by the Supplier by completing and signing Part C of one (1) copy of the Variation Proposal (which, following such signature, will be referred to as a "Variation Order") and supplying such Variation Order to the Supplier. The relevant part(s) of this Contract shall thereupon be varied accordingly.
- 1.5 The Supplier may indicate in a Variation Proposal that the price is an estimated price but, if it does so, it shall supply a firm price to the Company in writing at least five (5) Working Days before the expiry of the time within which the Company is entitled to instruct the Supplier to proceed with the variation.

- 1.6 In all Variation Proposals, the Supplier shall ensure that:
 - 1.6.1 the price indicated by the Supplier must be the full price and shall cover all costs associated with the variation;
 - 1.6.2 if appropriate a range of prices is shown corresponding to the extent of the Services to be carried out;
 - 1.6.3 the Variation Proposal details the effect, if any, on the Target Costs reasonably incurred by the Supplier as a direct consequence of the Variation;
 - 1.6.4 the Variation Proposal details the build-up to assessed effect (if any) on the Target Costs using a quantified Defined Cost estimate;
 - 1.6.5 the Variation Proposal details the effect on the current Target Cost Breakdowns and the Target Costs by submitting new Target Cost Breakdowns and new tables showing the proportion of the Target Costs by Period and by Budget Period; and
 - 1.6.6 the Variation Proposal includes such further information as may reasonably be required by the Company's Representative.
- 1.7 In an Emergency, both Parties shall use their reasonable endeavours to expedite the actions permitted or required under the Contract Variation Procedure.
- 1.8 The Company will not accept any retrospective claims for additional work caused by a variation which has not been approved by the Company's Representative in accordance with the Contract Variation Procedure before the commencement of such additional services.
- 1.9 All authorised additional services resulting from any Variation Proposal shall be priced and paid for as Defined Cost and supported with a full resource cost estimate.
- 1.10 The Supplier shall at all times act reasonably and shall price each Variation Proposal at the least possible additional cost to the Company that it is reasonably and economically practicable for the Supplier to offer and which has the least possible impact on the terms of this Contract, including but not limited to, the Specification and the Baseline Programme.
- 1.11 Strict adherence to the procedure described in this Part A (of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) shall be a condition precedent to any addition to any of the Target Costs or amounts payable to the Supplier for the Services. If the Supplier does not adhere to each paragraph in this Part A of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) then the Supplier shall not be entitled to any addition to any of the Target Costs or amounts payable to the Supplier notwithstanding that the Supplier may have supplied additional or varied Services.

SCHEDULE 4 PART A - APPENDIX 1: FORM OF VARIATION PROPOSAL/VARIATION ORDER

To:

From:

Contract Reference:

Variation Number:

Variation Title:

PART A (TO BE COMPLETED BY THE ORIGINATOR OF THE VARIATION ORDER)

Description of change:

Reason for changes and impact (if any) on Contract:

Variation Proposal Authorised by:

Proposal Date:

PART B (TO BE COMPLETED BY THE SUPPLIER)

Price Breakdown

Note: If a further breakdown is needed please append details as a separate sheet.

Expected Delivery Date or completion date (as applicable):

Supplier's Representative:

Print Name: Signature: Date:

Completed document to be returned to the Company's Representative

PART C (TO BE COMPLETED BY THE COMPANY'S REPRESENTATIVE)

Comment on Parts A and B:

Variation Authorisation

Company's Representative:

Print Name: Signature: Date:

SCHEDULE 4 - Part B: Maintenance Renewal Services

1. Notice of the Need for Maintenance Renewal Services

- 1.1 The Supplier shall proactively identify where there is a need or benefit to the Company in Maintenance Renewal Services being undertaken or where any asset or group of assets is identified as being at risk of obsolescence and shall notify the Company's Representative of the need or benefit in undertaking such Maintenance Renewal Services together with:
 - (A) details of why the Maintenance Renewal Services are required;
 - (B) details of the effects and/or consequences if the Company's Representative does not instruct to carry out such Maintenance Renewal Services;
 - (C) details of the technical proposal and specification for the required Maintenance Renewal Services;
 - (D) the cost of performing the required Maintenance Renewal Services and consequent adjustment to the Maintenance Services Target Cost;
 - (E) the proposed date for commencing performance of the Maintenance Renewal Services;
 - (F) the proposed date for completion of the Maintenance Renewal Services; and
 - (G) details of any proposed testing requirements in addition to those set out in Clause 7.2 of the Contract.
- 1.2 In the event that the Company requires any further information in order to consider a proposal for Maintenance Renewal Services then the Company's Representative shall notify the Supplier within 20 Working Days of receipt of the information referred to in paragraph 1.1 of this Part B of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) of the further information it requires. The Supplier shall provide the Company's Representative with such further information reasonably required by the Company's Representative in relation to the Supplier's notification pursuant to paragraph 1.1 of this Part B of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) within such reasonable period required by the Company's Representative.
- 1.3 Where the Company itself identifies that Maintenance Renewal Services are required, the Company shall notify the Supplier to that effect in writing and the Supplier shall provide the Company's Representative with the information referred to in paragraph 1.1 (B) - (G) of this Part B of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) together with such further information reasonably required by the Company's Representative within such reasonable period required by the Company's Representative in its notice to the Supplier.

2. **Supplier Response and Company Confirmation**

2.1 The Company's Representative shall, within 90 days of receipt of the information provided by the Supplier pursuant to paragraph 1.1 (and such further information required by the Company's Representative pursuant to paragraph 1.2) or receipt of the information provided by the Supplier pursuant to paragraph 1.3 of this Part B of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) either:

- (A) issue an instruction to the Supplier to proceed with the Maintenance Renewal Services confirming in that notice the agreed position on the matters referred to in paragraph 1.1 (C) - (G) of this Part B of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services);
- (B) object in writing to any part of that information provided by the Supplier under paragraph 1.1 (C) - (G) of this Part B of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) and in such circumstances the Parties shall act reasonably to agree as soon as practicable how the Maintenance Renewal Services are to be implemented; or
- (C) notify the Supplier that it does not wish to proceed with the relevant Maintenance Renewal Services.

In the event that the Company's Representative does not issue an instruction pursuant to sub-paragraph (A), an objection pursuant to sub-paragraph (B) or a notification pursuant to sub-paragraph (C) within the said 90 day period then a notification will be deemed to have been issued by the Company's Representative to the Supplier that it does not wish to proceed with the relevant Maintenance Renewal Services.

2.2 In the event that the Company's Representative issues an objection pursuant to in paragraph 2.1(B) of this Part B of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) and the Parties cannot reach agreement within 20 Working Days of the Company's Representative issuing that objection, then either Party may at any time thereafter refer the matters not agreed at any time to the Core Group for determination in accordance with the provisions set out in paragraph 2.4(A)(4) of Schedule 10 (Contract Management). The provisions of paragraph 2.1 of this Part B of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) shall apply following agreement between the Parties of the matters referred to in paragraph 1.1 (C) - (G) of this Part B of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) or determination pursuant to this paragraph 2.2 except that the time period referred to shall be 10 Working Days after agreement being reach or receipt of notification of the determination under this paragraph 2.2 and sub-paragraph (B) shall be deemed to be deleted.

2.3 Following receipt of an instruction by the Company's Representative to proceed with any Maintenance Renewal Services, the Supplier shall proceed to carry out the Maintenance Renewal Services in accordance with the agreed Maintenance Renewal Services Instruction.

2.4 The cost of implementing the required Maintenance Renewal Services shall be calculated by reference to paragraph 3 of this Part B (Maintenance Renewal Services) of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services). Other than the costs referred to in this paragraph 2.4, the Supplier shall make no

charge to the Company for processing, implementing or managing Maintenance Renewal Services.

2.5 In the event that the Company's Representative does not issue a Maintenance Renewal Services Instruction within the timescales set out in paragraph 2.1 (as may be extended in accordance with paragraph 2.2) or if the Company's Representative issues a notice to the Supplier that it does not wish to proceed with the Maintenance Renewal Services pursuant to paragraph 2.1(C) of this Part B of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) then the Parties shall agree:

- (A) any adjustments required to the PMM;
- (B) any amendments required to the Maintenance Plan including, without limitation, in respect of performance, critical spares holding, repairs, planned preventative maintenance and fault rectification times; and
- (C) any adjustment required to the Maintenance Services Target Cost;

in each case to the extent necessary as a consequence of the relevant Maintenance Renewal Services not being instructed.

In the event that the Parties cannot agree upon any of the matters referred to in sub-paragraphs (A) – (C) above then either Party may refer the matters that are not agreed at any time to the Core Group for determination in accordance with the provisions set out in paragraph 2.4(A)(4) of Schedule 10 (Contract Management).

2.6 The Supplier shall continue to be responsible for responding to faults and maintaining the relevant asset(s) that are the subject of a Maintenance Renewal Services proposal in accordance with the Contract unless and until they have been replaced pursuant to a Maintenance Renewal Services Instruction.

3. Pricing of Maintenance Renewal Services

3.1 For the purposes of paragraph 2 of this Part B of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services), the cost of implementing any Maintenance Renewal Services shall be calculated in accordance with the calculation set out in Schedule 3 (Payment) and on the basis that:

3.1.1 wherever practicable the Supplier shall procure that such services are carried out by existing on-site and suitably qualified Supplier Personnel and no additional labour element shall be charged to the Company in respect of such services. Where such Maintenance Renewal Services are not carried out by existing on-site and suitably qualified Supplier Personnel, the cost of the labour element shall be paid for as Defined Cost and supported with a full resource cost estimate;

3.1.2 subject to paragraph 3.1.3 below, the materials element shall be charged at the cost of materials to the Supplier or to the contractor carrying out the services (net of all discounts) and there shall be no management fee, margin, overhead, contingency or other cost applied in relation thereto; and

3.1.3 the applicable Fee Percentage shall be applied to the Defined Cost of the Maintenance Renewal Services and shall be payable by the Company to the Supplier in respect of the Maintenance Renewal Services.

4. **Implementation**

4.1 The Supplier shall perform the required Maintenance Renewal Services so as to minimise any inconvenience to the Company commencing them on the commencement date and implementing them by the completion date specified in the Maintenance Renewal Services Instruction.

4.2 Where the Supplier has:

4.2.1 failed to provide a response pursuant to paragraph 2.1 of this Part B of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services); or

4.2.2 failed to fully implement the Maintenance Renewal Services within 10 Working Days of the Maintenance Renewal Services Completion Date; or

4.2.3 a number of audits relating to the Services provided by the Supplier including, but not limited to, planned preventative maintenance activities, fault and repair maintenance activities and Maintenance Renewal Services that are 'unsatisfactory' or 'below requirements' in relation to KPI 10;

then the Company shall be entitled to exercise its rights pursuant to Schedule 18 (Performance Measurement).

4.3 Immediately following completion of any Maintenance Renewal Services, the Supplier shall carry out the tests specified in the Maintenance Renewal Services Instruction and Clause 7.2 to determine whether or not the Maintenance Renewal Services have been completed in accordance with the Contract.

4.4 The Supplier shall notify the Company's Representative when it believes that Maintenance Renewal Services Completion has been achieved in respect of the Maintenance Renewal Services.

4.5 As soon as reasonably practicable after completion of testing the Supplier shall provide the Company's Representative with details of the testing undertaken and evidence of the results and if the Company's Representative is satisfied that Maintenance Renewal Services Completion has been achieved in respect of the relevant Maintenance Renewal Services, the Company's Representative shall confirm Maintenance Renewal Services Completion in writing to the Supplier.

5. **Payment**

5.1 Where the Company's Representative has confirmed Maintenance Renewal Services Completion in respect of Maintenance Renewal Services, the Supplier shall include the costs of the relevant Maintenance Renewal Services in its next Payment Application submitted pursuant to paragraph 1.3 of Schedule 3 (Payment) following the relevant Maintenance Renewal Services Completion Date.

5.2 All amounts payable in respect of Maintenance Renewal Services shall be invoiced and paid in accordance with the procedure described in Schedule 3 (Payment) of this Contract.

6. **Documentation and Monitoring**

6.1 No due diligence (whether funder, legal, technical, insurance or financial) shall be required in relation to Maintenance Renewal Services unless otherwise agreed between the Parties.

6.2 Unless otherwise agreed between the Parties, no changes shall be made to this Contract as a result of Maintenance Renewal Services except as set out in the Maintenance Renewal Services Instruction.

6.3 The Supplier shall keep a record of all Maintenance Renewal Services processed, completed and outstanding and shall provide the Company's Representative with a copy of that record whenever reasonably required by the Company's Representative.

7. **Disputes**

Any Dispute may be referred by either party for resolution pursuant to Schedule 5 (Dispute Resolution Procedure), but the Supplier shall, nevertheless, be required to perform the Maintenance Renewal Services within the prescribed timescales notwithstanding the Dispute, where such Dispute concerns the cost of the Maintenance Renewal Services.

8. **Applicability of the Contract**

In providing the Maintenance Renewal Services, the Supplier shall comply with the requirements of the Contract and (save to the extent the contrary is expressly set out in this Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) that is agreed or determined in accordance with the Contract) any provisions in the Contract which impose obligations on the Supplier in respect of the provision of the Services shall apply equally to the provision of the Maintenance Renewal Services.

SCHEDULE 5: Dispute Resolution Procedure

1. For the purposes of this Dispute Resolution Procedure the following terms have the meanings set out below:

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

"Notice of Adjudication" means any notice given by a Party to the other party or parties to the Dispute requiring reference of a Dispute to the Adjudicator in accordance with paragraph 8 of this Schedule 5 (Dispute Resolution Procedure). The Notice of Adjudication shall include:

- (A) the nature and a brief description of the Dispute;
- (B) details of where and when the Dispute arose; and
- (C) the nature of the redress which is sought.

"Referral Notice" means a notice referring a Dispute to the Adjudicator in accordance with paragraph 12 of this Schedule 5 (Dispute Resolution Procedure);

2. The Company and the Supplier shall follow the procedure set out in this Schedule 5 (Dispute Resolution Procedure) for the management and resolution of Disputes.
3. Subject to paragraph 8, any Dispute may in the first instance be referred in writing from the referring Party to the Senior Representatives by notice in writing to the other Party. The written notice from the referring Party shall give brief written particulars of the Dispute, the relief sought and the basis for claiming the relief sought (including the provisions of this Contract that are relevant to the Dispute). The written notice shall also identify the referring Party's Senior Representative.
4. Within fourteen (14) days of receipt of the notice pursuant to paragraph 3, the responding Party shall provide the referring Party with a brief written response. The response shall include identification of the responding Party's Senior Representative.
5. The Senior Representatives shall meet and try to reach agreement to resolve the Dispute referred to them pursuant to paragraph 3.
6. If the Senior Representatives are unable to, or fail to, reach agreement to resolve the Dispute within fourteen (14) days after the date of the response under paragraph 4, court proceedings shall not be commenced unless and until the Dispute has first been referred to adjudication (and an Adjudicator's decision has been obtained) in accordance with the procedure in paragraphs 8 - 29 and notice has been given in accordance with paragraph 27.
7. Each Party bears its own costs and expenses in relation to any reference of a Dispute to the Senior Representatives. Discussions amongst the Senior Representatives and any documents prepared or exchanged in relation to the reference of the Dispute to the Senior Representatives (including, for the avoidance of doubt, the notice under paragraph 3 and any response under paragraph 4) are without prejudice and the Parties shall not make use of or rely upon any without prejudice statements in any proceedings.
8. Notwithstanding the provisions of paragraphs 2, 3, 4, 5, 6 and 7 either Party may give notice at any time of its intention to refer a Dispute to adjudication under the procedure set out in paragraphs 8-29 by giving a Notice of Adjudication to the other parties to the Dispute.

9 Should either Party give a Notice of Adjudication then immediately thereafter the parties to the Dispute shall endeavour to agree upon a person whom they would consider suitable to act as the Adjudicator.

In the event of the parties to the Dispute failing to agree upon a suitable person who is able to act as the Adjudicator, the referring Party shall request the Nominating Authority to select a person to act as the Adjudicator.

The Nominating Authority shall communicate the selection of the Adjudicator to the Parties within four (4) days of receiving a request to do so.

Any person requested or selected to act as the Adjudicator in accordance with paragraph 9:

- (A) shall be a natural person acting in his personal capacity; and
- (B) shall not be an employee of any of the parties to the Dispute, and shall declare any interest, financial or otherwise, in any matter relating to the Dispute.

10 The terms of remuneration of the Adjudicator shall be agreed by the parties to the Dispute and the Adjudicator with the object of securing the appointment of the Adjudicator within seven (7) days of the Notice of Adjudication. If any party to the Dispute (but not all parties to the Dispute) rejects the terms of the remuneration of the Adjudicator the same shall be settled (and binding upon the parties to the Dispute) by agreement between the Nominating Authority and the Adjudicator (provided that the level of the Adjudicator's remuneration does not exceed the level originally proposed to the parties to the Dispute by the Adjudicator). If all the parties to the Dispute reject the terms of remuneration proposed by an Adjudicator another person shall be selected as an Adjudicator in accordance with paragraph 9.

11 Where the Adjudicator has been selected in accordance with paragraph 9 the referring Party shall refer the Dispute in writing to the Adjudicator by the Referral Notice in accordance with paragraph 12 within seven (7) days of the date of the Notice of Adjudication or within two (2) days of the date of appointment of the Adjudicator, whichever is later. Upon receipt of the Referral Notice, the Adjudicator must inform every Party to the Dispute of the date that it was received.

12 The Referral Notice shall:

- (A) include the facts relied upon by the referring Party in support of its claim(s);
- (B) include a statement of the contractual and/or other basis relied upon by the referring Party in support of its claim(s);
- (C) include a calculation of the specific monetary amount (if any) that the referring Party is seeking to recover in relation to each and every claim that is the subject matter of the Dispute;
- (D) be accompanied by copies of, or relevant extracts from, this Contract and such other documents on which the referring Party relies; and
- (E) include the addresses of all Parties to the Dispute.

The referring Party shall send copies of the Referral Notice and the documents referred to in this paragraph 12 to the other Party at the same time as he sends them to the Adjudicator.

13 If a matter disputed by the Supplier under or in connection with a Sub-Contract is also a matter disputed under or in connection with this Contract, the Supplier may, with the consent of the Company, refer the Sub-Contract dispute to the Adjudicator at the same time as the main Contract referral. The Adjudicator shall then decide the disputes together and references to the parties for the purposes of the Dispute are interpreted as including the Sub-Contractor. The parties to the Dispute agree to consider and endeavour to agree in good faith any reasonable request by the Adjudicator for additional time to decide the main Contract and Sub-Contract disputes.

14 The parties to the Dispute may jointly terminate the Adjudicator's appointment at any time. In such a case, or:

- (A) if the Adjudicator fails to give notice of his decision within the period referred to in paragraph 17 and the parties to the Dispute do not jointly extend time for his decision to be made in accordance with paragraph 17; or
- (B) if the period referred to in paragraph 17 is extended in accordance with paragraph 18 or by agreement by the parties to the Dispute and the Adjudicator fails to give notice of his decision within such extended period, and the parties to the Dispute do not jointly extend time for his decision to be made in accordance with paragraph 17; or
- (C) if at any time the Adjudicator declines to act or is unable to act as a result of his death, disability, resignation or otherwise;

a person shall be appointed to replace the Adjudicator in accordance with the provisions of paragraph 9. In the event of the parties to the Dispute failing to jointly appoint a person willing and suitable to act as replacement Adjudicator within three (3) days, any party to the Dispute may apply to the Nominating Authority to appoint a replacement Adjudicator. In any case where the Adjudicator is appointed as a replacement pursuant to this paragraph 14, the parties to the Dispute shall each send to the Adjudicator, as soon as reasonably practicable, copies of all documents supplied by them to the Adjudicator he replaces.

15 The Nominating Authority and its employees and agents shall not be liable to any Party for any act or omission unless the act or omission is in bad faith. The Parties also agree that any employee or agent of the Nominating Authority shall be similarly protected from liability.

16 The Party not making the referral may send to the Adjudicator within fourteen (14) days of the date of the referral, with a copy to the other Party, a written statement of the contentions on which it relies and any materials it wishes the Adjudicator to consider.

17 The Adjudicator shall reach his decision and give notice of the decision to the parties to the Dispute within twenty eight (28) days of the date of receipt of the Referral Notice mentioned in paragraph 11, or such longer period as is agreed by the parties to the Dispute after the Dispute has been referred to him. Notice of the Adjudicator's decision (stating that it is given under this Schedule 5 (Dispute Resolution Procedure)) shall be in writing and shall include a summary of the Adjudicator's findings and a statement of the reasons for his decision.

18 The Adjudicator may extend the period of twenty eight (28) days referred to in paragraph 17 by up to fourteen (14) days, with the consent of the Party by whom the Dispute was referred.

19 The Adjudicator's decision shall be binding upon the parties to the Dispute and the Adjudicator unless and until the Dispute is finally determined by legal proceedings, by arbitration (if the parties otherwise agree to arbitration) or by agreement. The Adjudicator may on his own initiative or on the application of a Party correct his decision so as to remove a clerical or typographical error arising by accident or omission. Any correction of a decision must be made within five days of the delivery of the decision to the parties to the Dispute. As soon as possible after correcting a decision in accordance with this paragraph, the Adjudicator must deliver a copy of the corrected decision to each of the Parties to this Contract. Any correction of a decision shall form part of the decision. The Adjudicator may in his decision allocate his remuneration and expenses between the Parties in accordance with paragraph 26. If the Adjudicator's decision changes any payment which is due under this Contract, payment of the sum decided by the Adjudicator shall be due not later than seven days from the date of the decision or the date on which such payment is due in accordance with the provisions of this Contract, whichever is the later.

20 The Adjudicator:

- (A) shall act impartially and as an expert (not as an arbitrator) in the conduct of the reference and in reaching his decision;
- (B) shall consider any relevant information submitted to him by any of the parties to the Dispute and make available to them any information to be taken into account in reaching his decision provided in accordance with the procedure (if any) which the Adjudicator may decide;
- (C) shall reach his decision in accordance with the law applicable to this Contract;
- (D) may take the initiative in ascertaining the facts and the law in relation to the Dispute;
- (E) may with the consent of the parties to the Dispute seek legal or technical advice from consultants whose appointment by the Adjudicator (including terms of remuneration) is subject to the approval of the parties to the Dispute;
- (F) shall, where a translation of any document is required, decide by whom it should be provided in the event that the parties to the Dispute do not agree.

21 The Adjudicator shall decide in his discretion on the procedure to be followed in the adjudication. In particular he may, but is not obliged to:

- (A) convene meetings upon reasonable notice to the parties to the Dispute at which such parties and their representatives are entitled to be present;
- (B) submit lists of questions to the parties to the Dispute to be answered in such meetings or in writing within such reasonable time as he requires;
- (C) require the parties to the Dispute to provide him with such information and other facilities as he reasonably requires for the determination of the Dispute;
- (D) otherwise take such action and adopt such procedures as do not conflict with any of the provisions of this Contract and are reasonable and proper for the just, expeditious and economical determination of the Dispute; and
- (E) inspect any part of the Sites, the Services or the facilities of any relevant

Sub-Contractor.

- 22 The Adjudicator shall not be liable for anything done or omitted in the discharge or purported discharge of his functions as an adjudicator unless the act or omission is in bad faith. The Parties also agree that any employee or agent of the Adjudicator shall be similarly protected from liability.
- 23 All meetings are private and save as required by law the Adjudicator and the Parties shall keep confidential the Dispute, all information of whatever nature provided to him by or on behalf of any Party and his decision.
- 24 The Parties to a contract to which the Dispute relates shall continue to observe and perform all the obligations contained in such contract, notwithstanding any reference to the Adjudicator, and insofar as the same is consistent with any safety review procedures to which the parties to the Dispute are bound, give effect forthwith to the Adjudicator's decision in every respect unless and until as hereinafter provided the Dispute is finally determined by a court in any legal proceedings, by arbitration (if the parties otherwise agree to arbitration) or by agreement. Any party to the Dispute may apply to any appropriate court for enforcement of the Adjudicator's decision. Neither any form of enforcement of the Adjudicator's decision nor any form of challenge to the enforcement of the Adjudicator's decision nor any dispute arising out of or in connection with such enforcement or challenge are regarded and treated as a Dispute for the purposes of this Schedule 5 (Dispute Resolution Procedure).
- 25 After the giving of a Notice of Adjudication, the Parties may seek to agree how the Adjudicator allocates the costs and fees excluding his remuneration and expenses which are dealt with in paragraph 26 below of the adjudication as between the Parties. If such an agreement is reached between the Parties, they shall notify the Adjudicator, who shall allocate costs and fees in accordance with such agreement. The Parties agree to be bound by the Adjudicator's allocation of costs and fees and to pay such costs and fees in accordance with the Adjudicator's direction unless and until the direction of the Adjudicator is set aside or revised by a court pursuant to any legal proceedings.
- 26 Subject to any agreement of the Parties, the Adjudicator shall allocate payment of his remuneration and expenses as between the Parties. Unless the Parties otherwise agree, the Adjudicator awards the payment of his remuneration and expenses on the general principle that costs should follow the event, except where it appears to the Adjudicator that in the circumstances this is not appropriate in relation to the whole or part of his remuneration or expenses. The Parties agree to be bound by the Adjudicator's allocation of payment of his remuneration and expenses and pay such remuneration and expenses in accordance with the Adjudicator's direction unless and until the direction of the Adjudicator is set aside or revised by a court pursuant to any legal proceedings.
- 27 All notices, written submissions and any other written communications between the parties to the Dispute and the Adjudicator shall either be delivered by hand, sent by facsimile or sent by first class pre-paid post or recorded delivery (airmail if posted to or from a place outside the United Kingdom) and, in each case, copied simultaneously (delivered or sent as aforesaid) to the other Parties. Copies by way of confirmation of all communications by facsimile between the parties to the Dispute and the Adjudicator shall also be sent by first class post (airmail if posted to or from a place outside the United Kingdom) not later than the next following Working Day the date of the original facsimile transmission.
- 28 All information of whatever nature provided to the Adjudicator by any party to the Dispute shall be copied to the other parties simultaneously.

29 If any party to a Dispute is dissatisfied with the Adjudicator's decision on that Dispute, that party may commence court proceedings for the final determination of the Dispute.

SCHEDULE 6: Deed of Novation

THIS DEED is made [•] day of [•] 20[•]

BETWEEN:

TRANSPORT FOR LONDON or TfL, a statutory corporation established under the Greater London Authority Act 1999 of 55 Broadway, London SW1H 0BD (the “Company”, which expression shall include its successors, transferees and assignees); and

[•] a company registered in [England and Wales] under number [•] and having its registered office at [•] (the “Supplier”); and

[•] a company registered in [England and Wales] under number [•] and having its registered office at [•] (the “New Company”).

WHEREAS:

- (A) The Company has an agreement dated [•] and referenced [insert contract number] with the Supplier for the provision of [describe in brief the scope of work/services] (the “Contract”).
- (B) The Company wishes to transfer [part of] its benefit and burden under the Contract to the New Company.
- (C) The Supplier and the New Company have agreed to such transfer upon the terms and conditions of this Deed.

IT IS AGREED AS FOLLOWS:

1. In this Deed:
 - 1.1 “Transfer Date” means [•].
2. With effect from the Transfer Date:
 - 2.1 the New Company undertakes to perform the obligations of the Company under the Contract and be bound by its terms in every way as if the New Company is and had been named at all times as a Party to the Contract in lieu of the Company;
 - 2.2 the Supplier releases and discharges the Company from all demands and claims whatsoever in respect of the Contract and accepts the liability of the New Company in relation to the Contract in lieu of the liability of the Company and agrees to be bound by the terms of the Contract in every way as if the New Company were and had been a Party to the Contract at all times in lieu of the Company;
 - 2.3 for the avoidance of doubt, it is hereby expressly agreed that:
 - (A) any and all rights, claims, counter-claims, demands and other remedies of the Supplier against the Company accrued under or in connection with the Contract prior to the date hereof shall be exercisable and enforceable by the Supplier against the New Company; and
 - (B) any and all rights, claims, counter-claims, demands and other remedies of the

Company against the Supplier accrued under or in connection with the Contract prior to the date hereof shall be exercisable by the New Company against the Supplier.

- 2.4 the Company transfers its rights and obligations under the Contract to the New Company.
3. A person who is not a Party to this Deed may not enforce any of its terms by virtue of the Contracts (Rights of Third Parties) Act 1999.

Executed as a deed by the Parties and delivered on the date of this Deed

Executed as a deed by affixing the Common Seal of)

Transport for London)

in the presence of:)

.....
[Authorised Signatory]
Executed as a Deed by [SUPPLIER])
acting by).....
) Authorised Signatory
and).....
) Authorised Signatory

Executed as a Deed by [NEW COMPANY])
acting by).....
) Authorised Signatory
and).....
) Authorised Signatory

SCHEDULE 7: Form of Parent Company Guarantee

THIS GUARANTEE is made the

day of

20[•]

BETWEEN:

- (1) [•] a company registered in [England and Wales] under number [•] and having its registered office at [•] (the "Guarantor");
- (2) [•] a company registered in England and Wales under number [•] and having its registered office at 55 Broadway, London SW1H 0BD (the "Company", which expression shall include its successors in title and assigns); and
- (3) [•] a company registered in [England and Wales] under number [•] and having its registered office at [•] (the "Supplier").

WHEREAS:

- (A) This Guarantee is supplemental to a contract (the "Contract") for the carrying out of [•] at [•] made between (1) the Company and (2) the Supplier.
- (B) The Guarantor has agreed to guarantee to the Company the due and punctual performance of the Contract by the Supplier in the manner hereinafter appearing.
- (C) The Supplier is a party to this Guarantee in order to confirm its request that the Guarantor provide this Guarantee on the terms set out herein.

NOW IT IS HEREBY AGREED as follows:

1. The Guarantor unconditionally guarantees to the Company the proper and punctual performance and observance by the Supplier of all its obligations, warranties, duties, undertakings and responsibilities under the Contract and shall forthwith make good any default thereunder on the part of the Supplier and the Guarantor shall pay or be responsible for the payment by the Supplier to the Company of all sums of money, liabilities, awards, losses, damages, costs, charges and expenses that may be or become due and payable under or arising out of the Contract in accordance with its terms or otherwise by reason or in consequence of any such default on the part of the Supplier.
2. This Guarantee shall be a continuing guarantee and indemnity and accordingly shall remain in full force and effect until all obligations, warranties, duties and undertakings now or hereafter to be carried out or performed or observed by the Supplier under or arising out of the Contract have been duly and completely performed and observed in full.
3. The Guarantee is in addition to and not in substitution for any other security or warranty which the Company may at any time hold for the performance of any obligations, warranties, duties and undertakings under the Contract and may be enforced by the Company without first taking any proceedings or exhausting any right or remedy against the Supplier or any other person or taking any action to enforce any other security, bond or guarantee.

4. The Guarantor shall be under no greater obligation or greater liability under this Guarantee than it would have been under the Contract if it had been named as the Supplier in the Contract.
5. The obligations and liabilities hereunder shall remain in full force and effect and shall not be affected, lessened, impaired or discharged by:
 - (A) any alteration or variation to the terms of the Contract;
 - (B) any alteration in the extent or nature or sequence or method or timing or scope of the works, services or supplies to be carried out under the Contract;
 - (C) any extension of time being given to the Supplier or any other indulgence or concession to the Supplier or any forbearance, forgiveness or any other thing done, omitted or neglected to be done under the Contract;
 - (D) any other bond, security or guarantee now or hereafter held for all or any part of the obligations of the Supplier under the Contract;
 - (E) the release, modification, exchange or waiver of any such bond, security or guarantee;
 - (F) any amalgamation or reconstruction or dissolution including liquidation of the Supplier;
 - (G) the making of a winding up order, the appointment of a provisional liquidator, the passing of a resolution for winding up, liquidation, administration, receivership or insolvency of the Supplier;
 - (H) any legal limitation, disability or incapacity relating to the Supplier (whether or not known to the Guarantor);
 - (I) any invalidity in, irregularity affecting or unenforceability of the obligations of the Supplier under the Contract;
 - (J) the termination of the Contract; or
 - (K) anything the Company or the Supplier may do or omit or neglect to do including, but without limitation, the assertion of or failure or delay to assert any right or remedy of the Company or the pursuit of any right or remedy by the Company.
6. Until all amounts which may be or become payable under this Guarantee and all liabilities, obligations, warranties, duties and undertakings in respect of the Supplier's obligations have been irrevocably paid, performed or discharged in full ("Guaranteed Liabilities"), the Guarantor shall not, after a claim has been made or by virtue of any payment, performance or discharge by it under this Guarantee, and specifically limited to the Guaranteed Liabilities only:
 - (A) be subrogated to any rights, security or moneys held, received or receivable by the Company in respect of the Guaranteed Liabilities or be entitled to any right of contribution or indemnity in respect of any payment made or moneys received on account of the Guarantor's liability under this Guarantee;

- (B) claim, rank, prove or vote as a creditor of the Supplier or its estate in competition with the Company in respect of the Guaranteed Liabilities unless the Company so directs; or
- (C) receive, claim or have the benefit of any payment distribution or security from or on account of the Supplier, or exercise any right of set-off against the Supplier in respect of the Guaranteed Liabilities unless the Company so directs.

For the avoidance of doubt, the parties agree that nothing in this Clause 6 shall in any way prohibit or restrict the Guarantor from fully and unconditionally exercising any of those rights specified in clauses 6(A) to 6(C) in relation to all sums due to the Guarantor which are not Guaranteed Liabilities.

7. This Guarantee is irrevocable.
8. The benefit of this Guarantee may be assigned by the Company at any time to any assignee of the benefit of the whole of the Contract. No further or other assignments shall be permitted.
9. The Guarantor:
 - (A) gives the guarantee contained in this Guarantee as principal obligor and not merely as surety;
 - (B) agrees to indemnify the Company on written demand against any loss or liability suffered by it if any provision set out in the Contract guaranteed by the Guarantor becomes unenforceable, invalid or illegal, and
 - (C) waives any right it may have of first requiring the Company to proceed against, or enforce any other rights or security or claim payment from, any person before claiming from the Guarantor under this Guarantee.
10. Until all amounts which may be or become payable in respect of the Supplier's obligations have been irrevocably paid in full by the Guarantor, the Company may:
 - (A) refrain from applying or enforcing any other moneys, security or rights held or received by the Company in respect of those amounts, or apply and enforce the same in such manner and order as it sees fit (whether against those amounts or otherwise) and the Guarantor shall not be entitled to the benefit of the same; and
 - (B) hold in a suspense account any moneys received from the Supplier on account of these Supplier's obligations or on account of the Guarantor's liability under this Guarantee.
11. The Company is entitled to make any number of demands under this Guarantee.
12. The invalidity, illegality or unenforceability in whole or in part of any provisions of this Guarantee shall not affect the validity, legality and enforceability of the remaining part or provisions of this Guarantee.

13. This Guarantee may be executed in any number of counterparts each of which shall be an original and all of such counterparts taken together shall be deemed to constitute one and the same instrument.
14. No person other than the Company and its subsidiaries (as defined in section 1159 of the Companies Act 2006) shall have any right to claim or remedy under or pursuant to this Guarantee and the provisions of the Contracts (Rights of Third Parties) Act 1999 are hereby excluded.
15. This Guarantee, executed and delivered as a deed, shall be governed by and interpreted according to the laws of England and the Courts of England shall have exclusive jurisdiction save that the Company shall have the right to bring proceedings in the courts of any other jurisdiction in which any of the Guarantor's assets may be situated.
16. [For non-UK resident Guarantors only:

For the purposes of this Guarantee the Guarantor hereby appoints [•] of [•] [to be a London address] to accept service of process on its behalf, and service on the said [•] at the said address shall be deemed to be good service on the Guarantor; and the Guarantor hereby irrevocably agrees not to revoke or terminate such appointment.]

Executed as a deed by the Parties and delivered on the date of this Guarantee

Executed as a Deed by [GUARANTOR])
acting by).....
.....) Authorised Signatory
and).....
.....) Authorised Signatory

Executed as a deed by affixing the Common Seal of)
[COMPANY])
in the presence of:—)

.....
[Authorised Signatory]

Executed as a Deed by [SUPPLIER])
acting by).....
.....) Authorised Signatory

and).....
.....) Authorised Signatory

SCHEDULE 8: Form of On Demand Performance Bond

BOND

(Letterhead of Guarantor)

To: [Company name] (its successors in title and assigns)

Contract Bond No. [•]

Whereas our clients [•] (the “Supplier”) have entered into a contract with you dated [•] (the “Contract”) in respect of [•], we [•] (the “Guarantor”, which term shall include our successors in title and assigns) hereby irrevocably undertake as a primary obligation upon first demand in writing made by you upon us from time to time or at any time to pay to you on each occasion the sum demanded by you within five (5) banking days upon service of your demand.

PROVIDED THAT:

1. This Bond shall come into force on the date hereof.
2. Any demand hereunder shall be substantially in the form of Appendix 1 (Form of Demand from the Company to the Guarantor) to this Bond, and as between you and us the facts set out in that demand shall be: (a) deemed to be true and (b) accepted by us as conclusive evidence for the purposes of this Bond that the amount claimed in the demand is due and payable to you hereunder, it being our intention that the event upon which payment must be made hereunder is the service of your demand without any rights on our part to raise any objections, irrespective of the validity or the effectiveness of the Contract and the obligations arising thereunder and irrespective of the underlying facts or their significance under the Contract.
3. All sums payable under this Bond shall be paid in pounds sterling to such bank account as may be specified in your demand in immediately available funds, free of any restriction or condition and free and clear of and without any deduction or withholding whether for or on account of tax, by way of set-off, or otherwise, except to the extent required by law.
4. For the purpose of this paragraph 4, the expression “Expiry Date” means [•]. Our liability hereunder shall be limited as follows:
 - (A) we shall have no liability in respect of any demand received after the Expiry Date; and
 - (B) in respect of a demand or demands received on or before the Expiry Date, our liability shall not exceed the aggregate sum of [REDACTED]
5. Our obligations hereunder shall remain in full force and effect and shall not in any way be affected, reduced or discharged by:
 - (A) any alteration to the terms of the Contract made by agreement between you and the Supplier; and/or
 - (B) any defence, counterclaim, set-off or other deduction available to the Supplier under the Contract; and/or

- (C) any alteration in the extent or nature or sequence or method or timing of the works/services to be carried out under the Contract; and/or
- (D) any time being given to the Supplier or any other indulgence or concession to the Supplier or any forbearance, forgiveness or any other thing done, omitted or neglected to be done under the Contract; and/or
- (E) any other bond, security or guarantee now or hereafter held by you for all or any part of the obligations of the Supplier under the Contract; and/or
- (F) the release or waiver of any such other bond, security or guarantee; and/or
- (G) any amalgamation or reconstruction or dissolution including liquidation or change in control or constitution of the Supplier; and/or
- (H) the termination of the Contract; and/or
- (I) any other event which might operate to discharge a guarantor at law or in equity.

6. Terms defined in the Contract and not otherwise defined herein shall have the same meaning in this Bond unless inconsistent with the context.
7. This Bond shall be governed by, and interpreted according to, the laws of England and the Courts of England shall have exclusive jurisdiction in relation to any claim, dispute or difference concerning this Bond and any matter arising from it save that you shall have the right to bring proceedings in the Courts of any other jurisdiction in which any of our assets may be situated.
8. This Bond may be assigned or transferred without our prior consent to any member of the TfL Group. Any other assignment or transfer of this Bond by either Party shall require the consent of the other Party, such consent not to be unreasonably withheld or delayed.
9. This Bond may not be amended, varied or supplemented in any manner whatsoever without your prior written consent, other than in accordance with its express terms.
10. Each of the provisions of this Bond is severable and distinct from the others, and if at any time any such provision is or becomes ineffective, inoperable, invalid or unenforceable it shall be severed and deemed to be deleted from this Bond, and in such event the remaining provisions of this Bond shall continue to have full force and effect.
11. All bank charges and other fees payable in relation to or in connection with this Bond are for the account of the Supplier and you shall have no liability or responsibility therefor.
12. Except to the extent it is inconsistent with the express terms of this Bond, this Bond is subject to the ICC Uniform Rules for Demand Guarantees, 2010 revision, ICC Publication No. 758.

Executed as a deed by the Parties and delivered on the date of this Bond.

Executed as a Deed by [GUARANTOR]

)

acting by

).....

) Authorised Signatory

and

).....

) Authorised Signatory

Executed as a deed by affixing the Common Seal of

)

[COMPANY]

)

in the presence of:—

)

.....
[Authorised Signatory]

APPENDIX 1: FORM OF DEMAND FROM THE COMPANY TO THE GUARANTOR

Dear Sirs

[Contract Title]

Contract No: [•] (the "Contract")

We refer to the Bond given by you to us dated [•].

An event has occurred of the type described in Clause [•] of the Contract.

We hereby demand payment from you of the sum of £[•] under the Bond. Please make payment by CHAPS made payable to [Company name / bank account details].

Yours faithfully

.....
[Company name]

55 Broadway
London
SW1H 0BD

SCHEDULE 9: Form of Collateral Warranty

THIS AGREEMENT is made the _____ day of _____ 20[]

BETWEEN: -

- (1) **TRANSPORT FOR LONDON** or TfL, a statutory corporation established under the Greater London Authority Act 1999 of 55 Broadway, London SW1H 0BD (the "Company", which expression shall include its successors, transferees and assignees);
- (2) [•] a company registered in [England and Wales] under number: [•] and having its registered office at [•] (the "Sub-Contractor"); and
- (3) [•] a company registered in [England and Wales] under number: [•] and having its registered office at [•] (the "Supplier").

WHEREAS:-

- (A) The Company has entered into a contract with the Supplier (the "Main Contract") pursuant to which the Supplier is to undertake and complete the supplies, services and works more particularly described in the Main Contract (the "Services").
- (B) The Sub-Contractor has submitted a tender to the Supplier for the carrying out and completion of certain parts (the "Sub-Contract Services") of the Services referred to above as more particularly described in the tender.

NOW IN CONSIDERATION of the payment of £1 (one pound) by the Company to the Sub-Contractor (receipt of which the Sub-Contractor hereby acknowledges) IT IS HEREBY AGREED as follows:

1. The Sub-Contractor warrants to the Company that:
 - (A) the Sub-Contract Services have been and will be carried out with the skill and care to be expected of appropriately qualified and experienced professional contractors with experience in carrying out works or services of a similar type, nature and complexity to the Sub-Contract Services;
 - (B) reasonable skill and care has been and will continue to be exercised in connection with:
 - (1) the design of any goods, works or services to the extent that the Sub-Contractor has or will be responsible for such design;
 - (2) the selection of all goods and materials comprised in the Sub-Contract Services (in so far as such goods and materials have been or will be selected by the Sub-Contractor);
 - (3) the satisfaction of any performance specification or requirement in so far as the same are included or referred to in the contract between the Supplier and the Sub-Contractor in relation to the Sub-Contract Services (the "Sub-Contract");
 - (4) the execution and completion of the Sub-Contract Services;

- (5) the Sub-Contract Services will, on completion of the Main Contract, comply with all Applicable Laws and Standards (as such capitalised terms are defined in the Main Contract);
- (C) the Sub-Contract Services will be reasonably fit for the purposes for which they are intended (awareness of which purposes the Sub-Contractor hereby acknowledges) and in particular but without limitation will be so fit for the period and with a rate of deterioration reasonably to be expected of high quality, reliable, well designed and engineered goods, materials and construction; and
- (D) it has the right to grant to the Company all licences (including without limitation all rights to sub-liscence) of all intellectual property rights as contemplated in this Agreement.

For the purposes of construing the warranties in this Clause 1 references to the Sub-Contract Services shall include any part of the Sub-Contract Services. Each warranty shall be construed as a separate warranty and shall not be limited by reference to, or reference from, the terms of any other warranty or any other term of the Sub-Contract.

- 2. The Sub-Contractor shall, save in so far as he is delayed by any event in respect of which the Supplier is granted an extension of time under the Main Contract for completion of the Services:
 - (A) execute and complete the Sub-Contract Services in accordance with the provisions of the Sub-Contract; and
 - (B) ensure that the Supplier shall not become entitled to any extension of time for completion of the Services or to claim any additional payment under the Main Contract due to any failure or delay by the Sub-Contractor.
- 3. The Sub-Contractor shall from time to time supply the Company and the Supplier with such information as either may reasonably require.
- 4. To the extent that the intellectual property rights in any and all Documents have not already vested in the Company or the Supplier, the Sub-Contractor hereby grants to the Company an irrevocable, non-exclusive, non-terminable, royalty-free licence to copy and make full use of any and all Documents and all amendments and additions to them and any works, designs or inventions of the Sub-Contractor incorporated or referred to in them for the following purposes:
 - (A) understanding the Services;
 - (B) operating, maintaining, repairing, modifying, altering, enhancing, re-figuring, correcting, replacing, re-procuring and re-tendering the Services;
 - (C) extending, interfacing with, integrating with, connecting into and adjusting the Services;
 - (D) enabling the Company to carry out the operation, maintenance repair, renewal and enhancement of the TfL Network and/or Sites (as such capitalised terms are defined in the Main Contract);
 - (E) executing and completing the Services; and

(F) enabling the Company to perform its functions and duties as Infrastructure Manager and Operator of the TfL Network and/or Sites (as such capitalised terms are defined in the Main Contract)

provided always that the Supplier shall not be liable for the consequences of any use of the Documents as aforesaid for any other purpose. Such licence shall carry the right to grant sub-licences and shall be transferable to third parties without the prior consent of the Sub-Contractor.

For the purposes of this Clause, the term "Documents" shall mean documents, items of information, data, reports, drawings, specifications, plans, software, designs, inventions and any other materials provided by or on behalf of the Sub-Contractor in connection with the Sub-Contract (whether in existence or to be made).

5. The Sub-Contractor agrees:

(A) on request at any time to give the Company or any persons authorised by the Company access to the material referred to in Clause 4 and at the Company's expense to provide copies of any such material; and

(B) at the Sub-Contractor's expense to provide the Company with a set of all such material on completion of the Sub-Contract Services.

6. The Parties hereby agree that:

(A) this Agreement shall be personal to the Sub-Contractor;

(B) the Company may assign the benefit of this Agreement to any third party;

(C) the rights and remedies contained in this Agreement are cumulative and shall not exclude any other right or remedy available to either Party in law or equity.

7. The Sub-Contractor warrants and undertakes to the Company that he has maintained and will continue to maintain all insurances required to be maintained pursuant to the terms of the Sub-Contract and that, insofar as he is responsible for the design of the Sub-Contract Services, he has professional indemnity insurance with a limit of indemnity of not less than five million pounds (£5,000,000) in respect of each and every claim which may be made against the Sub-Contractor in respect of the Sub-Contract Services. The Sub-Contractor shall maintain such professional indemnity insurance for a period of 12 years from completion of the Services provided such insurance remains available at commercially reasonable rates and shall notify the Company forthwith if such insurance ceases to be so available. When deciding whether such insurances are available at commercially reasonable rates, no account shall be taken of any increase in the premium or imposition of terms which arise as a result of the Sub-Contractor's insurance claims record.

8. If any dispute of any kind whatsoever arises between the Parties in connection with this Agreement or the Sub-Contract Services which raises issues which are in opinion of the Company the same as or substantially the same as issues raised in a related dispute (the "Related Dispute") between the Company and the Supplier and such Related Dispute has already been referred to a conciliator or arbitrator appointed under the provisions to that effect contained in the Main Contract, then the Sub-Contractor hereby agrees that the Company may at his discretion by giving

notice in writing to the Sub-Contractor refer the dispute arising out of this Agreement or the Sub-Contract Services to the adjudicator, conciliator, arbitrator or other Party (the “Appointed Party”) appointed to determine the Related Dispute. In this event the Appointed Party shall have power to give such directions for the determination of the dispute and the Related Dispute as he may think fit and to make such awards as may be necessary in the same way as if the procedure of the High Court as to joining one or more defendants or joint co-defendants or third parties was available to the Parties and to him.

9.

- (A) Neither the Sub-Contractor nor the Supplier shall exercise or seek to exercise any right which may be or become available to it to terminate or treat as terminated the Sub-Contract or discontinue or suspend the performance of any of its duties or obligations thereunder or treat the Sub-Contract as determined without first giving to the Supplier or the Sub-Contractor (as applicable) not less than twenty five (25) Working Days prior written notice of its intention to do so, with a copy to the Company, specifying the Sub-Contractor’s or Supplier’s grounds for terminating or treating as terminated the Sub-Contract or discontinuing or suspending its performance thereof or treating the Sub-Contract as determined.
- (B) If the Main Contract is terminated for any reason, within twenty five (25) Working Days of such termination the Company may give written notice to the Sub-Contractor and to the Supplier (a “Step-in Notice”) that the Company or its appointee shall henceforth become the Supplier under the Sub-Contract in accordance with the terms of sub-Clause (C) below.
- (C) With effect from the date of the service of any Step-in Notice:
 - (1) the Company or its appointee shall be substituted in the Sub-Contract as the Supplier thereunder in place of the Supplier and references in the Sub-Contract to the Supplier shall be construed as references to the Company or its appointee;
 - (2) the Sub-Contractor shall be bound to continue with the performance of its duties and obligations under the Sub-Contract and any exercise or purported exercise by the Sub-Contractor prior to the date of the Step-in Notice of any right to terminate or treat as terminated the Sub-Contractor to discontinue or suspend the performance of any of its duties or obligations thereunder or to treat the Sub-Contract as automatically determined shall be of no effect;
 - (3) the Company shall become bound by the terms and conditions of the Sub-Contract in respect of all obligations and duties of the Supplier thereunder which fall to be performed after the date of the Step-in Notice and shall promptly thereafter make payment of any amounts properly due to the Sub-Contractor as at the date of the Step-in Notice and still outstanding; and
 - (4) the Supplier shall be released from further performance of the duties and obligations of the Supplier under the Sub-Contract after the date of the Step-in Notice, but without prejudice to any rights and remedies of:

- (a) the Sub-Contractor against the Supplier in respect of any matter or thing done or omitted to be done by the Supplier on or before the date of the Step-in Notice; and
- (b) the Supplier against the Sub-Contractor in respect of any matter or thing done or omitted to be done by the Sub-Contractor on or before the date of the Step-in Notice.

(D) Notwithstanding anything contained in this Agreement and notwithstanding any payments which may be made by the Company to the Sub-Contractor, the Company shall not be under any obligation to the Sub-Contractor and the Sub-Contractor shall not be under any obligation to the Company unless the Company shall have served a Step-in Notice pursuant to Clause 9(B) above.

10. The Sub-Contractor's liabilities, duties and obligations hereunder shall be no greater and of no longer duration than the liabilities, duties and obligations which the Sub-Contractor owes to the Supplier under the Sub-Contract.
11. The Sub-Contractor further undertakes to indemnify the Company from and against the consequences of any breach by the Sub-Contractor of any of the warranties, covenants and undertakings contained in this Agreement.
12. The rights and benefits conferred upon the Company by this Agreement are in addition to any other rights and remedies that the Company may have against the Sub-Contractor including, without prejudice to the generality of the foregoing, any remedies in negligence.
13. Nothing contained in this Agreement shall in any way limit the obligations of the Supplier to the Company arising under the Main Contract or otherwise undertaken by the Supplier to the Company in relation to the Sub-Contract Services.
14. No amendment to this Agreement shall be valid unless it is in writing and signed by all Parties.
15. Any person who is not a Party to this Agreement may not enforce any of its terms under the Contracts (Rights of Third Parties) Act 1999.
16. This Agreement shall be governed by and construed in accordance with English law and shall be subject to the exclusive jurisdiction of the Courts of England and Wales.

Executed as deed by the Parties and delivered on the date of this Agreement.

Executed as a deed by affixing)
the Common Seal of Transport)
for London in the presence of)
[•] Authorised Signatory

Executed as a Deed by [SUB-)
CONTRACTOR] acting by [•])
 Authorised Signatory

And)
)
)
 Authorised Signatory

Executed as a Deed by)
[SUPPLIER] acting by [•])
 Authorised Signatory

And)
)
 Authorised Signatory

SCHEDULE 10: Contract Management

1. Governance/Management Groups and Meetings

- 1.1. The Company's Representative and the Supplier shall, in accordance with Schedule 12 (Integrated Team), establish and maintain an Integrated Team for the delivery of the Released Upgrade Work Activities as may be notified by the Company by means of the Integrated Team Requirements for each Budget Period.
- 1.2. The Supplier shall comply with the Integrated Team Chart. The Supplier shall populate the Integrated Team Chart with the names of the Supplier Personnel required as part of each Integrated Team Work Plan. The Supplier and the Integrated Team shall update the Integrated Team Chart and the Supplier shall submit an updated Integrated Team Chart to the Company's Representative for approval Quarterly. Such updated Integrated Team Chart shall record any changes in the Supplier Personnel and the Company Personnel as may have occurred in accordance with the terms of this Contract.
- 1.3. The Company and the Supplier shall collaborate to set up, implement and maintain contract management groups to govern this Contract at a strategic, tactical and delivery level as set out in Table 1 (Contract Management Groups) of this Schedule 10 (Contract Management).
- 1.4. The Contract Management Groups shall meet, as a minimum, in accordance with the frequencies set out in Table 2 (Contract Management Group Frequencies) of this Schedule 10 (Contract Management).
- 1.5. The Company and the Supplier shall ensure respectively that all Company Personnel and Supplier Personnel attending meetings have the necessary delegated authority to act on behalf of the Company and the Supplier.
- 1.6. For Released Upgrade Work Activities, the processes for (i) design approval and assurance and (ii) progressive estimating and cost approval shall, in accordance with Schedule 11 (Project Processes), have a hold point at each Stage Gate, such that each Released Upgrade Work Activity shall not progress to the next Stage Gate until the relevant Stage Gate criteria have been passed.
- 1.7. The Stage Gate approval criteria for Released Upgrade Work Activities shall be developed by the Integrated Team and approved by the Core Group, but in summary are to be defined by the achievement of the Released Upgrade Work Activity Scope and Purpose or as may be amended and confirmed in writing by the Company's Representative at a Stage Gate.
- 1.8. Failure to achieve approval of a Stage Gate shall not relieve the Supplier of its obligations to deliver the Released Upgrade Work Activity.
- 1.9. The drafting and agreement of the Contract Management Plan shall be as detailed by the Mobilisation Plan.
- 1.10. All meetings shall be held at the Company's premises unless agreed otherwise by the Company's Representative.
- 1.11. The Supplier shall, in addition to all meetings and plans specified in this Schedule 10 (Contract Management), attend any meeting and produce reports in accordance with Schedule 3 (Payment) and as may be required by the Company's Representative.

1.12. Notwithstanding the obligation to prepare a Contract Management Plan, the Supplier shall attend with the Company in each Budget Period (as a minimum requirement) the meetings set out in Tables 3-18 of this Schedule 10 (Contract Management), in the frequencies stated below:

Table 3	Annual Strategic Review	Annually
Table 4	Contract Innovation Efficiency Review	Quarterly
Table 5	Contract Innovation Efficiency Working Group	Each Period
Table 6	Core Group Review	Each Period
Table 7	Maintenance Services Weekly Review	Weekly
Table 8	Fault Reporting and Corrective Action (FRACAS) Meeting	Fortnightly
Table 9	Maintenance Period Progress Meeting	Each Period
Table 10	Released Upgrade Work Activities Progress Review	Each Period
Table 11	Stage Gate 3 Approval meeting	As determined by the programme for each Released Upgrade Work Activity
Table 12	Stage Gate 4 Approval meeting	As determined by the programme for each Released Upgrade Work Activity
Table 13	Stage Gate 5 Approval meeting	As determined by the programme for each Released Upgrade Work Activity
Table 14	Visualisation Boards	Weekly
Table 15	Change Board	Each Period
Table 16	Payment Application Review	Each Period
Table 17	Estimate Assurance Review	Weekly
Table 18	Released Upgrade Work Activity Delivery Review	Weekly

Table 1: Contract Management Groups and Attendees

Group	Company – Contract Management	Supplier – Contract Management
Strategic	<ul style="list-style-type: none">• LUL Renewals Director	<ul style="list-style-type: none">• Contract Director
Tactical	<ul style="list-style-type: none">• Head of Stations• Sponsor (for Upgrade Works)• Senior Commercial Management Representatives	<ul style="list-style-type: none">• Head of Maintenance Delivery• Head of Upgrade Works• Senior Commercial Management Representatives
Delivery	<ul style="list-style-type: none">• Project Management Representatives• Commercial Management Representatives	<ul style="list-style-type: none">• Delivery Management Representatives• Commercial Management Representatives

Table 2: Contract Management Group Frequencies

Group	Frequency
Strategic	Annually
Tactical	Quarterly Each Period
Delivery	Each Period Fortnightly Weekly Daily Programme determined

Table 3: Annual Strategic Review

Strategic - Annual Strategic Review	
Purpose - A strategic assessment of the relationship between the Parties, including:	
<ul style="list-style-type: none">• business updates from the Company and the Supplier;• achievement of the Company's objectives for the Contract;• significant risks and issues affecting the Supplier's performance;• Supplier performance with agreement of actions for improvement;• success of Contract ICIE Initiatives by the Supplier and actions for improvement;• Supplier's compliance with (a) the Specification (b) the Launched Upgrade Work Activity Specification and (c) KPI performance as set out in Schedule 18 (Performance Measurement);• review the IPR Register;• review of the Supplier's progress in respect of strategy, health, safety and environmental issues (including a review of the Strategic Labour Needs and Training Plan and compliance with QUENSH);• developments within the parties and changes in the wider construction environment that affect the Contract; and• review of materials forecast and material costs.	
Title:	Annual Strategic Review Meeting
Frequency	Annual
Applicable to	Maintenance Services Released Upgrade Work Activities
Main Agenda Items	<ul style="list-style-type: none">• Annual performance review• Annual financial review• Contract ICIE Initiatives• Review of the IPR Register• Business and marketplace developments
Meeting Chair	<ul style="list-style-type: none">• Company's Representative
Reports Required	<ul style="list-style-type: none">• KPI performance report in accordance with Schedule 18 (Performance Measurement)• HSQE performance reports• IPR Register
Decisions/ Reports/ Outputs	<ul style="list-style-type: none">• Minutes• Actions with responsibility for completion allocated and target dates for completion

Table 4: Contract Innovation Efficiency Review

Tactical – Contract Innovation Efficiency Review	
Purpose – A review to identify opportunities for cost reduction and ICIE Initiatives.	
Title:	Contract Innovation Efficiency Review Meeting
Frequency	Quarterly
Applicable to	Maintenance Services Released Upgrade Work Activities
Main Agenda Items	<ul style="list-style-type: none">• ICIE Initiatives• Review Contract ICIE Initiatives for previous six month period• Modify and set out Contract ICIE Initiatives for the following six month period• Supplier performance review• Financial review• Cost reduction analysis
Meeting Chair	<ul style="list-style-type: none">• Company's Representative or its nominated delegate
Reports Required	<ul style="list-style-type: none">• Report on compliance with Schedule 19 (Contract Innovation, Continuous Improvement and Efficiency)• Quarterly report summarising Supplier performance of KPIs over the last three Periods
Decisions/ Reports / Outputs	<ul style="list-style-type: none">• Minutes• Actions with responsibility for completion allocated and target dates for completion

Table 5: Contract Innovation Efficiency Working Group

Tactical – Contract Innovation Efficiency Working Group	
Purpose – to detail and implement opportunities for cost reduction and Contract ICIE Initiatives.	
Title:	Contract Innovation Efficiency Working Group Meeting
Frequency	Each Period
Applicable to	Maintenance Services Released Upgrade Work Activities
Main Items	<ul style="list-style-type: none">• Implement and identify Contract ICIE Initiatives• Supplier performance review• Financial review• Cost reduction analysis
Meeting Chair	<ul style="list-style-type: none">• Company's Representative or its nominated delegate
Reports Required	<ul style="list-style-type: none">• Report on compliance with Schedule 19 (Contract Innovation, Continuous Improvement and Efficiency).
Decisions/ Reports / Outputs	<ul style="list-style-type: none">• Minutes• Actions with responsibility for completion allocated and target dates for completion

Table 6: Core Group Review

Tactical – Core Group – Period Review Meeting	
Purpose - A review of Supplier and Integrated Team performance, including:	
<ul style="list-style-type: none">• Review of KPI performance.• Progress report narrative• Integrated Team organisation and performance• Schedule 18 Escalation Procedure referrals• Progress towards agreement of future Integrated Team Work Plans• Key stakeholder Issues• Critical delivery issues (delivery and design activities)• Mobilisation Plan / Demobilisation Plan (as applicable)• Any other business	
Title:	Core Group Meeting
Frequency	Each Period
Applicable to	Maintenance Services Released Upgrade Work Activities
Main Items Agenda	<ul style="list-style-type: none">• Performance review• Financial review• Schedule 18 Escalation Procedure referrals
Meeting Chair	<ul style="list-style-type: none">• Company's Representative
Reports Required	<ul style="list-style-type: none">• KPI performance in accordance with Schedule 18 (Performance Measurement)
Decisions/ Reports/ Outputs	<ul style="list-style-type: none">• Minutes• Actions with responsibility for completion allocated and target dates for completion

Table 7: Maintenance Services Weekly Review

Delivery – Maintenance Service Delivery Weekly Review	
Purpose - A brief discussion to address operational concerns for that Period, including: <ul style="list-style-type: none">• day to day operational issues;• Maintenance Renewal Services;• brief update on operational priorities for that day/week (as applicable); and• set-out actions and key objectives for the following 24 hours.	
Title:	Maintenance Service Delivery Review
Frequency	Daily/Weekly (as required or requested by the Parties)
Applicable to	Maintenance Services
Main Agenda Items	<ul style="list-style-type: none">• Review of Schedule 18 (Performance Measurement)• Outstanding jobs• Action plan• Weekly update
Meeting Chair	<ul style="list-style-type: none">• Company's Representative
Reports Required	<ul style="list-style-type: none">• Update on remedial actions undertaken by the Supplier• Update on achievement of planned and reactive maintenance activities• Update on faults• Update on assessment of risks
Decisions/ Reports/ Outputs	<ul style="list-style-type: none">• Minutes• Any decisions, reports or other outputs

Table 8: Fault Reporting and Corrective Action (FRACAS) Meeting

Delivery – FRACAS	
Purpose – to review asset failure trends including discussion of: <ul style="list-style-type: none">• Top asset failure trends;• Repeat failures; and• Root causes.	
Title:	Maintenance Service Delivery Review
Frequency	Fortnightly
Applicable to	Maintenance Services
Main Agenda Items	<ul style="list-style-type: none">• Top asset failure trends;• Repeat failures;• Root causes analysis• Corrective actions.
Meeting Chair	<ul style="list-style-type: none">• Company's Representative
Reports Required	<ul style="list-style-type: none">• Asset failure management information report• Supporting failure code
Decisions/ Reports/ Outputs	<ul style="list-style-type: none">• Minutes• Any decisions, corrective actions, reports or other outputs

Table 9: Maintenance Period Progress Meeting

Delivery - Maintenance Services Period Progress Meeting	
Purpose - An operational review of performance of Maintenance Services by the Supplier, including: <ul style="list-style-type: none">• review of Supplier performance in previous Period;• review of Payment Applications and payment adjustments;• evaluation of the Supplier's skills and resourcing requirements;• resolution of on-going Supplier performance issues;• review of Maintenance Renewal Services and Variation Orders; and• review of progress by Supplier in respect of health, safety and environmental issues (including compliance with QUENSH) and waste and resources management.	
Title:	Maintenance Services Period Progress Meeting
Frequency	Each Period
Applicable to	Maintenance Services
Main Agenda Items	<ul style="list-style-type: none">• KPI review• Financial review• Operational updates
Meeting Chair	<ul style="list-style-type: none">• Company's Representative
Reports Required	<ul style="list-style-type: none">• KPI performance in accordance with Schedule 18 (Performance Measurement)• Update on remedial actions undertaken by the Supplier• Update on achievement of planned and reactive maintenance activities• Reports on faults• Report on waste and resources management• Update on any resource/technical/safety issues
Decisions/ Reports/ Outputs	<ul style="list-style-type: none">• Minutes• Actions with responsibility for completion allocated and target dates for completion

Table 10: Released Upgrade Work Activities Progress Review

Delivery – Release Upgrade Work Activity Progress Review	
Purpose – to review the progress of Released Upgrade Work Activities in regards to achievement of Stage Gate approvals agenda to include:	
<ul style="list-style-type: none">• safety;• survey;• design,• resources;• programme• transplant;• access• cost estimates	
Title:	Project Managers Review Meeting
Frequency	Each Period covering all Released Upgrade Work Activities
Applicable to	Released Upgrade Work Activities
Main Agenda Items	<ul style="list-style-type: none">• Design• Resources• Programme• Cost
Meeting Chair	<ul style="list-style-type: none">• Senior project manager nominated by the Company's Representative
Reports Required	<ul style="list-style-type: none">• None
Decisions/ Reports/ Outputs	<ul style="list-style-type: none">• Minutes• Actions with responsibility for completion allocated and target dates for completion

Table 11: Stage Gate 3 Approval Meeting

Delivery – Stage Gate 3 Approval Meeting	
Purpose – to review the documents prepared in support of the application for Stage Gate 3 approval for a Released Upgrade Work Activities agenda to include:	
<ul style="list-style-type: none">• safety;• design,• resources;• programme• transplant;• access• cost estimate	
Title:	Stage Gate 3 Approval Meeting
Frequency	As determined by the programme for each Released Upgrade Work Activity
Applicable to	Released Upgrade Work Activities
Main Agenda Items	<ul style="list-style-type: none">• Design• Resources• Programme• Cost
Meeting Chair	<ul style="list-style-type: none">• Senior manager nominated by the Company's Representative (the Company's track sponsor)
Reports Required	<ul style="list-style-type: none">• Documents as described in Schedule 11 (Project Processes)
Decisions/ Reports/ Outputs	<ul style="list-style-type: none">• Minutes• Actions with responsibility for completion allocated and target dates for completion• Stage Gate approval or rejection

Table 12: Stage Gate 4 Approval Meeting

Delivery – Stage Gate 4 Approval Meeting	
Purpose – to review the documents prepared in support of the application for Stage Gate 4 approval for a Released Upgrade Work Activities agenda to include:	
<ul style="list-style-type: none">• safety;• design,• resources;• programme• transplant;• access• cost estimate	
Title:	Stage Gate 4 Approval Meeting
Frequency	As determined by the programme for each Released Upgrade Work Activity
Applicable to	Upgrade Works
Main Agenda Items	<ul style="list-style-type: none">• Design• Resources• Programme• Cost
Meeting Chair	<ul style="list-style-type: none">• Senior manager nominated by the Company's Representative (the Company's track sponsor)
Reports Required	<ul style="list-style-type: none">• Documents as described in Schedule 11 (Project Processes)
Decisions/ Reports/ Outputs	<ul style="list-style-type: none">• Minutes• Actions with responsibility for completion allocated and target dates for completion• Stage Gate approval or rejection

Table 13: Stage Gate 5 Review Meeting

Delivery – Stage Gate 5 Review Meeting	
Purpose – to review the documents prepared in accordance with Schedule 11 (Project Processes) paragraph 3.7 (Stage Gate 5) agenda to include:	
Title:	Stage Gate 5 Approval Meeting
Frequency	As determined by the programme for each Released Upgrade Work Activity
Applicable to	Released Upgrade Work Activities
Main Agenda Items	<ul style="list-style-type: none">• Operational readiness• Maintenance readiness• Engineering safety hazard log• MAID documentation
Meeting Chair	<ul style="list-style-type: none">• Senior manager nominated by the Company's Representative (the Company's track sponsor)
Reports Required	<ul style="list-style-type: none">• Document as identified in Schedule 11 (Project Processes)
Decisions/ Reports/ Outputs	<ul style="list-style-type: none">• Minutes• Actions with responsibility for completion allocated and target dates for completion• Stage Gate approval or rejection

Table 14: Visualisation Boards

Delivery – Vis Boards	
Purpose – to review team performance and identify trends and issues in need of action:	
<ul style="list-style-type: none">• safety;• strategic plan• design,• resources;• programme (milestones and delivery);• equipment performance;• access;• cost.	
Title: Vis Boards	
Frequency Weekly	
Applicable to Maintenance Services Released Upgrade Work Activities	
Main Agenda Items <ul style="list-style-type: none">• Design• Resources• Programme• Cost	
Meeting Chair <ul style="list-style-type: none">• Company's Representative	
Reports Required <ul style="list-style-type: none">• Vis Board updates	
Decisions/ Reports/ Outputs <ul style="list-style-type: none">• Actions with responsibility for completion allocated and target dates for completion	

Table 15: Change Board

Delivery – Change Board	
Purpose – to review proposed changes to Released Upgrade Work Activity scope and the notification of change to the Strategic Plan:	
<ul style="list-style-type: none">• Review of Change Request ("CR") forms (including details of time and cost implications);• Review of early warning notifications• Confirmation change approvals;• Notification of proposed changes to the strategic plan	
Title:	Change Board
Frequency	Each Period
Applicable to	Released Upgrade Work Activities
Main Agenda Items	<ul style="list-style-type: none">• CR forms• Programme• Cost• Strategic Plan
Meeting Chair	<ul style="list-style-type: none">• Company's Representative
Reports Required	<ul style="list-style-type: none">• CR forms• Strategic Plan updates (by the Company)
Decisions/ Reports/ Outputs	<ul style="list-style-type: none">• Approval of CR forms.

Table 16: Payment Application Review

Delivery – Payment Application Review	
Purpose – To review the periodic payment application from the Supplier ahead of the Company's payment certificate being issued.	
Title:	Contract Innovation Efficiency Review
Frequency	Each Period
Applicable to	Maintenance Services Released Upgrade Work Activities
Main Agenda Items	<ul style="list-style-type: none">• Presentation of the periodic application (key actual payments, deviations from cashflow predictions, details of forecast elements, identification of cost misallocation)• Identification of certificate queries• Review any outputs from deep dive requests / Supplier's audit plan• Review stockholding• Cost reduction analysis• Confirmation of payment issues with the supply chain.
Meeting Chair	<ul style="list-style-type: none">• Company's Representative or its nominated delegate
Reports Required	<ul style="list-style-type: none">• Cumulative periodic payment application• Recommendations from any deep dive requests• Running account of disallowed costs• Running account of queries
Decisions/ Reports / Outputs	<ul style="list-style-type: none">• Minutes• Actions with responsibility for completion allocated and target dates for completion

Table 17: Estimate Assurance Review

Delivery – Estimate Assurance Review (EAR)	
Purpose – To review the Integrated Team Released Upgrade Work Activity estimates	
Title:	Contract Innovation Efficiency Review
Frequency	Weekly
Applicable to	Released Upgrade Work Activities
Main Agenda Items	<ul style="list-style-type: none">Estimate Assurance Review panel meets to discuss Released Upgrade Work Activity estimates in accordance with the Schedule 11 Progressive Estimating Process.
Meeting Chair	<ul style="list-style-type: none">Company's Representative or its nominated delegate
Reports Required	<ul style="list-style-type: none">Estimate status reportEstimates for review
Decisions/ Reports / Outputs	<ul style="list-style-type: none">MinutesActions with responsibility for completion allocated and target dates for completion

Table 18: Released Upgrade Work Activity Delivery Review

Delivery – Released Upgrade Work Activity Delivery Review	
Purpose – To review each project and its status in the context of the End-to-End Process	
Title:	Released Upgrade Work Activity Delivery Review
Frequency	Weekly
Applicable to	Released Upgrade Work Activities
Main Agenda Items	<ul style="list-style-type: none">• Assessment of readiness for project work• Review of supply chain (resources ordered, booked, confirmed)• Review and challenge of the detailed project delivery plans (including review of go-no-go points, access points, protection)• Review of briefing packs• Review of method statements• Review of risk assessments and mitigation measures• Confirmation of delivery team, escalation points and team details• Previous project performance, wash-up, lessons learned.
Meeting Chair	<ul style="list-style-type: none">• Supplier's Representative or its nominated delegate
Reports Required	<ul style="list-style-type: none">• Method statements• Rosters
Decisions/ Reports / Outputs	<ul style="list-style-type: none">• Minutes• Actions with responsibility for completion allocated and target dates for completion

2. **Role of the Core Group (Executive Management Board)**

2.1. The overall objectives of the Core Group are to provide leadership, challenge and support to the Integrated Team and to facilitate:

- (A) the safe, efficient and effective delivery of the maintenance and upgrade activities;
- (B) the promotion of collaboration working and partnering;
- (C) the integration of the Company's and the Supplier's staff within the Integrated Team;
- (D) the management of stakeholders; and
- (E) the achievement of a mutually beneficial commercial relationship.

2.2. The Core Group priorities are to:

- (A) drive continuous improvement and best practice;
- (B) ensure reliability of the maintained asset based through effective planned and reactive maintenance;
- (C) ensure that optimum design solutions for Released Upgrade Work Activities are achieved;
- (D) focus on strategy and provide direction to senior management within the Integrated Team;
- (E) support innovation; and
- (F) act quickly to resolve issues within the Integrated Team and avoid Disputes.

2.3. The role of the Core Group is to provide:

- (A) strategic guidance to the Integrated Team including by:
Administration and performance
 - (1) developing and maintaining a purpose statement and set of objectives for the Core Group and the Integrated Team, with particular regard to collaborative behaviours;
 - (2) monitoring and advising on the performance and behaviours of the Integrated Team;
 - (3) appointing and replacing the Supplier's Representative;
 - (4) making recommendations and approvals to the Company's Representative and the Company in respect of acceptance of the appointment and replacement of the senior posts in the Integrated Team;
 - (5) advising and giving recommendations in respect of resourcing of the Integrated Team;
 - (6) the review and approval of the Contract Management Plan.

- (7) the review and approval of the minutes from Core Group meetings and to ensure that the procedures of the Core Group are followed;
- (8) the review and approval of the works status reports prepared by the Integrated Team and to investigate and advise on measures necessary to overcome any adverse trends;
- (9) to provide advice, to challenge and provide guidance to the Integrated Team in respect of the implementation of best practices, innovation and improvement initiatives;
- (10) to monitor compliance with the CDM Regulations;

Financial Management

- (1) setting stretch targets for the Integrated Team and provide the necessary resources and incentives (including training and support programmes) to enable the Integrated Team to meet such targets;
- (2) to monitor the overall performance of the Integrated Team against measures relating to cost, quality, programme and behaviour;
- (3) to assist in the management and reduction of any excesses payable on insurance policies pursuant to clause 50 of the Contract and to facilitate implementation of all necessary measures as may be required by the Parties to reduce any such excess;
- (4) to ensure that the forecast cost data is provided to the Company's Representative as and when required;
- (5) to recommend approval of the payment of any additional incentive payments to Integrated Team personnel;
- (B) value engineering and value management:
 - (1) to review and make recommendations in respect of approval of any significant value management and/or value engineering initiatives proposed by the Integrated Team; and
- (C) any other matter referred to the Core Group in accordance with this Contract.

2.4. Procedures of the Core Group

- (A) The Core Group shall be constituted of four members; two senior representatives from the Company and two senior representatives from the Supplier. Each Core Group member may, where their senior representative(s) are unavailable for a meeting appoint a designated representative in their place by notice to the other Core Group members in writing. The following procedures shall apply to each meeting of the Core Group:
 - (1) The Supplier's Representative and the Company's Representative shall attend meetings of the Core Group in a non-voting capacity.
 - (2) Meetings of the Core Group shall only be held with all board members present (or their designated representative) and members of the Core Group must attend all meetings. Meetings shall be held on a 4 weekly basis or otherwise when requested in writing by any board member. The Core Group shall agree the venue for each meeting of the Core Group and

shall agree procedures to enable Core Group members to attend meetings by telephone or video conference facilities.

- (3) All decisions of the Core Group shall be binding on all Parties only if:
 - (a) all members (or their authorised representative) of the Core Group are present; and
 - (b) unanimous; and
 - (c) in writing and/or by way of the approved Core Group meeting minutes.
- (4) In the event that the Core Group are unable to reach a unanimous decision on any issue then any member of the Core Group may refer the matter to the Senior Representatives of each Party who shall meet and try to reach agreement to resolve the issue referred to them. Each Party shall bear its own costs and expenses in relation to reference of any issue to the Senior Representatives. In the event that the Senior Representatives cannot resolve the issue between them, the Company's Senior Representative shall determine the issue and such determination shall be binding on the Parties unless and until either Party refers the matter for resolution pursuant to Schedule 5 (Dispute Resolution Procedure) and the Company's Senior Representative determination of the issue is adjusted. Paragraphs 2-7 Schedule 5 (Dispute Resolution Procedure) shall not apply in relation to any issue referred for resolution to Schedule 5 (Dispute Resolution Procedure) pursuant to this paragraph 2.4(A)(4).

2.5. Schedule of Members of the Core Group

- (A) The initial members of the Core Group are set out in Schedule 1 (Contract Data).
- (B) Successors may be appointed by the relevant Party in writing subject to the consent of the other Party, such consent not to be unreasonably withheld or delayed.

2.6. Core Group meeting agenda

- (A) The agenda for Core Group meetings shall follow the following structure but be amended by agreement:
 - (1) review of KPI performance:
 - (a) safety and sustainability;
 - (b) asset knowledge;
 - (c) financial accounting;
 - (d) innovation;
 - (e) delivery;
 - (f) reliability; and
 - (g) quality

- (2) progress report narrative;
- (3) Integrated Team organisation and performance;
- (4) progress towards agreement of the Integrated Team Work Plan for future Budget Periods;
- (5) key stakeholder and supply chain issues;
- (6) critical delivery issues (delivery and design activities);
- (7) Mobilisation Plan / Demobilisation Plan (as applicable);
- (8) Contract Management Plan; and
- (9) any other business.

3. Supplier's Plans

- 3.1. The Supplier shall comply with the plans listed in this paragraph 3, which are:
 - (A) Health, Safety, Quality and Environmental Plan in accordance with Schedule 16 (Health, Safety, Quality and Environmental Requirements);
 - (B) Competency Management and Training Plan in accordance with this Schedule 10 (Contract Management);
 - (C) Strategic Labour Needs and Training Plan in accordance with Schedule 20 (Strategic Labour Needs and Training);
 - (D) Business Continuity Plan in accordance with this Schedule 10 (Contract Management);
 - (E) Mobilisation Plan in accordance with Schedule 14 (Mobilisation);
 - (F) Contract Management Plan in accordance with Schedule 14 (Mobilisation); and
 - (G) Demobilisation Plan in accordance with Schedule 15 (Demobilisation).
- 3.2. The Supplier shall review and submit to the Company's Representative for approval updated copies of such plans as per the frequencies specified in paragraph 3.4 of this Schedule 10 (Contract Management).
- 3.3. The Company's Representative shall provide the Supplier with comments on the plans within thirty (30) Working Days of receipt. The Supplier shall incorporate the comments and suggestions of the Company and shall issue a revised copy of the plans to the Company within fourteen (14) Working Days of receipt. No amended plan shall take effect until the Company's Representative has confirmed the Company's approval of the amended plan(s).

3.4. The Supplier shall be required to provide the above plans in the frequencies stated below:

Plan	Frequency
Health, Safety, Quality and Environmental Plan	Annually
Competency Management and Training Plan	Annually
Strategic Labour Needs and Training Plan	Annually
Business Continuity Plan	Annually
Demobilisation Plan	Annually

(A) **Health, Safety, Quality and Environmental Plan**

The Supplier shall set out its approach to health, safety, quality, environment and corporate social responsibility in accordance with Schedule 16 (Health, Safety, Quality and Environmental Requirements).

(B) **Competency Management and Training Plan**

The Supplier shall provide a plan within twenty (20) Working Days of the Commencement Date demonstrating how the Supplier will meet all training requirements for itself and its Sub-Contractors as set out in Schedule 21 (Training).

(C) **Strategic Labour Needs and Training (SLNT) Delivery Plan**

The Supplier shall provide a plan demonstrating how the Supplier will meet the minimum Strategic Labour Needs and Training outputs for itself and its Sub-Contractors in accordance with Schedule 20 (Strategic Labour Needs and Training).

(D) **Business Continuity Plan**

- (1) The Supplier shall provide a Business Continuity Plan to the Company in accordance with the requirements of paragraph 3.4(D) of this Schedule 10 (Contract Management) within twenty (20) Working Days of the Commencement Date. The Supplier shall thereafter comply with the Business Continuity Plan and the Business Continuity Plan cannot be varied unless agreed by the Parties in writing.
- (2) The Business Continuity Plan shall detail how the Supplier will fulfil its responsibilities and obligations to the Company under the terms of the Contract in the event of an incident affecting the Supplier's ability to provide the Services, including its business recovery arrangements and testing regime.
- (3) The Supplier shall review and update, in conjunction with the Company's Representative, its Business Continuity Plan on an annual basis, unless an alternative frequency is agreed between the Parties.
- (4) The Supplier shall review and test the robustness of its Business Continuity Plans annually (unless an alternative frequency is agreed between the parties) or following any incident or business change and implement changes to the plan based on test outcomes.

- (5) The Supplier shall be responsible for providing assurance to the Company that its Business Continuity Plan is fit for purpose to recover, within reasonable timescales, parts of the Supplier's business so as to provide continuity in performance of the Services in accordance with the Contract.
- (6) The Supplier shall provide to the Company, upon request, evidence that its Business Continuity Plan is tested on an annual basis. The Company reserves the right to ask for further details regarding the Supplier's Business Continuity Plan.
- (7) The Supplier shall identify risks to continuity of delivery of the Services to the Company and develop a specific Business Continuity Plan to ensure that all Services are available to the Company as required, and there is minimum disruption to the Company in the event of incidents where the Business Continuity Plan is enacted.
- (8) Within the Business Continuity Plan, the Supplier shall set out its approach to managing operational and commercial risk. This shall include, but shall not be limited to, the Supplier's Contract-specific plan for business continuity, incorporating the potential risks to business continuity, its mitigation strategies, how the Services will be delivered in the event of a disruption to normal operations and how the Business Continuity Plan will be tested.

(E) **Demobilisation Plan**

The Supplier shall deliver a Demobilisation Plan in accordance with Schedule 15 (Demobilisation).

SCHEDULE 11: Project Processes

1. Definitions

For the purposes of this Schedule 11 (Project Processes), the following expressions shall have the following meanings:

- 1.1. "Hazard Identification" or "HAZID" means the Company's process for the early identification of potential hazards and threats effecting people, the environment, assets or reputation.
- 1.2. "Estimate Template" means the document contained in Appendix A to this Schedule 11 (Project Processes).

2. Pathway and Benchmark Upgrade Work Activity Breakdowns

- 2.1. The Company shall, during the Mobilisation Period, provide the Supplier with an overview of the Pathway Process and the Supplier shall ensure that all necessary Supplier Personnel receive training on the Pathway Process in support of the End to End Process.
- 2.2. The Benchmark Upgrade Work Activity Breakdowns may be used by the Company and the Integrated Team as productivity and resourcing benchmark data as part of the End to End Process and Progressive Estimating Process

3. The 'End to End' Process

3.1. Release of Upgrade Work Activity information to Integrated Team

- 3.1.1. The Company shall release upgrade activities from its Strategic Plan to the Supplier and the Integrated Team for delivery.
- 3.1.2. The Released Upgrade Work Activity Scope and Purpose is provided by the Company as part of the Integrated Team Requirements for each Budget Period in accordance with Schedule 12 (Integrated Team)

3.2. Pathway Stage 2 - Feasibility

- 3.2.1. For each Released Upgrade Work Activity, the Supplier shall collate and create a health and safety pre-construction information pack which shall be issued to the Company and the Integrated Team.
- 3.2.2. As part of Pathway Stage 2 the Company shall produce the documents set out in Table 1 below:

Table 1: Stage 2 documentation

Document title	Purpose
Released Upgrade Work Activity Scope and Purpose	Define the output requirements

- 3.2.3. The Supplier shall provide an estimate of the Released Upgrade Work Activity Target Cost Breakdown for each Released Upgrade Work Activity in accordance with paragraph 4 (Progressive Estimating Process and Benchmarking) of this Schedule 11 (Project Processes).

3.2.4. The Supplier (supported by the Integrated Team) shall ensure that all stakeholders for each Released Upgrade Work Activity are invited to attend a launch meeting, where the Supplier (supported by the Integrated Team) shall present the information set out in Table 2 below:

Table 2: Released Upgrade Work Activity launch information

Document Title	Prepared by:
Released Upgrade Work Activity programme	The Supplier
Released Upgrade Work Activity estimate	The Supplier
Released Upgrade Work Activity risk register	The Integrated Team
Strategic plant identified	The Supplier
Long lead materials identified, e.g. P&C	The Supplier
F10	The Integrated Team
Feasibility studies and design solution options analysis	The Supplier and the Integrated Team
Technical Requirements Specification ("TRS")	The Supplier
Operational Assurance Notification ("OAN")	The Supplier shall submit an OAN to the Company's station access team prior to any site visits or Services taking place.

3.2.5. The purpose of the launch meeting is for the stakeholders to confirm their acceptance of the Released Upgrade Work Activity launch information. The launch meeting shall be minuted and any actions or amendments required by stakeholders recorded.

3.2.6. Following completion of the launch meeting and the approval of the TRS by the Company, the Company's Representative shall confirm the launch of the Released Upgrade Work Activity into Pathway Stage 3 (concept design).

3.3. **Stage 3 – Concept Design**

3.3.1. Following the issue of the approved TRS, the Supplier shall:

- (A) start production of the Concept Design Statements ("CDS") for each required asset area;
- (B) undertake detailed site investigations and surveys; and
- (C) hold an Interdisciplinary Design Review ("IDR"), at which the Supplier shall invite the Company's engineering representatives to attend and comment on the draft designs.

3.3.2. Following the IDR the Supplier shall hold a construction launch meeting on site making reference to draft concept designs and proposed delivery methodology. The Supplier (supported by the Integrated Team) shall arrange for key Company stakeholders to be present at the construction launch meeting and as a minimum should include the following:

- (A) the Company's Released Upgrade Work Activity sponsor;
- (B) representatives from the Company's premises maintenance teams
- (C) representatives from the Company's railway operations team (if required); and
- (D) any third parties impacted by or engaged in the delivery of the proposed Released Upgrade Work Activity.

3.3.3. The Supplier shall present the Released Upgrade Work Activity output requirements. In response the Company shall define the scope of Services it needs to undertake or procure to facilitate the delivery of the scope of the Released Upgrade Work Activity.

3.3.4. The Supplier (supported by the Integrated Team) shall ensure that the outputs defined in Table 3 below are achieved at or following the construction launch meeting.

Table 3: Construction launch meeting outputs

Supplied by	Output
The Supplier	Site report, including photos, recording details of construction launch meeting and highlighting any risks or issues associated with the site and proposed design. Long lead material items to be identified to suit the works staging and configuration.
The Supplier	Any data necessary to complete the CDS and enable production of the detailed design, including assessment of risks.
The Supplier	A report detailing any assets affected by the Released Upgrade Work Activity and a proposal detailing the site works and materials required to deliver the concept design.
The Company (premises maintenance team)	A summary report highlighting any issues or risks associated presented by the Released Upgrade Work Activity to other assets not maintained by the Supplier as part of Maintenance Services
Company railway operations team	A summary report highlighting any ongoing issues or risks to operational assets affected by the Released Upgrade Work Activity and a proposal for operational equipment and installation locations in sufficient detail to enable completion of concept designs.

3.3.5. Post construction launch activities:

- (A) The Supplier shall review and book access requirements in accordance with Schedule 13 (Access).
- (B) For Released Upgrade Work Activities where a safety change is required, an initial HAZID review shall be held by the Supplier, which the Company will attend and provide input. The Supplier shall prepare and draft the appropriate safety cases as required.
- (C) The Supplier shall issue to the Company for each Released Upgrade Work Activity a CDS. The Company shall review and confirm if there are any objections or concerns with the concept design.
- (D) The Supplier shall update the cost estimate of the Released Upgrade Work Activity Target Cost Breakdown based on the CDS and the construction launch information.

3.3.6. Stage Gate 3:

- (A) The Supplier shall present the updated cost estimate of the Released Upgrade Work Activity Target Cost Breakdown in accordance with paragraph 4.3 below (Progressive Estimating Process and Benchmarking). The cost estimate must be accepted in order for the Released Upgrade Work Activity to progress further toward Stage Gate 3 approval.
- (B) The Supplier (supported by the Integrated Team) shall submit all approved documentation required on the Project Pathway Management Plan ("PPMP") to the Company (Released Upgrade Work Activity sponsor) a minimum of two weeks in advance of the Stage Gate 3 review meeting date.
- (C) The Supplier (supported by the Integrated Team) shall provide the documents detailed in Table 4 for review at the Stage Gate 3 meeting.

Table 4: Supplier Documentation for Stage Gate 3

Document	Explanatory notes
Released Upgrade Work Activity Target Cost Breakdown estimate	Presented and accepted at the Stage 3 Estimate Assurance Review
Released Upgrade Work Activity programme	Updated from Released Upgrade Work Activity launch with input from Integrated Team
Construction phase plan and environmental plan	Project level document covering multiple sites is acceptable
Site emergency preparedness plan	Project level document covering multiple sites is acceptable
Waste management plan	Project level document covering multiple sites is acceptable
Operational Assurance Notification	Updated by the Supplier and approved by the Company's station access team
Site surveys (walk outs)	Report produced at Released Upgrade Work Activity construction launch
F10 notification	As produced and submitted at Released Upgrade Work Activity launch
Released Sub-Project risk register	Produced with input from Integrated Team
Released Upgrade Work Activity issues register	Produced with input from Integrated Team

Document	Explanatory notes
Lessons learnt	Gather and take account of lessons learned from previous, similar jobs to the Released Upgrade Work Activity, with input from Integrated Team
Technical Requirements Specifications	Produced and approved for feasibility stage of Released Upgrade Work Activity
Scope/Design review	IDR meeting minutes
Progress reports	Periodic progress reports
Health, safety and environment pre-construction information	As provided at Released Upgrade Work Activity feasibility stage
Operational readiness plan	Produced by Company Operations – if required
Maintenance readiness plan	Produced by the Supplier
Access plan	Company Strategic Plan
Project execution plan	Project level document covering multiple sites is acceptable
Risk management strategy	Project level document covering multiple sites is acceptable
Stakeholder engagement plan	Project level document covering multiple sites is acceptable
People change plan	Project level document covering multiple sites is acceptable
Team competency assessment	Completed with input from Integrated Team (updated if team members change)
Engineering safety hazard log	Produced and updated with input from Integrated Team for all project sites in the Budget Period – if required
Mandatory Asset Information Deliverables (MAID)	Populated for each Released Upgrade Work Activity with input from Integrated Team
Procurement strategy	Project level document covering multiple sites is acceptable
Concession request	Produced for Released Upgrade Work Activity - if required

Document	Explanatory notes
Design management plan	Project level document covering multiple sites is acceptable
Verification & validation plan	Produced for Released Upgrade Work Activity - if required
RAM plan	Project level – if required
EMC test plan/specification	Produced for Released Upgrade Work Activity - if required
Engineering safety case	Produced for Released Upgrade Work Activity – if required
Engineering safety & assurance case	Project level document covering multiple sites is acceptable – if required
Space allocation application	Produced for Released Upgrade Work Activity and submitted for acceptance
Concept Design Statement	Approved through Company assurance process
Design reviews	Minutes from IDR
S1088 fire compliance submission	Produced for Released Upgrade Work Activity - drafted

(D) The Company (Released Upgrade Work Activity sponsor) shall assess if the Released Upgrade Work Activity shall be awarded a Stage Gate 'pass' or 'fail with an action plan'. If a 'fail with an action plan' is given, the Company (Released Upgrade Work Activity sponsor) shall decide whether the Released Upgrade Work Activity can continue into Pathway Stage 4 or is held at Pathway Stage 3 until all the action plan items are closed out.

(E) Once all action plan items have been signed off as completed by the Company (Released Upgrade Work Activity sponsor), a Stage Gate 3 approval will be issued to the Integrated Team.

3.4. Stage 4 – Detailed Design

- 3.4.1. On commencement of Pathway Stage 4, the Supplier shall start production of the detailed design of the Released Upgrade Work Activity.
- 3.4.2. The Supplier shall hold Interdisciplinary Design Review(s) (each an "IDR"), at which the Supplier shall invite the Company's engineering representatives to attend and comment on the draft detailed designs.
- 3.4.3. Following the initial detailed design IDR the Supplier shall procure/confirm any required long lead materials based on draft detailed design.
- 3.4.4. The Supplier shall hold a final HAZID review, which the Company shall attend and provide input.

- 3.4.5. The Supplier shall hold a final IDR, at which the Company shall receive, review and provide input into the final design.
- 3.4.6. The Supplier shall update the cost estimate of the Released Upgrade Work Activity Target Cost Breakdown based on the final detailed design.
- 3.4.7. The Supplier shall present the updated cost estimate of the Released Upgrade Work Activity Target Cost Breakdown in accordance with paragraph 4.4 below (Progressive Estimating Process and Benchmarking). The cost estimate must be accepted in order for the Released Upgrade Work Activity to progress further toward Stage Gate 4 approval.
- 3.4.8. The Supplier shall undertake dilapidation surveys with the Company (maintenance Integrated Team) to capture existing condition of assets on site. Second site walks with Company installation teams and third parties shall be held, if required, to refine scope using final detailed designs.
- 3.4.9. The Supplier in designing and specifying upgrade works for each Released Upgrade Work Activity, warrants, undertakes and represents to the Company that the design:
 - (A) is in accordance with the Schedule 2 (Specification) and any other performance or output specification or requirements contained or referred to in the Contract;
 - (B) complies with all Applicable Laws and Standards; and
 - (C) is fit for the purpose defined in the Released Upgrade Work Activity Scope and Purpose.
- 3.4.10. The Supplier accepts entire responsibility for the design and specification of the Services for each Released Upgrade Work Activity which it is required to design and specify and for any mistake, inaccuracy, ambiguity, inconsistency or omission in or between its design and the specification of the Services for each Released Upgrade Work Activity and the documents which are part of the Contract.
- 3.4.11. Stage Gate 4:
 - (A) The Supplier and Integrated Team shall submit all approved documentation required on the PPMP to the Company (Released Upgrade Work Activity sponsor) a minimum of two weeks in advance of the Stage Gate review meeting date.
 - (B) The Supplier (supported by the Integrated Team) shall provide the documents detailed in Table 5 for review at the Stage 4 meeting.

Table 5: Supplier Documentation for Stage Gate 4

Document	Explanatory notes
Released Upgrade Work Activity design and delivery estimate	Presented and accepted at the Pathway Stage 4 Estimate Assurance Review
Released Upgrade Work Activity programme	Updated from the T-12 readiness review, with input from Integrated Team
Safe system of work	Produced and approved by Supplier
Section 61	Submitted to and approved by local authority
Operational Assurance Notification	Updated by the Supplier and approved by the Company's station access team
Site obstruction/utility relocation plan	Produced by Supplier with input from Integrated Team
Site inspections	Collection of survey reports produced by Supplier, Company teams and third parties
Cutting, drilling & fixing assessments	Prepared for site works with input from Integrated Team
Inspection and testing strategy/plan	Produced and approved with input from Integrated Team
Storage license	Submitted by Supplier, approved by Company
Hot works permits	Submitted by Supplier, approved by Company
Permit to dig	Produced by Supplier for Released Upgrade Work Activity
Crane plan	Produced and approved by Supplier
Lifting plan	Produced and approved by Supplier
Plant packs	Produced and approved by Supplier
Released Upgrade Work Activity Stage Gate 3 Certificate	Issued on acceptance of Pathway Stage 3 PPMP by the Company (Released Upgrade Work Activity sponsor)
Released Upgrade Work Activity Risk Register	Updated with input from Integrated Team
Released Upgrade Work Activity issues register	Updated with input from Integrated Team

Document	Explanatory notes
Progress reports	Periodic progress reports
Operational Readiness Plan	Produced by Company operations, if required – updated from Pathway Stage 3 (if required)
Maintenance readiness plan	Produced by the Supplier
Engineering safety hazard log	Updated with input from Integrated Team for all Sites in the Budget Period (if required)
Mandatory Asset Information Deliverables (MAID)	Updated with input from Integrated Team
Asset database change submission	Asset Management System data for Released Upgrade Work Activity
Asset database verification report	Asset Management System data (new and to be removed) for Released Upgrade Work Activity
Concession request	Produced and approved by the Company (if reasonable and appropriate)
Verification & validation report	Updated by the Company, if required
RAM status report	Updated by the Company, if required
Engineering safety case	Produced and approved by the Company with input from the Integrated Team (if required)
Space allocation application	Updated and approved by the Company (if required)
Power load application	Submitted and approved by the Company (if required)
Safe load assessments	Submitted and approved by the Company (if required)
Building Control group application	Submitted and approved by the Company (if required)
Concept Design Statement	Approved for Released Upgrade Work Activity Pathway Stage 3
Design reviews	Produce minutes for detailed design IDRs
Design check certificate	Produced and approved by the Company

Document	Explanatory notes
Design compliance report	Approved through Company assurance process
S1088 fire compliance submission	Submitted and approved by the Company
Quality Inspection Completion Certificate (QICC)	Prepared for site works by the Company (if required)

(D) Deliverables provided as part of the Pathway Stage 3 submission documents do not need specifically updating at Pathway Stage 4 for each Released Upgrade Work Activity (unless information contained within those documents has changed or time frame for review dictates an update) will be carried over onto the Pathway Stage 4 submission where necessary.

(E) The Company (Released Upgrade Work Activity sponsor) shall assess if the Released Upgrade Work Activity shall be awarded a 'Stage Gate 'pass' or 'fail with an action plan'. If a 'fail with an action plan' is given, the Company (Released Upgrade Work Activity sponsor) shall determine whether the Released Upgrade Work Activity can continue towards Pathway Stage 5 (delivery) or is held at Pathway Stage 4 until all the action plan items are closed out.

(F) All action plan items must be closed before Services relating to a Released Upgrade Work Activity commence (excluding enabling works). Once all action plan items have been signed off as completed by the Company (Released Upgrade Work Activity sponsor) a Stage Gate 4 approval notice will be issued to the Supplier and the Integrated Team.

(G) The Supplier can apply for Stage 5 Notice on receipt of the Stage Gate 4 approval notice or with written permission from the Company (Released Upgrade Work Activity sponsor) to continue with a 'fail with an action plan' status.

(H) It shall be a condition precedent that the Company issue a Stage 5 Notice to the Supplier before any Released Upgrade Work Activity may progress to Pathway Stage 5 (delivery). Upon issue of a Stage 5 Notice each Released Upgrade Work Activity attains Launched Upgrade Work Activity status.

3.5. Stage 5 - Delivery

3.5.1. On issue of the Stage 5 Notice, the Supplier shall continue with planning and delivery of the now Launched Upgrade Work Activity. The roles and responsibilities of the Company and the Supplier post issue of the Stage 5 Notice are set out in Schedule 12 (Integrated Team).

3.6. Stage Gate 5

3.6.1. The Supplier (supported by the Integrated Team) shall submit all approved documentation required on the PPMP to the Company (Released Upgrade Work Activity sponsor) a minimum of two weeks in advance of the Stage Gate 5 review meeting date.

3.6.2. The Supplier and the Company shall provide new or updated documents for the Stage Gate 5 review meeting as set out in Table 6 below:

Table 6: Documents for submission by the Supplier at the Stage Gate 5 review meeting.

Document	Explanatory notes
Released Upgrade Work Activity Stage Gate 4 certificate	Issued to Supplier on acceptance of Stage Gate 4 PPMP by the Company (Released Upgrade Work Activity sponsor)
Lessons learned report	Produced by Supplier with input from Integrated Team
Approved Released Upgrade Work Activity delivery cost	Final cost of design and delivery, to be produced with input from Integrated Team
Approved Released Upgrade Work Activity programme	Final delivery programme
Approved Released Upgrade Work Activity risk register	Updated with input from Integrated Team
Approved Released Upgrade Work Activity issues register	Updated with input from Integrated Team
Snagging list	Produced by Supplier with input from Integrated Team
Health, safety and environment pre-construction information	As provided to Supplier by Company at Stage Gate 2. Updated pre-construction information will be contained within MAID
Construction phase plan and environmental plan	Project level document covering multiple sites is acceptable
Safe system of work	Final version used for Released Upgrade Work Activity
Site emergency preparedness plan	Project level document covering multiple sites is acceptable
Section 61	Final approved version
Waste management plan	Project level document covering multiple sites is acceptable
Operational Assurance Notification	Final approved version
Site obstruction/utility relocation plan	Final approved version
Cutting, drilling & fixing Assessments	Updated on site by Supplier with input from Integrated Team

Document	Explanatory notes
Inspection and testing strategy/plan	Updated by Supplier
Site survey – as-built information	Requested by the Supplier and produced by the Company
Project execution plan	Project level document covering multiple sites is acceptable
Risk management strategy	Project level document covering multiple sites is acceptable
Stakeholder engagement plan	Project level document covering multiple sites is acceptable
People change plan	Project level document covering multiple sites is acceptable
Procurement strategy	Project level document covering multiple sites is acceptable
Team competency assessment	Updated by Integrated Team, if necessary
Progress reports	Periodic progress reports
Project completion & handover Certificate	Produced and approved by the Company
Completion report	Produced and approved by the Company
Operational readiness plan	Produced by Company operations, if required – updated from Stage Gate 4
Maintenance readiness plan	Produced by Company maintainer, if required – updated from Stage Gate 4
Engineering safety hazard log	Updated with input from Integrated Team for all Sites in Team Work Plans (if required). Updated from Stage Gate 4.
Mandatory Asset Information Deliverables (MAID)	Updated and approved by the Company with input from Integrated Team
Asset database change submission	Asset Management System data – updated following delivery of works
Asset database verification report	Asset Management System data (new and to be removed) – updated following delivery of works
Access plan	Strategic plan
Concession request	Produced and approved by the Company

Document	Explanatory notes
Design management plan	Project level document covering multiple sites is acceptable
Verification & validation report	Updated and approved by the Company, if required
RAM status report	Updated and approved by the Company, if required
EMC test plan/specification	Updated and approved by the Company, if required
Engineering safety management plan	Project level document covering multiple sites is acceptable (if required)
Engineering safety case	As produced and approved at Stage Gate 4 (if required)
Engineering safety & assurance case	Project level document covering multiple sites is acceptable
Building control group application	As produced and approved at Stage Gate 4
Design reviews	As produced and approved at Stage Gate 4
Design check certificate	As produced and approved at Stage Gate 4
Design Compliance report	As produced and approved at Stage Gate 4
S1088 fire compliance submission	As produced and approved at Stage Gate 4
Quality Inspection Completion Certificate (QICC)	Updated following completion of site works (if required)

4. Progressive Estimating Process, Benchmarking and Calculation of Delay Damages

4.1. Overview

Progressive estimating process is the process by which each Released Upgrade Work Activity is assessed throughout its Pathway Stages to determine affordability. Each Released Upgrade Work Activity will be measured against benchmark data for similar Released Upgrade Work Activities (where available) to determine if the estimated cost of the Released Upgrade Work Activity is in alignment with expected norms. These reviews are linked to completion of each Stage Gate.

4.2. Pathway Stage 2 - Feasibility

- 4.2.1. Released Upgrade Work Activities already in the Strategic Plan will have been included in the overall the TfL business plan and will have a baseline estimate derived from known benchmark data and feasibility estimates. This will be the Upgrade Work Activity Maximum Budget for each Released Upgrade Work Activity detailed as part of the Integrated Team Requirements and this shall be recorded as 'Estimate 1' on the Released Upgrade Work Activity estimate summary.
- 4.2.2. Each subsequent estimate update shall be tracked against the Upgrade Work Activity Maximum Budget to record variance to the benchmark data. All Estimate Assurance Review (EAR) submissions shall be made using the Estimate Template.

4.3. Pathway Stage 3 – Concept Design

- 4.3.1. The Supplier Personnel within the Integrated Team shall be responsible for resource planning and cost estimating and shall therefore prepare Released Upgrade Work Activity estimated cost updates and undertake cost checks throughout Pathway Stage 3 (concept design) to reflect new information and outputs of the Integrated Team as a whole.
- 4.3.2. The estimates prepared by the Supplier shall use the Estimate Template.
- 4.3.3. The Supplier is required to demonstrate at each EAR meeting that the Released Upgrade Work Activity is within cost norms and can be delivered for a sum no greater than the Upgrade Work Activity Maximum Budget.
- 4.3.4. The EAR panel will review the submission documents and challenge the Integrated Team and the Supplier in regards to design, resourcing and costing assumptions contained therein:
 - (A) if the estimated cost of a Released Upgrade Work Activity is deemed to be acceptable the EAR Panel will complete the estimate assurance form for the Released Upgrade Work Activity and sign off to allow progression to Pathway Stage 4 (detailed design); or
 - (B) if it is deemed the Released Upgrade Work Activity does not represent value for money, the Released Upgrade Work Activity will be returned to the Integrated Team for value engineering which shall be re-presented to EAR at a later date.

4.4. Pathway Stage 4 – Detailed Design

- 4.4.1. Upon approval and signature of a Pathway Stage 3 estimate the Released Upgrade Work Activity can proceed to Pathway Stage 4 (detailed design). During this Pathway Stage the Released Upgrade Work Activity estimated costs shall be

presented to the EAR panel as and when detailed design information becomes available in order to provide cost checked that the emerging detailed design is not exceeding the Upgrade Work Activity Maximum Budget. It is envisaged that as a minimum four cost checks will be undertaken by the Supplier during Pathway Stage 4.

4.4.2. As with Pathway Stage 3, at each of these reviews the Released Upgrade Work Activity will be assessed against benchmark criteria and:

- (A) if successful it can progress through to the next stage of planning and preparation; or
- (B) if unsuccessful the Supplier and the Integrated Team shall undertake value engineering activities in order to provide a cost effective design and delivery solution that can deliver the Released Upgrade Work Activity for a sum less than the Upgrade Work Activity Maximum Budget.

4.4.3. At prior to Stage Gate 4 the final version estimate shall be presented to an EAR review meeting. If at this stage the submission is accepted, the estimate shall become the final Released Upgrade Work Activity Target Cost Breakdown for inclusion as part of the Pathway Stage 4 documents issued to the Company as part of those requested for the issue of a Stage 5 Notice.

4.5. Calculation of Delay Damages

4.5.1. Following acceptance of the Pathway Stage 3 estimate for each Released Upgrade Work Activity Target Cost in accordance with paragraph 4.3 above, where the Company has indicated Delay Damages will apply in the Released Upgrade Work Activity Scope and Purpose, the Company shall confirm in writing to the Supplier the amount of Delay Damages that are to be levied in the event that the applicable Released Upgrade Work Activity achieves Launched Upgrade Work Activity Completion after the Launched Upgrade Work Activity Completion Date.

4.5.2. The Parties agree that the Delay Damages shall be made on a cost per calendar day basis, subject to the maximum Delay Damages per calendar day not exceeding 0.5% of the relevant Released Upgrade Work Activity Target Cost.

5. **Stage 5 Notice applications**

5.1. In support of each application for issue of a Stage 5 Notice the Supplier shall provide to the Company the following documents (collectively "the Stage 5 Documents") and in doing so confirms that the Stage 5 Documents are complete and fully enable the Supplier to fulfil its obligations under this Contract:

- 5.1.1. the Stage Gate 4 approval;
- 5.1.2. the Detail Design Information;
- 5.1.3. the final Released Upgrade Work Activity Target Cost Breakdown;
- 5.1.4. the final programme for the Released Upgrade Work Activity; and
- 5.1.5. the Delay Damages as identified by the Company.

5.2. The Supplier shall not request the issue of a Stage 5 Notice for any Released Upgrade Work Activity which is dependent on upgrade works being completed as part of another Released Upgrade Work Activity until such time as all the interrelated Released Upgrade Work Activities have achieved Stage Gate 4 approval.

- 5.3. The Company shall review the Stage 5 Documents provided by the Supplier and within 4 weeks of the receipt of the documents either:
 - 5.3.1. issue a Stage 5 Notice;
 - 5.3.2. notify that the Detail Design Information is to be subject to further value engineering review and cost reduction; or
 - 5.3.3. notify that the Released Upgrade Work Activity is withdrawn.
- 5.4. Where the Company notifies that the Detail Design Information is to be subject to value engineering review, the Released Upgrade Work Activity shall revert back to Pathway Stage 4 unapproved status.
- 5.5. Where the Company notifies that the Released Upgrade Work Activity is withdrawn, the Supplier and the Integrated Team shall not undertake any further Services in respect of that Released Upgrade Work Activity unless instructed to do so by the Company.
- 5.6. The Supplier shall confirm the total of Defined Cost incurred up to the point of withdrawal of the Released Upgrade Work Activity and provide the Company with a hard and soft copy of the documentation listed in paragraph 5.1 above for archiving.
- 5.7. The Company reserves the right to tender competitively withdrawn Released Upgrade Work Activities or to re-release them to the Supplier at a later date.

6. Maintenance Plan

6.1. Approving the Maintenance Plan

- 6.1.1. If there is no Maintenance Plan at the Commencement Date, the Supplier shall submit a first maintenance plan to the Company's Representative for acceptance within one (1) week of the Commencement Date.
- 6.1.2. The Supplier shall show on each maintenance plan which it submits for acceptance:
 - (C) the access dates, key dates and Budget Period start and finish dates;
 - (D) the order and timing of operations which the Supplier plans to do in order to provide the Planned Maintenance Services, including details of the worksites within the Site to be visited; the assets to be maintained; the frequency and duration of attendance at each worksite and including but not limited to details of:
 - (1) the number of planned safety inspections;
 - (2) the number of planned preventative inspections;
 - (3) the number of periodic technical inspections; and
 - (4) dates for submission of reports including obsolescence reports;
 - (E) the order and timing of the work of the Company and others as last agreed with them by the Supplier or, if not so agreed, as stated in Schedule 2 (Specification);

- (F) the dates when the Supplier plans to meet each condition stated for any key dates and to complete other work needed to allow the Supplier and others to do their work;
- (G) provisions for float, time risk allowances and environmental and health and safety requirements;
- (H) the dates when, in order to provide the Planned Maintenance Services in accordance with its Maintenance Plan, the Supplier needs:
 - (1) access to a part of the Sites if later than its access date;
 - (2) acceptances;
 - (3) plant and materials and other things to be provided by the Company; and
 - (4) information from others;
- (I) for each maintenance activity, a statement of how the Supplier plans to provide the services identifying the principal equipment and other resources which it intends to use;
- (J) its access requirements in accordance with Schedule 13 (Access); and
- (K) other information which Schedule 2 (Specification) requires the Supplier to show on a maintenance plan submitted for acceptance.

6.1.3. Within two (2) weeks of the Supplier submitting a maintenance plan to him for acceptance, the Company's Representative either accepts the maintenance plan or notifies the Supplier of his reasons for not accepting it. A reason for not accepting a maintenance plan is that:

- (A) the Supplier's plans are not practicable;
- (B) it does not show the information which the Contract requires;
- (C) it does not represent the Supplier's plans realistically; or
- (D) it does not comply with Schedule 2 (Specification) or Schedule 13 (Access).

6.2. Revising the Maintenance Plan

6.2.1. The Supplier shows on each revised maintenance plan:

- (A) the actual progress achieved on each operation and its effect upon the timing of the remaining Services;
- (B) the effects of implemented Compensation Events;
- (C) the effects of decisions reached and approved by the Company's Representative;
- (D) how the Supplier plans to deal with any delays and to correct notified defects; and
- (E) any other changes which the Supplier proposes to make to the Maintenance Plan.

6.2.2. The Supplier submits a revised maintenance plan to the Company's Representative for acceptance:

- (A) within five (5) days after the date on which the Company's Representative has instructed him to do so;
- (B) when the Supplier chooses to; and
- (C) at no less than four (4) weekly intervals from the Services Commencement Date until the Expiry Date.

7. Baseline Programme and Programmes for Launched Upgrade Work Activities

7.1. Approving the Baseline Programme

7.1.1. The Supplier shall submit a first baseline programme for acceptance with each Integrated Team Work Plan (which shall subsequently become the Baseline Programme after acceptance by the Company's Representative of the Integrated Team Work Plan in accordance with the provisions of paragraph 8 (Integrated Team Work Plans) below.

7.1.2. The Supplier shall show on each Baseline Programme:

- (A) the starting date and completion date for each Launched Upgrade Work Activity for which a Stage 5 Notice has been issued;
- (B) the targeted starting date and completion date for each Released Upgrade Work Activity for which a Stage 5 Notice has not yet been issued;
- (C) the planned and actual dates for Stage Gates for each Released Upgrade Work Activity for which a Stage 5 Notice has not yet been issued;
- (D) any linkages between Released Upgrade Work Activity and Launched Upgrade Work Activity;
- (E) Schedule 13 (Access) requirements; and
- (F) the Budget Period start and finish dates.

7.2. Revising the Baseline Programme

7.2.1. The Supplier shall demonstrate in detail on each revised Baseline Programme:

- (A) the effects of Variation Orders and Compensation Events;
- (B) the effects of decisions reached and approved by the Company's Representative;
- (C) how the Supplier plans to deal with any delays; and
- (D) any other changes which the Supplier proposes to make to the Baseline Programme.

7.2.2. The Supplier shall submit a revised Baseline Programme to the Company's Representative for acceptance:

- (A) within five (5) Working Days after the date on which the Company's Representative has instructed him to do so;

- (B) when the Supplier chooses to; and, in any case
- (C) at no less than four (4) weekly intervals from the Commencement Date until the Expiry Date.

7.2.3. Within two (2) weeks of the Supplier submitting a revised Baseline Programme for acceptance, the Company's Representative shall either accept the programme or notify the Supplier of his reasons for not accepting it, in each case in the Company's Representative's absolute discretion. A non-exhaustive list of reasons for not accepting a programme may be that:

- (A) the Supplier's plans which it shows are not practicable;
- (B) it does not show the information which this Contract requires;
- (C) it is not consistent with a Launched Upgrade Work Activity Programme;
- (D) it does not represent the Supplier's plans (in the reasonable opinion of the Company's Representative) realistically; or
- (E) it does not comply with Schedule 13 (Access) requirements.

7.3. **Approving the Launched Upgrade Work Activity Programmes**

7.3.1. The Supplier shall submit programmes for Released Upgrade Work Activities, for acceptance as part of the Stage 5 Notice application process. Following issue of the Stage 5 Notice the programme for the each Launched Upgrade Work Activity shall subsequently become the accepted programme for that Launched Upgrade Work Activity.

7.3.2. The Supplier shall show on each Launched Upgrade Work Activity Programme:

- (A) the starting date, access dates, key dates and completion date (where applicable);
- (B) the order and timing of operations which the Supplier plans to do in order to undertake the Services;
- (C) the order and timing of the work of the Company and Others;
- (D) the dates where survey data and information required to be supplied by the Company shall be provided by to support the delivery programme;
- (E) provision for design reviews, providing comments and allowance for updating designs and any supporting documentation, to support the delivery programme;
- (F) the dates when the Supplier plans to meet each condition stated for any key dates and to complete other work needed to allow the Supplier and Others to do their work;
- (G) provisions for float, time risk allowances and environmental and health and safety requirements;
- (H) the dates when, in order to provide the Services in accordance with its programme, the Supplier needs:
 - (1) access to a part of any of the Sites if later than its access date;

- (2) acceptances;
- (3) plant and materials and other things to be provided by the Company; and
- (4) information from Others;
- (I) for each operation, a statement of how the Supplier plans to do the Services identifying the principal equipment and other resources which it intends to use;
- (J) for each Launched Upgrade Work Activity, a cost-loaded programme showing the forecast resources required for that operation;
- (K) its access requirements in accordance with Schedule 13 (Access); and
- (L) other information which the Schedule 2 (Specification) requires the Supplier to show on a programme submitted for acceptance.

7.4. Revising the Launched Upgrade Work Activity Programmes

7.4.1. The Supplier shows on each revised programme:

- (A) the actual progress achieved on each operation and its effect upon the timing of the remaining work;
- (B) the effects of implemented Variation Orders and Compensation Events;
- (C) the effects of decisions reached and approved by the Company's Representative;
- (D) how the Supplier plans to deal with any delays and to correct notified defects; and
- (E) any other changes which the Supplier proposes to make to the Launched Upgrade Work Activity Programme.

7.4.2. Within two (2) weeks of the Supplier submitting a revised Launched Upgrade Work Activity Programme to him for acceptance, the Company's Representative shall either accept the programme or notify the Supplier of his reasons for not accepting it. A reason for not accepting a programme is that:

- (A) the Supplier's plans which it shows are not practicable;
- (B) it does not show the information which the Contract requires it to show;
- (C) it does not represent the Supplier's plans realistically; or
- (D) it does not comply with Schedule 2 (Specification) or Schedule 13 (Access).

8. Integrated Team Work Plans

8.1. Integrated Team Work Plan for Budget Period One

8.1.1. Notwithstanding the requirements of paragraph 8.2.1 below, the Company may issue the Integrated Team Requirements for Budget Period One during the Mobilisation Period and the Company and the Supplier shall follow the process set out in paragraphs 8.2.2 to 8.2.13 inclusive for Budget Period Two and all Subsequent Budget Periods.

8.1.2. Upon receipt of a Commencement Notice for Budget Period One, the Supplier shall proceed with the delivery of the works relating to the Integrated Team as defined by the Integrated Team Work Plan.

8.2. Integrated Team Work Plans for Budget Period Two and all subsequent Budget Periods

8.2.1. The Company's Representative shall issue the Integrated Team Requirements not later than 26 weeks prior to the last day of the preceding Budget Period for all subsequent Budget Periods. . For the avoidance of doubt In the event that the Company does not require the release of new Released Upgrade Works in a subsequent Budget Period the Company Representative shall issue the Integrated Team Requirements notifying the Supplier accordingly.

8.2.2. The Supplier and the Integrated Team shall prepare the draft Integrated Team Work Plan based on the Integrated Team Requirements. The draft Integrated Team Work Plan shall be formulated as far as possible to achieve the requirements of the Integrated Team Requirements for a sum less than or equal to the Integrated Team Budget.

8.2.3. In preparing the Integrated Team Work Plan, the Supplier and the Integrated Team shall confirm the Released Upgrade Work Activity for which it is planned to make application for a Stage 5 Notice within the Budget Period taking into account:

- (A) the Integrated Team Budget;
- (B) the proposed Integrated Team Chart;
- (C) the total programme of Released Upgrade Work Activities and target dates for issue of Stage 5 Notices;
- (D) access requirements and availability;
- (E) the amount of design information to be produced for each Released Upgrade Work Activity;
- (F) the availability of resources including but not limited to design, labour, materials and equipment; and
- (G) in the event that the Company Representative notifies the Supplier that there are no new Released Upgrade Works, the timely demobilisation of Supplier Personnel within the Integrated Team, taking into account the Stage 5 Notices remaining to be issued in respect of Released Upgrade Works Activities from a prior Integrated Team Works Plan, in respect of which a Commencement Notice has been issued.

8.2.4. The Supplier and the Integrated Team shall jointly prepare in support of each draft Integrated Team Work Plan (for submission by the Supplier) the following

documents:

- (A) the Integrated Team Chart;
- (B) the Integrated Team Budget Breakdown
- (C) the confirmed Advance Works; and
- (D) a Baseline Programme.

8.2.5. For the purposes of the Integrated Team Budget Breakdown referred to above, the Supplier and Integrated Team shall ensure that the Integrated Team Budget Breakdown contains the following prices calculated and broken down into Defined Cost by reference to Part B (Schedule of Cost Components) of Schedule 3 (Payment) together with the applicable Integrated Team Fee:

- (A) the price for the Supplier Personnel;
- (B) the price for Advance Works;
- (C) the price for all other materials consumables, good and services; and
- (D) the Integrated Team Fee.

8.2.6. The Supplier and the Integrated Team shall prepare the draft Integrated Team Work Plan and the Supplier shall issue the draft Integrated Team Work Plan to the Company's Representative within 8 weeks of issue by the Company's Representative of each Integrated Team Requirements submission. For the avoidance of doubt the total of the Integrated Team Budget Breakdown shall be less than the Integrated Team Budget.

8.2.7. The Company's Representative shall review the draft Integrated Team Work Plan and shall notify the Supplier and the Integrated Team within 4 weeks of such review of its approval or of any required changes, including but not limited to, in relation to the Integrated Team Budget Breakdown and the Stage 5 Notices proposed to be achieved by the Supplier. Within 2 weeks of such notification requiring changes, the Supplier and the Integrated Team shall revise the draft Integrated Team Work Plan, including the Integrated Team Budget Breakdown, as necessary and shall resubmit the draft Integrated Team Work Plan to the Company's Representative for approval by the Company.

8.2.8. Where the Company approves under paragraph 8.2.7 alone the draft Integrated Team Work Plan (including the Integrated Team Budget Breakdown) submitted under paragraph 8.2.6 or a draft Integrated Team Work Plan (including the Integrated Team Budget Breakdown) resubmitted in accordance with paragraphs 8.2.7 and 8.2.9, the proposed team lump sum fee in the Integrated Team Budget Breakdown shall be the agreed Integrated Team Fee and the Integrated Team Budget Breakdown and Integrated Team Work Plan shall be deemed approved.

8.2.9. If the Company rejects a draft Integrated Team Work Plan resubmitted in accordance with paragraph 8.2.7, the Supplier and the Company shall repeat the process set out in paragraph 8.2.7 until such time as the Company has approved the draft Integrated Team Work Plan including the Integrated Team Budget Breakdown or until determination in accordance with paragraph 8.2.10. The provisions of paragraph 8.2.8 shall apply to any draft Integrated Team Work Plan approved by the Company in accordance with the process set out in paragraph 8.2.7 or paragraph 8.2.10.

8.2.10. In the event that the draft Integrated Team Work Plan is not approved by the Company in accordance with paragraph 8.2.7 or 8.2.9, either Party may submit, a draft Integrated Team Work Plan, including the Integrated Team Budget Breakdown and the proposed Integrated Team Fee in the Integrated Team Budget Breakdown to the Core Group. The Party submitting the matter to the Core Group shall clearly identify the matters unable to be agreed between the Parties. The Core Group's unanimous determination, if any, shall be made within one week of the referral to it under this paragraph 8.2.10 unless the Company extends that period and if the Core Group unanimously agree the content of the draft Integrated Team Work Plan, including the Integrated Team Budget Breakdown and Integrated Team Fee (but not the Integrated Team Budget) they shall issue the same to the Parties. In the event that the Core Group are unable to reach a unanimous decision then the content of the draft Integrated Team Work Plan, including the Integrated Team Budget Breakdown and Integrated Team Fee (but not the Integrated Team Budget) will be determined in accordance with the provisions set out in paragraph 2.4(A)(4) of Schedule 10 (Contract Management).

8.2.11. Upon determination in accordance with paragraph 8.2.10 the Supplier, in consultation with the Integrated Team, shall amend the draft Integrated Team Budget Breakdown to incorporate the determination made under paragraph 8.2.10 and shall make any direct and consequential amendments required to the draft Integrated Team Work Plan. The Supplier shall resubmit the draft Integrated Team Work Plan including the draft Integrated Team Budget Breakdown to the Company within 1 week of the determination under paragraph 8.2.10. The Company shall review the aforesaid submission within 1 week of receipt and if the draft Integrated Team Work Plan and draft Integrated Team Budget Breakdown adequately reflects in the Company's opinion, acting reasonably, the determination made under paragraph 8.2.10, the Company shall approve the draft Integrated Team Work Plan (including the draft Integrated Team Budget Breakdown) and the integrated team fee within that Integrated Team Budget Breakdown shall be the Integrated Team Fee and the Integrated Team Work Plan and the Integrated Team Budget Breakdown shall be deemed approved.

8.2.12. Where the Company does not approve the Supplier's resubmission of the draft Integrated Team Work Plan and the draft Integrated Team Budget Breakdown under paragraph 8.2.11 or the Supplier fails to resubmit the draft Integrated Team Work Plan and/or the Integrated Team Budget Breakdown, the Company acting reasonably shall make the necessary amendments to the Integrated Team Work Plan including the Integrated Team Budget Breakdown and issue the same to the Supplier. Upon the issue by the Company of the Integrated Team Work Plan, including the Integrated Team Budget Breakdown, the integrated team fee in the Integrated Team Budget Breakdown shall be the Integrated Team Fee and the Integrated Team Work Plan and the Integrated Team Budget Breakdown shall be deemed approved.

8.2.13. Upon approval of the draft Integrated Team Work Plan in accordance with paragraph 8.2.7 or 8.2.9 or 8.2.10 such draft Integrated Team Work Plan shall become a Integrated Team Work Plan in respect of which the Company's Representative may issue a Commencement Notice to the Supplier in accordance with this paragraph 8.2.13. The Company's Representative may issue a Commencement Notice in respect of the relevant Integrated Team Work Plan not later than 6 weeks after its approval in accordance with paragraphs 8.2.7 or 8.2.9 or 8.2.10. The Supplier shall not proceed with the relevant Integrated Team Work Plan until such Commencement Notice is given.

8.2.14. Upon receipt of a Commencement Notice, the Supplier shall proceed with the delivery of the works relating to the Integrated Team as defined by the Integrated

Team Work Plan. Where a Commencement Notice is not issued prior to the first day of the Budget Period to which a Integrated Team Work Plan relates the Supplier shall continue to provide works relating to the Integrated Team as defined by the previous agreed Integrated Team Work Plan and Integrated Team Budget Breakdown, but shall not commence delivery of works to new Released Upgrade Work Activities until such time as the Commencement Notice is issued.

9. Cost Management and Information

9.1. Introduction

- 9.1.1. The Supplier shall provide information to the Company which will support the Company's cost control and management reporting procedures and is requested to note the importance of submitting accurate and timely information. The information will be used in the preparation of management reports within the Company and should communicate the Supplier's comprehensive view regarding the financial position for Maintenance Services; each current Integrated Team Work Plan, and each and all Launched Upgrade Work Activities, taking account of the impact of current and anticipated future events.
- 9.1.2. The Supplier shall prepare reports showing earned value and the forecasts of the final outturn cost (including Defined Cost and Fees) in respect of the Maintenance Services Target Cost Breakdown; Integrated Team Budget Breakdown and any Launched Upgrade Work Activity Target Cost Breakdown and submits the reports to the Company's Representative each period. Reports are in a format agreed by the Company's Representative.
- 9.1.3. Each report shall consist of:
 - (A) a contract summary report;
 - (B) a Budget Period summary report, consisting of a collation of all the reports for Maintenance Services, the Integrated Team and all Launched Upgrade Work Activities; and
 - (C) a Launched Upgrade Work Activity summary report and Launched Upgrade Work Activity detail reports for each Launched Upgrade Work Activity within any current Budget Period consisting of:
 - (1) value of work done / earned value / estimated final cost reports;
 - (2) Compensation Event details notified and implemented;
 - (3) early warnings notified;
 - (4) variance analysis;
 - (5) Price for Launched Upgrade Work Activities Provided to Date;
 - (6) Defined Cost accruals; and
 - (7) unit rate report.
- 9.1.4. For each Launched Upgrade Work Activity the Supplier will be required to report against appropriate Work Breakdown Structures ("WBS"), and Cost Breakdown Structures ("CBS") that will enable P6 to identify the "Value of Work Done", ("VOWD"), Cashflow Forecast ("CF") and Earned Value ("EV") comparators and provide reporting information into both SAP and the Company's estimating system.

The WBS and CBS to be adopted are to be as directed by the Company's Representative.

- 9.1.5. The Supplier shall establish an internal cost capture system that will capture and code costs in accordance with the WBS and CBS and will include the allocation of separate cost codes for Disallowed Cost and costs that fall within the Fees.
- 9.1.6. Unless otherwise agreed, all cost information required by the Company to complete internal reports shall be submitted to the Company's Representative by the end of week 2 of each accounting Period.

9.2. **Applications for Payment**

- 9.2.1. Payment Applications shall be made in accordance with the payment cycle for Periods, and shall be submitted in accordance with the requirements of Schedule 3 (Payment) of this Contract.
- 9.2.2. The Supplier's Payment Applications shall additionally be in a format to reflect the Maintenance Services Target Cost Breakdown, the Integrated Team Budget Breakdown and the Launched Upgrade Work Activity Target Cost Breakdown for each Launched Upgrade Work Activity, and the CBS entailed therein. Compensation Events within Supplier's Payment Applications shall be similarly be allocated to the same CBS.
- 9.2.3. The Supplier shall prepare a monthly cashflow forecast in a format which correlates directly to the accepted Baseline Programme and Launched Upgrade Work Activity Programmes (P6 format) and the pricing structure (in the applicable Maintenance Target Cost Breakdown, Integrated Team Budget Breakdown and each Launched Upgrade Work Activity Target Cost Breakdown) and the cashflow forecast shall be submitted by the Supplier on a Period (4-weekly) basis concurrently with the Supplier's Payment Application, and shall include a forecast breakdown by CBS.

9.3. **Cost Performance and Reporting Earned Value (applicable to Launched Upgrade Work Activities only)**

9.3.1. Purpose

- (A) EV is a measure of progress. There is a direct relationship between EV and percent complete. The attributes of EV are threefold. First, it is a uniform unit of measure for total Baseline Programme progress and for any WBS sub-element of the Baseline Programme. Second, it is a consistent method for analysis of progress and performance. Third, it is a basis for cost performance analysis of the Baseline Programme.
- (B) The EV analysis shall provide a measure for two performance Indices:
 - (1) Schedule Performance Index ("SPI"); and
 - (2) Cost Performance Index ("CPI").

9.3.2. Abbreviations and Definitions

Abbreviation	Definitions
P6	<i>Primavera P6. The planning system used by the Company</i>
EV	Earned Value
Budgeted Cost of Work Scheduled (BCWS)	planned value from P6
Budgeted Cost of Work Performed (BCWP)	earned value from P6
Actual Cost of Work Performed (ACWP)	is the actual cost to date and is the equivalent to the Cost of Work Done (COWD) or Actual Cost in P6. It therefore takes account of the actual spend plus an accrual for work invoiced but not yet paid and work done but not yet invoiced.
Schedule performance index(SPI)	<p>measures how much value has been delivered to date, against how much was planned to be delivered to date. An SPI of less than 1 indicates that it is taking longer to deliver the work than originally planned, and suggests that the project is tending to deliver late. In P6 The SPI is calculated as:</p> $\text{SPI} = \frac{\text{BCWP}}{\text{BCWS}}$
Cost Performance Index (CPI)	<p>measures how much value has been earned by the work so far completed, against how much the work has cost. It is defined as: A CPI value less than 1 indicates that actual costs have exceeded the value of work performed, and suggests that the project is tending to overspend. In P6 The CPI is calculated as</p> $\text{CPI} = \frac{\text{BCWP}}{\text{ACWP}}$
WBS	Work Breakdown Structure

9.3.3. Responsibilities

- (A) The Supplier shall be responsible for the operation of the EV reporting process.
- (B) The Supplier shall ensure that all resource, quantity and cost spreads in P6 do fully support the achievement of the Baseline Programme milestones.
- (C) The Supplier shall ensure that the resource, quantity and cost data in P6 is accurate, realistic and is updated and actualised in a timely manner.
- (D) The Supplier shall manage and operate a project control system which controls and reports on the incremental forecast and actual quantities installed and the monetary values of such quantities. The system shall be capable of calculating the EV on a weekly, bi-weekly and a four weekly basis.
- (E) The Supplier shall follow the compensation event process and submit to the Company's Representative for approval all proposed changes to budget, programme and quantity spreads. Compensation Events shall be submitted in accordance with the contract
- (F) In order to have a stable earned value the Baseline Programme needs to be cost loaded at the P6 activity level. The Supplier shall allocate the appropriate budget values to the activities at the lowest WBS level. The Supplier shall ensure that the sum of the individual costs in P6 is equal to the applicable budget breakdowns.

9.3.4. Process

- (A) The Baseline Programme activities belonging to or managed by the Supplier shall be resource, quantity and cost loaded in P6 in order to function within the EV system.
- (B) The Supplier shall resource load and cost load the Baseline Programme activities at the lowest possible WBS level.
- (C) EV shall be calculated through P6.

9.3.5. Cost Loading

- (A) The Supplier shall ensure that the total value of the cost loaded tasks is equal to the total amount of the applicable budgets
- (B) The Supplier shall cost load the P6 Programme tasks by adding a resource of £GBP (Non-labour) to every task that carries cost. This will form the basis of the earned value. This resource shall be updated with the CoWD (or Actual Total Cost, ATC, in P6), AFC (or At Completion Total Cost, ACTC in P6) and budget (or budgeted Total Cost, BTC in P6) ensuring that the ACTC value is equal to the BTC. P6 calculates the Cost to Complete (or Remaining Total Cost, RTC in P6) value of the task.

9.3.6. Types of Percentage Complete

(A) Duration Percentage Complete

Duration percent complete shall not be used.

(B) Physical Percentage Complete

All activities shall only use physical percent complete. For physical percent complete measurements a quantifiable unit's measure methodology is required from the Supplier. This methodology shall be documented by the Supplier and submitted to the Company's Representative for approval.

9.3.7. Earned Value Baseline (EVB)

Upon initiation of the earned value process through P6 a baseline shall be created. This baseline will be known as the Earned Value Baseline (EVB) .This shall be the baseline used when generating earned value reports. The EVB shall be fixed and the only time that this baseline shall be changed is through an approved change request. However, only the activities that have been affected by the change shall be amended unless it is a fully justified project re-baseline. This is essential in order to maintain a valid measure of progress.

9.3.8. Marking of Progress

The Supplier shall include the earned value analysis in his report. To this end the close of a reporting week shall be 17:00 on a Friday afternoon. All progression to the P6 programme shall be completed by this time.

9.3.9. Progress of Engineering and Design

The Supplier's Baseline Programme represents the fully integrated plan; this includes all engineering and design activities through the entire project Lifecycle. All activities belonging to or managed by the Supplier shall be resource and cost loaded in order to function within the EV system. For physical percent complete measurements a quantifiable unit's measure methodology is required from the Supplier. This methodology shall be documented by the Supplier and submitted to the Company's Representative for approval. The Supplier shall provide a separate earned value report for engineering / design activities down to the lowest possible WBS node.

9.3.10. Percentage Complete

The project percentage complete values shall be generated from P6. The basis of the percentage complete curve shall be based on a common denominator for engineering, management and construction. The common denominator is EV. Therefore, a percentage complete can be calculated by using the cumulative BCWP as a percentage of the total BCWS.

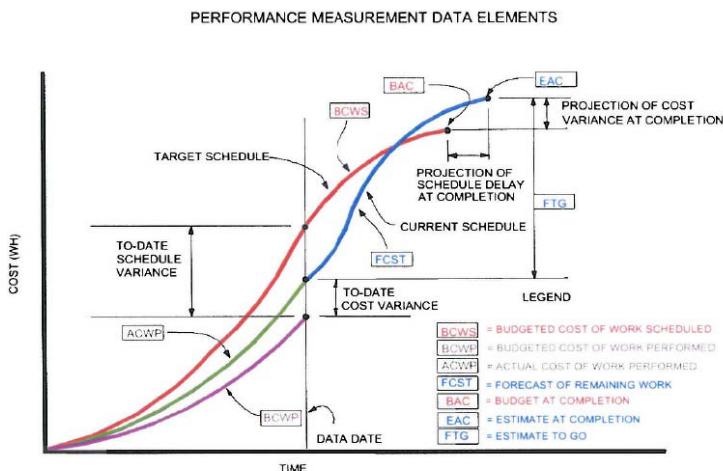
9.3.11. Reporting of Earned Value

The Supplier shall submit the EV report to the Company's Representative every four weeks.

Six months prior to a key event the Supplier shall provide a separate EV report for the key event on a bi-weekly basis. The EV report shall include the report narrative, SPI, CPI and EV for the overall project, and for each WBS level as required by the Company's Representative. The Supplier shall identify in his report the key issues

and actions relating to poor EV performance. The EV chart shall show the status, forecast and variances against the EVB. Example of an EV chart is shown in figure 10.3.11.

Figure 10.3.11 – Example of an Earned Value Chart



9.3.12. Value Added Tax

The payment and recovery of VAT shall be the responsibility of the Supplier who shall be deemed to have allowed for all incidental costs and expenses which he may incur thereby.

9.3.13. Fee

The Fee is included in the Budget Period summary report

10. Management of Risk

10.1. Risk management applies throughout the Pathway Process lifecycle and is a structured process. The effective management of risk is central to the delivery of the whole of the Services within the cost, time and performance boundaries. Risk shall be managed in accordance with this Contract. The Supplier shall co-operate with the Company and Others in providing information needed in connection with risk management.

10.2. The Supplier and the Integrated Team shall manage risk in line with the Standard LU-PR-10846.

10.3. Initial management of risk

10.3.1. The Integrated Team shall prepare a risk management strategy for the Services, in conjunction with the Supplier and the Company and Others, to ensure that risks and critical issues are managed in a timely, structured manner.

10.3.2. The Supplier shall implement the risk management strategy to ensure that:

- (A) the methods used for risk management are defined;
- (B) responsibility for risk management is assigned;
- (C) risks are identified and recorded;

- (D) risks are analysed and evaluated;
- (E) appropriate action is taken to treat risks; and
- (F) opportunities are identified and managed.

10.4. Ongoing Management of Risk

- 10.4.1. The Supplier shall submit updates to the risk management strategy for the agreement of the Company in order to keep current and maintain the risk management strategy detailing how the Supplier is proposing to assess, manage and mitigate against risks identified within the risk management strategy throughout the duration of the Services.
- 10.4.2. The Supplier shall fully co-operate with the Company as necessary in providing information required to enable risk management to be carried out. This shall include a 4 weekly review in which the Supplier is expected to provide an updated risk register in an agreed format, which includes the following information:
 - (A) progress on mitigation actions;.
 - (B) increase / decrease in risk figure shown for current and target risks with commentary on risk movement; and
 - (C) P50 evaluations.

10.5. Risk Management Tools

The Supplier is required to hold and manage risk, with updates made available to the Company in a compatible format for use in Active Risk Manager ("ARM").

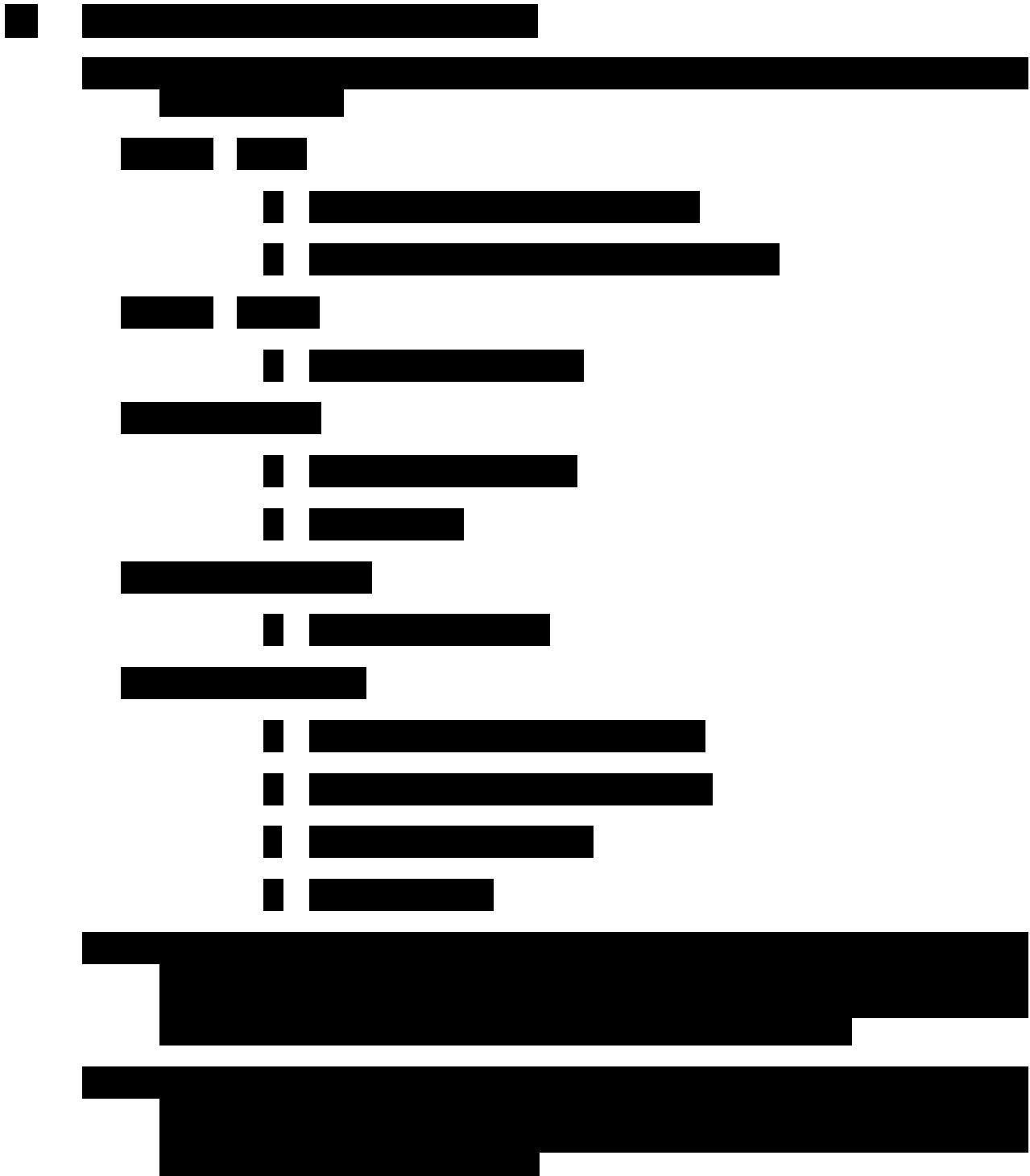
10.6. Occurrence of Risk

- 10.6.1. The Supplier shall, where possible, take all reasonable steps to mitigate any practical, programming or financial impact of the occurrence of an identified risk, including where appropriate proposing alternative methods of working or programme changes.
- 10.6.2. If a Company held risk occurs the Supplier shall advise the Company of:
 - (A) the nature of the risk;
 - (B) the effect of the risk (including any practical, programming or financial impact) on the Baseline Programme and/or any Launched Upgrade Work Activity Programme and/or the Integrated Team Budget Breakdown and/or any Launched Upgrade Work Activity Budget Breakdown and Defined Cost; and
 - (C) where mitigation is possible, the mitigation measures proposed to be adopted by the Supplier to reduce the impact of the risk and any adjustments required to the Baseline Programme and/or any Launched Upgrade Work Activity Programme and/or the Team Budget Breakdown and/or any Launched Upgrade Work Activity Budget Breakdown and Defined Cost required to affect such mitigation measures.

10.7. Contract Administration Management System

10.7.1. The Company will be employing a Contract Administration Management System ("CAMS") in order to manage the exchange of contract documentation for this contract. The technology used is a 'Software as a Service' product ("SaaS") and is web-based and hosted by a third party supplier in a secure environment.

10.7.2. The Supplier is to allow in his pricing for all of his appropriate staff to have the necessary training on this product which should average no more than a day per user. The super-user will need two days' training. There will be no charge to the Supplier for the provision of this platform. If necessary a presentation can be provided on how the system works.



12. IPR Register

12.1 The Supplier shall prepare or update (as applicable), submit and maintain an IPR register in accordance with this Schedule 11 (the "IPR Register"). The IPR Register shall, as a minimum, include the following information with respect to all Intellectual Property Rights used in or in connection with or relating to the Services:

- (a) a unique identification reference;
- (b) the type of each Intellectual Property Right:
 - (i) patent;
 - (ii) patent application;
 - (iii) registered design;
 - (iv) registered trade mark;
 - (v) copyrighted software;
 - (vi) copyrighted software library;
 - (vii) Sub-Contactor or other third party licence/agreement;
 - (viii) copyrighted specification;
 - (ix) copyrighted guide/manual; or
 - (x) if none of the above types are applicable, a free-text description of the relevant Intellectual Property Right;
- (c) the details of the legal and beneficial owner and the basis on which these are owned;
- (d) the licensee(s);
- (e) the date the entry was added to the IPR Register;
- (f) when the Intellectual Property Rights were created if they were created after the Commencement Date and, where reasonably possible, if they were created before the Commencement Date;
- (g) details of whether Intellectual Property Rights were created either:
 - (i) prior to the Commencement Date; or
 - (ii) under or in connection with this Contract;
- (h) associated references for the entry (e.g. any licence agreement associated with software or patent, the licence number where the Intellectual property Right is subject to a Sub-Contractor licence or other third party licence, the patent number

and territory in which the patent is granted where the Intellectual Property Right is a patent); and

(i) all additions, deletions or modifications to the entry (which shall be highlighted).

- 12.2 The Supplier shall not remove an item from the IPR Register without the prior approval of the Company
- 12.3 The IPR Register shall be updated by the Supplier and issued to the Company's Representative ten (10) Working Days prior to each annual strategic review meeting and within ten (10) Working Days of being instructed to do so by the Company's Representative at any other time.
- 12.4 Where the Supplier fails to provide the IPR Register in accordance with this Schedule 11 such failure shall be a Level 2 Non Conformance (as defined in Schedule 18 (Performance Measurement)).

SCHEDULE 11 (PROJECT PROCESSES) - APPENDIX A: ESTIMATE TEMPLATE

Contract TfL-01230 Estimate Template

[Insert Upgrade Work Activity title]

Pricing Instructions

1.00 General Instructions

- 1.01 Please enter Upgrade Work Activity title in the spaces provided above
- 1.02 Cells shaded in 'yellow' indicate where data should be inserted
- 1.03 additional columns may be added to capture additional resource requirements, if needed.
- 1.04 The formula in the "Quantity" column will sum up the quantities included in the resource columns. When adding new columns, insert them before the last column so that the quantities in new columns will get picked by the formula.
- 1.05 Insert Defined Cost rates for the resources required in the delivery of each Upgrade Work Activity (exclusive of Fee)
- 1.06 Rows can be added to each sub-section allow the inclusion of additional items if required.
- 1.07 The Supplier should state any pricing assumptions, exclusions or any other relevant notes in the "Notes" tab

2.00 Pricing of Delivery management; Installation; and Testing, commissioning and Handover into Maintenance sub-sections (tab Activity Brkdn)

Supplier Personnel

- 2.01 Insert the description of the role of each member of Supplier Personnel in Column B (highlighted) following the heading of 'Supplier Personnel'.
- 2.02 Insert the Defined Cost 'day rate' of each member of Supplier Personnel in Column E (highlighted)
- 2.03 Enter the number of days required for each member of Supplier in columns 'H to AG' inclusive

Plant and Equipment

- 2.04 Insert the description of each item of plant and equipment in Column B (highlighted) following the heading of 'Plant and Equipment'
- 2.05 Insert the unit of measure for each item of plant and equipment which is applicable to the Defined Cost rate inserted in Column D (highlighted)
- 2.06 Insert the Defined Cost rate of each item of plant and equipment in Column E (highlighted)
- 2.07 Enter the number of units required for each item of plant and equipment in columns 'H to AG' inclusive

Materials and Charges

- 2.08 Insert the description of each item of material and charge in Column B (highlighted) following the heading of 'Materials and Charges'
- 2.09 Insert the unit of measure for each item of material and charge is applicable to the Defined Cost rate inserted in Column D (highlighted)
- 2.10 Insert the Defined Cost rate of each item of material and charge in Column E (highlighted)
- 2.11 Enter the number of units required for each item of plant and equipment in columns 'H to AG' inclusive

Sub-contractors

- 2.12 Insert the name of each subcontractor and the description of the works being undertaken in Column B (highlighted)
- 2.13 Insert the unit of measure for each Sub-contractor is applicable to the Defined Cost rate inserted in Column D
- 2.14 Insert the Defined Cost for each Sub-contractor in Column E (highlighted)
- 2.15 Enter the number of units required for each Sub-contractor in columns 'H to AG' inclusive

3.00 Fee

- 3.01 Supplier to insert the Integrated Team Fee percentage in cell "G16" in "Summary" Tab

Contract TfL-01230 Estimate Template

[Insert Upgrade Work Activity title]

Released Upgrade Work Activity - Target Cost Breakdown

1.00	Delivery management	£	-
2.00	Installation	£	-
3.00	Testing, commissioning and handover into Maintenance	£	-
4.00	Total of Defined Cost breakdown excluding Fee	£	-
5.00	Upgrade Work Activity Fee percentage	0.00%	
6.00	Upgrade Work Activity Fee	£	-
7.00	Total of Target Cost Breakdown	£	-
8.00	Upgrade Work Activity Maximum Cost	£	-

Contract TfL-01230 Estimate Template

[Insert Upgrade Work Activity title]

Released Upgrade Work Activity - Defined Cost Breakdown

Scope summary	[Insert Summary]
Activity reference number	[Insert reference number]
Maximum Budget	[Insert Maximum Budget]
Stage Gate 5 Notice Date	[Insert issue date]

Code	Description	Quantity	Unit	Unit Rate	Total
1.0	Delivery management				
1.1	Supplier Personnel				
1.11		0.00	Per Day		£0
1.12		0.00	Per Day		£0
1.13		0.00	Per Day		£0
1.14		0.00	Per Day		£0
1.15		0.00	Per Day		£0
1.16	Insert additional rows as necessary	0.00	Per Day		£0
1.2	Plant and Equipment				
1.21		0.00	[Insert unit]		£0
1.22		0.00	[Insert unit]		£0
1.23		0.00	[Insert unit]		£0
1.24		0.00	[Insert unit]		£0
1.25		0.00	[Insert unit]		£0
1.26	Insert additional rows as necessary	0.00	[Insert unit]		£0
1.3	Material and Charges				
1.31		0.00	[Insert unit]		£0
1.32		0.00	[Insert unit]		£0
1.33		0.00	[Insert unit]		£0
1.34		0.00	[Insert unit]		£0
1.35		0.00	[Insert unit]		£0
1.36	Insert additional rows as necessary	0.00	[Insert unit]		£0
1.4	Sub Contractors				
1.41		0.00	[Insert unit]		£0
1.42		0.00	[Insert unit]		£0
1.43		0.00	[Insert unit]		£0
1.44		0.00	[Insert unit]		£0
1.45		0.00	[Insert unit]		£0
1.46	Insert additional rows as necessary	0.00	[Insert unit]		£0
				subtotal	£0
2.00	Installation				
2.1	Supplier Personnel				
2.11		0.00	Per Day		£0
2.12		0.00	Per Day		£0
2.13		0.00	Per Day		£0
2.14		0.00	Per Day		£0
2.15		0.00	Per Day		£0
2.16	Insert additional rows as necessary	0.00	Per Day		£0
2.2	Plant and Equipment				
2.21		0.00	[Insert unit]		£0
2.22		0.00	[Insert unit]		£0
2.23		0.00	[Insert unit]		£0
2.24		0.00	[Insert unit]		£0
2.25		0.00	[Insert unit]		£0
2.26	Insert additional rows as necessary	0.00	[Insert unit]		£0
2.3	Material and Charges				
2.31		0.00	[Insert unit]		£0
2.32		0.00	[Insert unit]		£0
2.33		0.00	[Insert unit]		£0
2.34		0.00	[Insert unit]		£0
2.35		0.00	[Insert unit]		£0
2.36	Insert additional rows as necessary	0.00	[Insert unit]		£0
2.4	Sub Contractors				
2.41		0.00	[Insert unit]		£0
2.42		0.00	[Insert unit]		£0
2.43		0.00	[Insert unit]		£0
2.44		0.00	[Insert unit]		£0
2.45		0.00	[Insert unit]		£0
2.46	Insert additional rows as necessary	0.00	[Insert unit]		£0
				subtotal	£0
3.00	Testing, commissioning and handover into Maintenance				
3.1	Supplier Personnel				
3.11		0.00	Per Day		£0
3.12		0.00	Per Day		£0
3.13		0.00	Per Day		£0
3.14		0.00	Per Day		£0
3.15		0.00	Per Day		£0
3.16	Insert additional rows as necessary	0.00	Per Day		£0
3.2	Plant and Equipment				
3.21		0.00	[Insert unit]		£0
3.22		0.00	[Insert unit]		£0
3.23		0.00	[Insert unit]		£0
3.24		0.00	[Insert unit]		£0
3.25		0.00	[Insert unit]		£0
3.26	Insert additional rows as necessary	0.00	[Insert unit]		£0
3.3	Material and Charges				
3.31		0.00	[Insert unit]		£0
3.32		0.00	[Insert unit]		£0
3.33		0.00	[Insert unit]		£0
3.34		0.00	[Insert unit]		£0
3.35		0.00	[Insert unit]		£0
3.36	Insert additional rows as necessary	0.00	[Insert unit]		£0
3.4	Sub Contractors				
3.41		0.00	[Insert unit]		£0
3.42		0.00	[Insert unit]		£0
3.43		0.00	[Insert unit]		£0
3.44		0.00	[Insert unit]		£0
3.45		0.00	[Insert unit]		£0
3.46	Insert additional rows as necessary	0.00	[Insert unit]		£0
				subtotal	£0
4.00	Total of Defined Cost breakdown excluding Fee				

Contract TfL-01230 Estimate Template

[Insert Upgrade Work Activity title]

	Pricing assumptions
1	
2	
3	
4	
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6	
7	
8	
9	
10	
	Scope exclusions
1	
2	
3	
4	
5	
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8	
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10	
	Other notes
1	
2	
3	
4	
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10	

SCHEDULE 12: Integrated Team

1. Purpose and Function

- 1.1 The Company has identified within its Strategic Plan a programme of upgrade works in relation to functions provided by its existing CCTV, access control and security systems.
- 1.2 The Company requires the Supplier to collaborate with the Company in the creation of a co-located integrated team, which shall undertake the functions of survey; design; engineering, construction methodology; logistics; cost estimating; project and delivery management (the Integrated Team) within which Supplier Personnel will work in collaboration with Company Personnel for the purpose of survey design; construction methodology; logistics; and costing, estimating and delivery management of Released Upgrade Work Activities.

2. Project Organisation

- 2.1 The Company and Supplier shall jointly review each quarter the Integrated Team Chart including the structure and the roles and responsibilities of the named individuals defined by the Integrated Team Chart.
- 2.2 Where the Company or the Supplier identify that an update to the Integrated Team Chart is required, the Supplier shall update the Integrated Team Chart and submit it to the Company for approval.
- 2.3 The Company shall confirm agreements to changes to the Integrated Team Chart in writing and where the Company does not confirm agreement then the prior version of the Integrated Team Chart shall remain in force.
- 2.4 In support of the Integrated Team Chart, the Supplier shall provide:
 - (a) a schedule of requirements (telephones, thin clients, mobile phones etc.);
 - (b) project specific performance development objectives for Supplier Personnel where appropriate;
 - (c) implementation plans for transition of staff to new structure where appropriate; and
 - (d) details of any management systems and procedures to be provided by the Supplier in support of the delivery of the Services.

3. Roles and Responsibilities

- 3.1 The Company's Representative and the Supplier's Representative shall perform their respective duties and obligations as assigned to them in this Contract. The Company's Representative shall chair meetings of the Integrated Team senior management team.
- 3.2 The Supplier shall provide the Supplier Personnel identified by the Integrated Team Chart in accordance with this Contract and agrees to fully collaborate with the Company and the Company Personnel in the Supplier's delivery of the Services.

3.3 The Supplier further agrees that its performance measurement under Schedule 18 (Performance Measurement) is, where applicable, a function of the performance of the Integrated Team as a whole including the output from the roles undertaken by Company Personnel.

3.4 The Company will provide the TfL Supplied Resources specified in each Integrated Team Requirements submission (including the Company Personnel identified by the Integrated Team Chart). The TfL Supplied Resources may be changed, reduced or increased during each Budget Period by the Company (at its sole discretion).

3.5 The Integrated Team shall facilitate the delivery of the Strategic Plan by the design and planning of Released Upgrade Work Activities.

3.6 As stated in paragraph 1.1 above, the Supplier is required to collaborate with the Company in the Supplier's delivery of the Services. The respective roles and responsibilities of the Supplier and the Company within the Integrated Team at Pathway Stages (2-4) and Pathway Stages (5-6) are summarised in Tables 1 and 2 below:

Table 1: Pathway Stages (2-4)	
<i>Supplier Personnel</i>	<i>Company Personnel</i>
Strategic Planning	
Delivery planning input into the strategic planning process	Strategic planning of upgrade work activities Objective setting and scoping for upgrade work activities
Access	
Access booking (except for Minor Closure and Major Closure)	Access booking (Minor Closure and Major Closure)
CDM and Health and Safety	
Principal Designer and Principal Contractor in compliance with the CDM Regulations Health and safety management and assurance of compliance with the Health and Safety at Work Act	Client in compliance with the CDM Regulations
Survey and enabling works, design and assurance	

Table 1: Pathway Stages (2-4)

<i>Supplier Personnel</i>	<i>Company Personnel</i>
Design surveys Cable route surveys Liaising with the Supplier's maintenance services managers in regards to current asset condition of assets impacted by proposed Released Upgrade Work Activities.	Dilapidation surveys Asbestos removal works
Design and Assurance	
Feasibility studies and option development (taking into account the installed asset base and asset condition. Concept designs Detail designs	Client input into feasibility studies and option development Client input into concept designs Engineering assurance
Project controls, planning and methodology	
Methodology Planning Submission of Stage 5 Notices	Administration of the Pathway Process and the End to End Process Corporate governance approvals Collection of KPI performance data.
Roles	
Project management Design management Construction management Delivery management Delivery planning Record keeping	Contract and strategic management

Table 1: Pathway Stages (2-4)	
<i>Supplier Personnel</i>	<i>Company Personnel</i>
Cost Management	
Resource planning and cost estimating in support of the Progressive Estimating Process and the calculation of Released Upgrade Work Activity Target Cost	Cost checking and benchmarking Overall financial management
Value engineering of design solutions for each Released Upgrade Work Activity to assure delivery for a sum less than the Upgrade Work Activity Maximum Budget	
Financial management of Defined Cost	
Delivery	
Logistics	
Delivery of Advance Works	

Table 2: Pathway Stages (5-6)	
<i>Supplier Personnel</i>	<i>Company Personnel</i>
CDM and Health and Safety	
Principal Designer and Principal Contractor in compliance with the CDM Regulations	Client in compliance with the CDM Regulations
Health and safety management and assurance of compliance with the Health and Safety at Work Act	
Project controls, planning and methodology	
Method statements	Collection of KPI performance data.
Roles	
Project management	Contract management
Design management	
Construction management	
Delivery management	
Delivery planning	
Record keeping	

3.7 The number of Supplier Personnel in the Principal Team shall be scaled by the Supplier and agreed by the Company for each Budget Period to reflect the resourcing required for delivery of Released Upgrade Work Activities.

3.8 In addition to the Supplier's role within the Integrated Team, the Supplier shall deliver the Services in accordance with Schedule 2 (Specification).

4. Senior Management Team

4.1 The Integrated Team will be managed on a day-to-day basis by a senior management team comprised of the following:

- (a) the Company's Representative (Company Personnel);
- (b) a Strategic Planning Manager, being a senior manager responsible for workbank management and access (Company Personnel);
- (c) an Assurance Manager, being a senior manager responsible for oversight of the Supplier's engineering and design activities (Company Personnel);
- (d) a Commercial Manager, being a senior manager responsible for commercial administration of the Contract including finance and accounting systems, financial control, governance approvals and financial reporting to the Company (Company Personnel);
- (e) the Supplier's Representative (Supplier Personnel);
- (f) a Design Manager, being a senior manager responsible for all survey and design activities (Supplier Personnel);
- (g) a Delivery Manager, being a senior manager responsible for the delivery of all Released Upgrade Work Activities (Supplier Personnel);
- (h) a Health and Safety Manager, being a senior manager responsible for all health, safety and environmental matters associated with the delivery of the Services (Supplier Personnel); and
- (i) an Estimating Manager, being a senior manager responsible for cost forecasting and cost estimating (Supplier Personnel).

4.2 The Company's Representative and the Supplier's Representative shall coordinate the activities of the Integrated Team.

4.3 The senior management team may be full or part time depending on work volumes and subject to the written agreement of the Company.

5. Company Personnel

5.1 The Company shall detail the Company Personnel on each proposed Integrated Team Chart provided as part of the Integrated Team Requirements.

5.2 For the avoidance of doubt, the Supplier is liable for the performance of the Services and other obligations allocated to it under this Contract notwithstanding that such Services and other obligations may be undertaken by Company Personnel.

5.3 Any issues arising out of the Services undertaken by Company Personnel may be referred by either Party to the Core Group for resolution. In the event that the Core Group cannot resolve any issue then it will be determined in accordance with the provisions set out in paragraph 2.4(A)(4) of Schedule 10 (Contract Management).

6. Integrated Team Offices

6.1 The Supplier Personnel and the Company Personnel assigned to the Integrated Team shall be co-located in order to promote collaborative working, effective communication and efficient working.

6.2 The Company shall provide fully serviced office accommodation for the use of the Integrated Team at a TfL Group office location as part of the TfL Supplied Resources.

7. Integrated Team Work Plans

Integrated Team Work Plans for each Budget Period shall be prepared by the Supplier and the Integrated Team in accordance with the provisions set out in paragraph 8 of Schedule 11 (Project Processes).

SCHEDULE 13: Access

CONTENTS

- 1.1 Definitions
- 1.2 Access Plan
- 1.3 Types of Access
- 1.4 Timescales for Booking Access and Closures
- 1.5 Utilising Existing Closures
- 1.6 Booking and Arranging Access
- 1.7 Training, Certificates, Identity Cards and Entry Permits
- 1.8 London Underground Access control
- 1.9 Access within the Railway Environment

APPENDICES

1. List of existing planned closures
2. Limits on the time period of Engineering Hours
3. Request Lifecycle for a Train or Motorised Vehicle Request
4. Indicative timescales for the publication of Engineering Look Ahead Notice and Engineering Notices
5. Curtailed or Delayed/Curtailed Access Form
6. Access Subcategories
7. Network Rail Interface Locations

1.1 Definitions

The terms used in this Schedule 13 (Access) in regard to access have the following meanings:

"Access Subcategories" has the meaning defined by paragraph 1.3.1(l) of this Schedule 13 (Access).

"Access Manager" means the person designated by the Head of Access as the manager for access requests for particular services and who will act as the single point of contact for all access related matters.

"Accepted Access Plan" is the latest Access Plan applied for by the Applicant and accepted by the Company in RailSys.

"Access Plan" means the access plan prepared by the Applicant within RailSys.

"Applicant" means the Company's Representative for Major Closures and Minor Closures and the Supplier for all other access requirements.

"Application to Work Form" means the form contained in Appendix 5 to this Schedule 13 (Access).

"Emergency Access" has the meaning defined by paragraph 1.3.1(E) of this Schedule 13 (Access).

"Engineering Hours" means the term applying to the running line and is described as being when traction current is switched off (as published in the Guide to Switching Current On and Off subject to variance as published in an Engineering Notice) and trains are not running (ref LUL Rule Book 17 for the definition of Engineering Hours).

"Engineering Notice" means a publication produced and circulated within LUL at short notice containing details of engineering works, special current arrangements, engineers' possessions and engineers' trains and similar activities not included in the Traffic Circular.

"Engineering Look Ahead Notice" means a draft publication produced and circulated by LUL providing a week-view of items that, at that time, are planned to be published on the Engineering Notice for a specific shift.

"Exclusive Access" has the meaning defined by paragraph 1.3.1(D) of this Schedule 13 (Access).

"Head of Access" means the person responsible for managing access to the LUL infrastructure for works. This role includes but is not limited to the responsibility for the publication of safety documentation.

"Incident Officer" means the senior LUL operating officer responsible for managing an incident.

"Latest Request Date" means the last date an access request can be made in line with a given timescale.

"L&E Closures" has the meaning defined by paragraph 1.3.1(H).

"Local Station Access Arrangement Reference Files" means the files published by the Head of Access detailing where services may potentially be undertaken on Stations in Traffic Hours including details of possible locations for the storage of materials and equipment and Station opening and closing hours.

"LUL Rule Books" are the rule books covering the operation of trains and Stations and accessing the Track.

"Major Closure" has the meaning defined by paragraph 1.3.1(F) of this Schedule 13 (Access).

"Minor Closure" has the meaning defined by paragraph 1.3.1(G) of this Schedule 13 (Access).

"Network Rail Interface Locations" means locations on the TfL Network where Network Rail infrastructure interfaces with TfL infrastructure including but not limited to the location identified in Appendix 7 to this Schedule 13 (Access).

"Nightly Engineering Protection Arrangements (NEPA)" means a publication produced and circulated within LUL at short notice containing details of safety related material for engineering works and engineer's trains and vehicles.

"Night Tube" means the provision a 24 hour revenue service.

"Night Tube Running Period" means nominally the period between 21:00hrs Friday night and 06:00hrs Sunday morning.

"Night Tube Sections" means the sections of the Underground Network which provide Night Tube. The applicable sections of the Underground Network are:

- a) the Central Line route between and including Hainault, Loughton and Ealing Broadway stations (no Night Tube outside of this route);
- b) the Jubilee Line entire network;
- c) the Northern Line route between and including High Barnet, Edgware and Morden Stations via the Charring Cross Branch (no Night Tube outside of this route);
- d) the Piccadilly Line route between and including Cockfosters and Heathrow Terminal 5 stations (no Night Tube outside of this route);
- e) the Victoria Line entire network.

"Non-Restrictive/Exclusive Access" has the meaning defined by paragraph 1.3.1(B) of this Schedule 13 (Access).

"Operational Managers" means Area Managers - Stations and Train Operations Managers.

"Operational Assurance" means an Operational Assurance Notification made to LUL in accordance with the requirements of Standard S1538 (A11) (Assurance) and is incorporated in to an access request in RailSys.

"Pre-Closure Request Meeting" means a meeting to discuss the viability of a proposed closure request.

"Possession Meeting" means a meeting to discuss the viability of a proposed Track possession.

"Published" means,(i) in respect of Restrictive and Exclusive Track access, that the works need to be notified in the Engineering Look Ahead Notice; the Engineering Notice and the Nightly Engineering Protection Arrangements (NEPA) Notice and (ii) in respect of Restrictive and Exclusive Stations access, the works need to be notified in the Station Works Plan.

"Restrictive Access" has the meaning defined by paragraph 1.3.1(C) of this Schedule 13 (Access).

"RailSys" means the access booking system for all engineering work on the stations and track. RailSys is a geographical interface where Access Plans and Track access requests are made.

"Self Service Access" has the meaning defined by paragraph 1.3.1(A) of this Schedule 13 (Access).

"Specialist Protection" means all protection arrangements in addition to the Suppliers SPC (with dual protection qualifications) including but not limited to possession masters; protection resources to implement possession protection arrangements; staff to isolate traction current, technical officers to implement a set of protection arrangements and protection on Network Rail Infrastructure.

"Stations" means areas to which LUL Rule Book 10 applies including buildings, equipment or facilities designed to be used by customers to access or leave a train.

"Track" means areas to which LUL Rule Book 17 applies including track, tunnels, embankments and other line side infrastructure.

"Traffic Circular" means the weekly Traffic Circular which contains diverse information such as, infrastructure changes, train service changes, events affecting LUL, notification of restrictions to LU operations and operational communications.

"Traffic Hours" means the term applying to the running line and is described as being when traction current is switched on (as published in the Guide to Switching Current On and Off subject to variance as published in an Engineering Notice) and trains are running (ref LUL Rule Book 17 for the definition of Traffic Hours).

"Underground Network" means the Company's railway network and includes all surface, sub-surface and deep tube lines.

"Work Request" means the work request e-form provided on the Company's access booking portal and which is completed by the Applicant to reflect the Access Plan and requirements for plant and equipment (including engineering trains) and specialist protection.

"Working Time" means a period of agreed access (including closures) in either Traffic Hours or Engineering Hours.

1.2 The Access Plan

1.2.1 The Access Plan shall be prepared by the Applicant in RailSys, where an electronic template guides the Applicant to describe what work is to take

place, where and when work is planned to take place. This is information displayed on the geographical interface.

- 1.2.2 RailSys will pre-populate parts of the subsequent access requests associated with each Accepted Access Plan.
- 1.2.3 The Supplier shall prepare an Access Plan with the objective of maximising the efficient use of the available Working Time and takes account of the following in the access planning process:
 - (A) the information provided in the Local Station Access Arrangement Reference Files (the use of any potential storage areas identified by the Local Station Access Arrangement Reference Files remains subject to the Supplier obtaining the appropriate storage licences);
 - (B) if the Services can be carried out in Traffic Hours and the Supplier shall construct the Access Plan to achieve the optimisation of Working Time;
 - (C) the minimisation of the number and duration of closures;
 - (E) the utilisation and extension of existing planned closures;
 - (F) the hours/shifts/days in the week required to be worked in order to comply with the Launched Upgrade Work Activity Programme;
 - (G) the timescales for booking access and closures defined in paragraph 1.4;
 - (H) the sharing of access with Others and the minimisation of disruption of the work of Others;
 - (I) if the productivity of Engineering Hours working can be increased, safely, by completing the clearance of workers, materials tools and equipment tools in Traffic Hours and supports plans with method statements detailing appropriate measures for the protection of the public;
 - (J) the maximisation of working time during Engineering Hours when accessing the Track through a Station (where it is safe to do so, all persons, plant and equipment may be positioned within the Station ready to access the Track immediately on confirmation of traction current being turned off);
 - (K) a minimum call back time of 20 (twenty) minutes for Track access before the expiry of each shift of Engineering Hours (to allow for the safe removal of all workers, materials, tools, equipment and the like) unless a shorter period is stated in Appendix 2 of this Schedule 13 (Access);
 - (L) any limitation on Engineering Hours specific to the Services stated by the Company in Appendix 2 of this Schedule 13 (Access);
 - (M) the time required for the Supplier to ensure the worksite is left clean and safe; and

(N) the Night Tube.

1.2.4 Should the Supplier need to work hours additional to those stated in the Accepted Access Plan (within the constraint of the maximum working hours available within the booked access types), the Supplier shall amend the Access Plan accordingly within RailSys.

1.2.5 The Applicant shall be responsible for checking for clashes (Clash Checking) in respect of access booked by Others and the Company by means of the geographical interface provided in RailSys. The Supplier shall also monitor the following publications:

- (A) Engineering Look Ahead Notice;
- (B) Engineering Notice;
- (C) Nightly Engineering Protection Arrangements (NEPA); and
- (D) Traffic Circular.

1.2.6 In the event that the Supplier attends any of the Sites and access is not provided by the Company in accordance with the Accepted Access Plan the Supplier shall complete the "Cancelled or Delayed/Curtailed Access Form" contained in Appendix 5 of this Schedule 13 (Access).

1.2.7 The completion of a "Cancelled or Delayed/Curtailed Access Form" in full (including the obtaining of all necessary signatures) and the identification of the period of access in question on the Accepted Access Plan (with the RailSys number) are all condition precedents in respect of any entitlement to apply for a Compensation Event.

1.3 Types of Access

1.3.1 Summarised below are the types of access that the Supplier's Access Plan shall be based upon. In preparing the Access Plan the Supplier shall select the type of access required for the Services. The Applicant shall consult with the Access Manager as to the appropriateness of the selection as set out in the Access Plan. The Access Manager's decision as to the types of access and closures which can be used in the formulation of the Access Plan is final and binding.

(A) Self Service Access

Self Service Access is a category of access for undertaking non-exclusive and non-restrictive works on the Underground Network, using all necessary tools and equipment. It is valid for both Station and Track. The RailSys number is valid for only one access event at one location. It can be raised at short notice and the RailSys number is instantly raised without the need for approval.

Self Service Access is not Published.

(B) Non-Restrictive/Exclusive Access

Non-Restrictive/Exclusive Access is a category of access for undertaking non-restrictive and non-exclusive works on the Underground Network, using all necessary tools and equipment. It is valid for both Station and Track.

The Supplier clearly defines the area covered by a Non-Restrictive/Exclusive Access request and limits the area to the minimum required to deliver the Services.

Non-Restrictive/Exclusive Access does not need to be Published.

(C) Restrictive Access

Restrictive Access is a category of access that places a restriction on what can take place within a particular worksite and where the restriction will apply to all parties attempting to work that particular shift.

The Supplier demonstrates that this is the most appropriate form of access and takes account of the impact that the granting of Restrictive Access would have on the network and other work streams. Restrictive Access will not typically be permitted to cover a protracted number of shifts or consecutive shifts, across the same geographical area.

The Supplier clearly defines the area covered by a Restrictive Access request and restricts the area to the minimum required to deliver the Services and avoids unduly impeding the works of Others.

Restrictive Access will need to be Published.

(D) Exclusive Access

Exclusive Access is a category of access that prohibits any party not directly involved in the Services (for which Exclusive Access has been booked) from working in that worksite.

The Supplier demonstrates that this is the most appropriate form of access and takes account of the impact that granting Exclusive Access would have on the Underground Network and other work streams. Exclusive Access will not typically be permitted to cover a protracted number of shifts or consecutive shifts, across the same geographical area.

The Supplier clearly defines the area covered by an Exclusive Access request and restricts it to the minimum area required to deliver the Services and to avoid unduly impeding the works of Others.

Exclusive Access will need to be Published.

(E) Emergency Access

Emergency Access is access required to deal with an Incident as defined in Rule Book 2, or is required to rectify the failure of an asset which, if not rectified, would have a material adverse impact on passenger services. Emergency Access takes precedence over any other booking or request as directed by the Incident Officer.

(F) Major Closures

A Major Closure can be classified as any planned disruptive work which results in any LUL service being unavailable between 0600 and 2100 on a weekday (excluding Bank Holidays).

(G) Minor Closures

A Minor Closure can be classified as any planned disruptive work, apart from L&E Closures (defined below) which results in any LUL services being unavailable outside the hours of 0600 and 2100 on a weekday (excluding Bank Holidays) or at any other time at Weekends and Bank Holidays (including the Night Tube Period for work with the Night Tube Sections).

(H) L&E Closures

Lift & Escalator Closures are closures of lifts, escalators, travelators, fixed stairways, routeways or cross-passageways which can be accommodated without requiring a Station or platform to be closed. The Applicant will liaise with the Access Manager to review the impact of the requested L&E Closure in the context of any other concurrent Underground Network closures. Where the Applicant is the Supplier, the Company's Representative may also participate in such liaison.

(I) Access Subcategories

Within the above access types there are a number of access subcategories which are used in the booking system. The subcategories are detailed in Appendix 6 of this Schedule 13 (Access) and a description of the typical work to which they apply, such a track possession, is also provided in order to assist the Applicant in identifying the type of access applicable to particular services.

- 1.3.2 For all closure requests the Applicant shall attend a Pre-Closure Request Meeting or Possession Meeting with the Access Manager before a Work Request is submitted by the Applicant for approval. Where the Applicant is the Supplier, The Company's Representative may attend such meetings.

1.3.3 Where the Company's Representative and Supplier agree a proposed closure has business justification, the Applicant shall confirm with the Access Manager the acceptability of the proposed closure. Where the Access Manager confirms that the proposed closure dates are not acceptable the Applicant will liaise with the Access Manager to identify alternative closures that are as near as possible and equivalent to, the closures originally proposed by the Supplier. Where the Applicant is the Supplier, the Company's Representative may also participate in such liaison. The Access Manager's decision as to acceptability of a proposed closure or proposed alternative closures is final and binding.

1.3.4 The Access Manager may reject proposed closures on, including (without limitation) the grounds that if granted it would unduly limit journey opportunities. By way of guidance, and without limitation, examples of such a limitation of journey opportunities would be:

- (A) a closure of a central London Station during a seasonal event,
- (B) a closure of key Station for access to a popular one-off event during the period of the event,
- (C) a closure of a key branch for access to airport terminals during a peak travel weekend, or
- (D) a closure on a part of a line when there is a concurrent closure on the only alternate line during an abnormally busy period.

Similarly a closure request may be rejected where it is considered that the level of disruption caused is not justifiable given the nature and the scope of the Services.

1.4 Time Scales for Booking Access and Closures

1.4.1 In preparing an Access Plan the Supplier shall make allowance for the minimum booking periods for the applicable access and closure types, as listed in the following table:

Type	Applicable to:			
	Station Access	Track Access	Working Time in	
			Engineering Hours	Traffic Hours
Self Service Access	Yes (0)	Yes (0)	Yes	Yes
Non-Restrictive/ Exclusive Access	Yes (14)	Yes (14)	Yes	Yes
Restrictive Access Exclusive Access	Yes (21)	Yes (56)	Yes	Yes
Major Closures	Yes (540)	Yes (540)	No	Yes
Minor Closure	Yes (222)	Yes (222)	No ⁽ⁱⁱ⁾	Yes
L&E Closure	Yes (90)	N/A	Yes	Yes

Notes

- i. The above table gives the T- date in brackets by which planning must be completed (the Latest Request Date). The Supplier must allow for sufficient time for adequate access planning. The Supplier shall note that there is approximately a 30 minute delay between making a Self Service Access request and the number appearing on the track assess control system. During this period the Supplier will not have access.
- ii. A Minor Closure may be applicable to Engineering Hours if a vehicle is being outstabled. Where no more than two vehicles are being outstabled at any single location the timescale for booking may subject to the agreement of the Access Manager be reduced to 90 days
- iii. A Major Closure or Minor Closure in respect of a depot or sliding may be required if the proposed Services affect the operational railway

1.4.2 At specific locations the minimum booking period for Major Closures and Minor Closures stated in the above table may be able to be reduced. Where a reduced period applies this is stated in Appendix 2 of this Schedule 13 (Access).

1.4.3 The Supplier shall plan access as early as possible and in no event applies for access or closures after the Latest Request Date past.

1.4.4 Where access is required to Network Rail infrastructure at the Network Rail Interface Locations the minimum booking period for all access types is 294 days access except for Major Closures which remains unchanged.

1.5 Utilising Existing Closures

1.5.1 The Supplier shall actively seek to utilise the Company's existing closure programme to progress the Services. A list of existing planned closures is provided at Appendix 1 of this Schedule 13 (Access).

1.5.2 The Supplier shall identify all possible opportunities to use the Company's existing closure programme and provides the information necessary to complete the Application to Work Form. The Applicant completes the Application to Work Form and submits this to the Access Manager and the Company's Representative for approval. Such form shall be submitted a minimum of 15 (fifteen) weeks prior to the relevant closure start date. The Applicant attends the planning meetings for the relevant closure and the Supplier prepares for submission by the Applicant any information as may be requested by the Access Manager as part of this planning process. Where the Applicant is the Supplier. The Company's Representative may attend such meetings.

1.5.3 The Supplier may also propose an extension to an existing planned closure. The Company's Representative considers the proposal and where the business benefits more than offsets the increased customer disruption, authorises the Applicant to seek endorsement by the Access Manager. The Access Manager determines whether the request should be taken forward as a formal application and advises the Applicant accordingly. Where such application has been approved by the Company's Representative, the Supplier submits an updated Access Plan, to reflect such application, to the Company's Representative for approval.

1.5.4 The Supplier recognises the level of disruption and limitation of journey opportunities which result from closures and where the Contactor plans any change to the scope or type of services to be undertaken under an existing closure, seeks the approval of the Company's Representative accordingly. The Applicant seeks consent for the change from the Access Manager. The Supplier accepts that if the Access Manager or the Company's Representative considers that changes in scope are such that the business benefit of the Services to be carried out is no longer commensurate with the disruption caused, that the closure may be cancelled. For the avoidance of doubt where a closure is cancelled in these circumstances it is not a Compensation Event and the Supplier submits a revised Access Plan for acceptance by the Company's Representative.

1.6 Booking and Arranging Access

1.6.1 The Applicant shall book access via RailSys, booking requests associated with the agreed Access Plan. The Supplier accepts that access to the Sites will be refused without a valid RailSys number and the Supplier checks that it is in possession of a valid RailSys number for all access requirements detailed on the accepted Access Plan. If the Supplier is not in possession of the same it shall advise the Company's Representative accordingly.

1.6.2 The Supplier shall comply with the requirements of the use of Sentinel (Network Rail's Access and Competency System), particularly in the context of access control at the point of site entry. The Supplier shall note that individuals will be refused access to Sites without a valid Sentinel card.

1.7 Training, Certificates, Identity Cards and Entry Permits

1.7.1 The Supplier is responsible for ensuring that all staff and personnel are suitably trained, competent and carry the appropriate and requisite certification for performing the roles required of them in carrying out the Services.

1.7.2 The Standards, and in particular QUENSH and the rule book(s) set out the training and certifications required to be met by the Supplier.

1.7.3 The Supplier is responsible for arranging, booking, and paying for all requisite medicals, training and certification of its staff and / or personnel.

1.7.4 The Supplier shall allow a minimum of 28 days' notice period for all Company provided training and certification courses. This must be included on the programme for acceptance. Any time period less than this cannot be guaranteed, and although efforts may be made to facilitate wherever possible, the Supplier does not rely on such reduced time periods being accommodated.

1.7.5 At the starting date of the Contract, the Supplier must produce a competency matrix for all Supplier's staff or personnel involved in undertaking the Services detailing the training, certification and other competency information held on record. The Supplier shall update the matrix throughout the Contract duration maintaining current records and shall make these available on request of the Company's Representative.

1.8 London Underground Access control

1.8.1 All Supplier Personnel require a Sentinel smartcard endorsed with the Industry Common Induction (ICI) competence plus the LUL-ICI endorsement in order to access the Sites and carry out Services on London Underground operational infrastructure.

1.8.2 The Supplier shall register to become a Sentinel Sponsor via the Rail Industry Supplier Qualification Scheme (RISQS). Further details can be found at the following Achilles website address (Achilles administer the Scheme on the behalf of RISQS).

http://www.achilles.com/en/?option=com_content&view=article&id=285

1.8.3 All sponsors and sponsored individuals must abide by the Sentinel scheme rules, the latest version of these can be found at the following Sentinel website address:

<https://www.railsentinel.co.uk/Content/Downloads/SentinelSchemeRules.pdf>

1.8.4 The Smartcard is specific to an individual and is not transferable.

1.8.5 The Supplier Personnel shall carry their smartcard at all times when working on operational underground network property and present them to any authorised representative of the Company for inspection when requested to do so. Failure to produce a valid smartcard, or requisite certification, for inspection may result in the individual being instructed to leave site. A smartcard is not required when working solely on non-operational underground network property.

1.8.6 The smartcard does not entitle the Supplier's staff or personnel to any benefits other than permitting access to the Sites for the purpose of carrying out Services during the agreed hours of work.

1.8.7 Details of required courses and medicals are detailed in QUENSH.

1.8.8 Exceptions to the smartcard process:

- (A) for certain exceptional access circumstances it may not always be practical or cost effective to enrol the Sub-Contractors or Others onto the Sentinel scheme.
- (B) such scenarios whereby temporary LUA-LUL paper certificates are issued would be:
 - (1) specialised Sub-Contractors or suppliers requiring limited access; and
 - (2) survey work requiring limited access

1.8.9 If the Company's Representative decides to permit exceptional access to Sites or other working areas, the Supplier must obtain the Company's Representative's written acceptance regarding the personnel and work activities prior to commencement on site.

1.8.10 Any person attempting to gain access to the Sites or other working areas who is not in possession of a valid LUCAS or Sentinel smartcard is treated as a visitor. All visitors, except for authorised collection or delivery drivers, are escorted or supervised at all times by an authorised member of staff whilst on site.

1.8.13 The Supplier shall maintain a register of all visitors including:

- (A) name;
- (B) employer;
- (C) nature of business / persons being visited;
- (D) time in;
- (E) time out; and
- (F) supervisor/escort name including signature.

1.8.14 The Supplier shall provide a health and safety site briefing to the visitor who signs a form to confirm that they have received the briefing and understand the site rules and their respective responsibilities as a visitor.

- 1.8.15 The Supplier shall issue the visitor a temporary pass that is valid for a maximum 24 hours and the expiry date and time is clearly indicated.
- 1.8.16 The Supplier shall ensure the temporary pass is returned when the visitor leaves the site and that a list of lost any passes is maintained.
- 1.8.17 Lost electronic visitor passes shall be de-activated immediately on the Supplier being made aware of the loss.
- 1.8.18 When booking in and out of the Sites, the Supplier's staff and personnel shall report in, record entry and exit, and present their smartcards when and where required, in accordance with the local access control arrangements.

1.9 Access within the Railway Environment

1.9.1 Engineering Trains

Engineering trains may be available from the Company for transportation of plant and materials and equipment to and from platforms in Stations together with other specialist mechanised plant for the delivery of the Services. The Applicant submits a Work Request detailing requirements for engineering trains and mechanised plant to the Access Manager in accordance with the timescales set out in Appendix 6 of this Schedule 13 (Access). The Supplier shall provide the Applicant with all the information relating to engineering trains and mechanised plant required by the Work Request and where the Supplier is the Applicant seeks the approval of the Company's Representative before the formal submission of the Work Request to the Access Manager.

Where the Supplier cancels the booking for an engineering train or other mechanised plant, the Supplier shall compensate the Company as follows:

- (A) cancellations made at least 56 (fifty-six) days in advance of the date on which the train has been booked to run – no charge will be levied by the Company; and
- (B) cancellations made at less than 56 (fifty-six) days in advance of the date on which the train has been booked to run – the full price will be charged to the Supplier by the Company, in accordance with the prevailing charges detailed in Schedule 1 (Contract Data).

The Supplier shall direct any requests to amend a booking for engineering trains or mechanised plant to the Access Manager and the Company's Representative in compliance with the minimum timescales set out in Appendix 6 of this Schedule 13 (Access). Requests to amend the make-up of engineering trains will be subject to availability.

Other mechanised vehicles provided by the Supplier must be plant approved and have route clearance for the area involved. This is the responsibility of the Supplier. Access for other mechanised vehicles shall be booked by the Supplier by directing such booking to the Access Manager and the Company's Representative in the same manner as for engineering trains or mechanised plant as described above and is subject to the same minimum timescales as set out in Appendix 6 of this Schedule 13 (Access).

Engineering train rolling stock and train/mechanised vehicle paths will be subject to optimisation planning by the Access Manager at 56 (fifty-six) days prior to the week of the requested date. The intention of this process is to:

- (A) maximise the nightly use of the available resources, trains, rolling stock, loading gangs, crews;
- (B) maximise train pathing opportunities and time at site;
- (C) maximise the access to the infrastructure to all parties requiring access;
- (D) promote opportunities to share engineering trains between requesters in order to optimise available access and/or resources; and
- (E) meet business needs and/or priorities.

In the event that it is required to re-schedule a requested engineering train, the Access Manager will use reasonable endeavours to provide an alternative and equivalent booking as close to the original date as possible

1.9.2 **Protection**

The Supplier shall consult and agree all protection arrangements (including provision of additional Specialist Protection resources) with the Company's Representative and the Access Manager. The Applicant shall seek formal approval for the agreed protection arrangements (including provision of agreed Specialist Protection resources) by submitting a Work Request.

The Supplier shall provide a minimum of 1 qualified Site Person in Charge (SPC) for each work party.

The Supplier's SPC (who work on the track) shall hold a dual qualification enabling them to provide protection as well as provide work site supervision and shall work as part of the protection detail. If Services are planned to take place during Engineering Hours, the SPC shall hold a dual qualification enabling them to provide protection during Engineering Hours, and shall be familiar with the area that they will be working in and safe routes to / from the worksite, as such there should be no need for additional protection staff to be employed.

In the event of additional Specialist Protection staff being required, the Supplier shall advise the Company's Representative accordingly and the Applicant requests the additional Specialist Protection resources from the Access Manager a minimum of 21 days before the Specialist Protection is required. Where the Supplier is the Applicant it will seek the approval of the Company's Representative before the submission of such request. The Access Manager will review the protection arrangements and determine the number and qualifications of any Specialist Protection staff that may be required. This will be done in consultation with the Applicant and where the Applicant is the Supplier, in consultation with the Applicant and the Company's Representative. Any Specialist Protection will be arranged by the Access Manager and provided by the Company

The cost of Specialist Protection staff will be charged back to the Supplier in the event of cancellation (or non-utilisation) on the following basis:

- (A) cancellations made 96 hours or more in advance of the activity start date – no charge will be levied by the Company; and
- (B) cancellations made less than 96 before the job start date – the full cost will be charged to the Supplier and shall be accounted for as a TfL Supplied Resource.

The above durations are subject to the cancellation being made before 12:00hrs on a weekday (Monday to Friday inclusive). Where a cancellation notice is received after 12:00hrs, the 96hour cancellation period will be calculated from 09:00hrs on the next weekday.

SCHEDULE 13 - APPENDIX 1: LIST OF EXISTING PLANNED CLOSURES

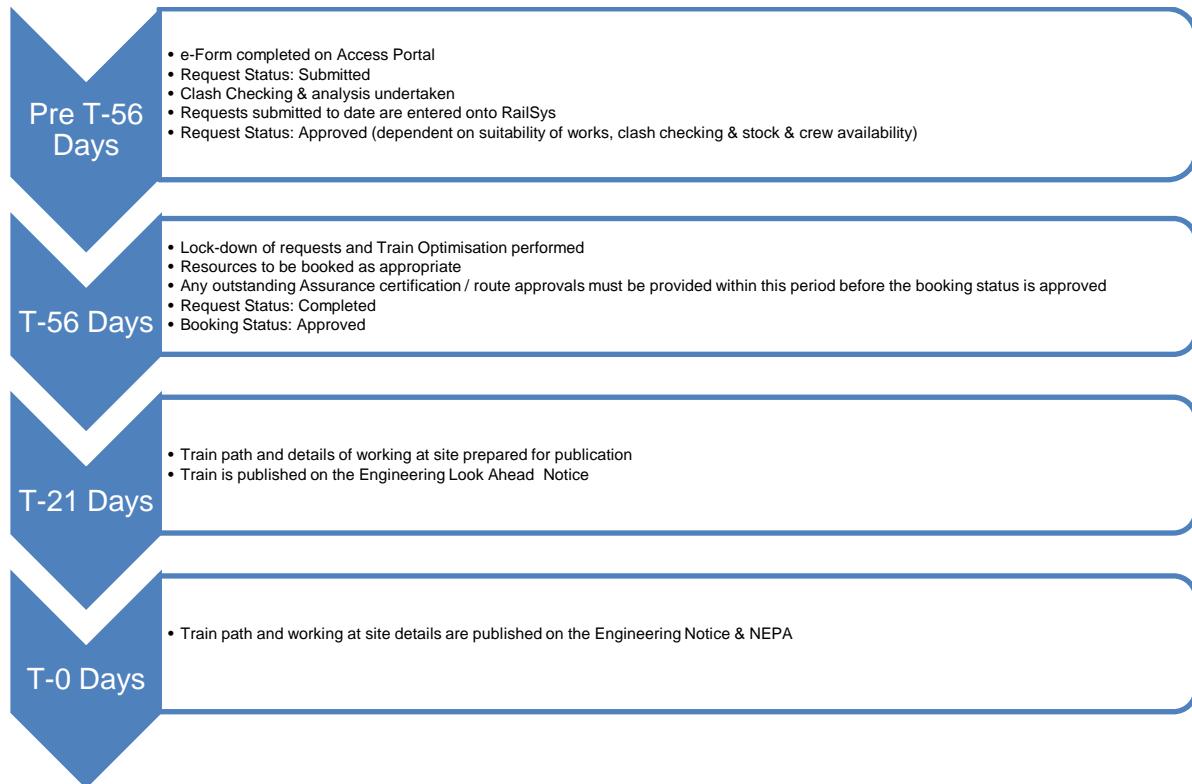
The Supplier shall liaise with the Company's Representative to obtain current information on the Company's existing closure programme.

SCHEDULE 13 – APPENDIX 2: LIMITS ON THE TIME PERIOD OF ENGINEERING HOURS

1. The call-back period is 20 minutes unless a shorter period is agreed in writing by the Company's Representative for the delivery of a specific element of the Services.
2. The time period for working in Engineering Hours is restricted as detailed in Access Plan for each Launched Upgrade Work Activity.
3. The reduced minimum periods for booking Major Closures and Minor Closures is not applicable.

SCHEDULE 13 - APPENDIX 3: REQUEST LIFECYCLE FOR A TRAIN OR MOTORISED VEHICLE REQUEST

The timescales for booking an engineering train or other mechanised vehicle is described the in following flow chart.



Note: 'T' indicates the Monday of the week that the train or vehicle is booked to work in.

The process at each stage is summarised as follows:

a. **Pre T-56 Days**

A Work Request for a train can be submitted by the Applicant at any time prior to T-56 days. All requests will be made by the Applicant comprehensively completing all the requisite screens of the Work Request. The Work Request is the sole means by which Transplant engineering vehicles can be booked and requested and there is provision on the Work Request to provide specific details as to the make-up of each train (if the consist is known). The Access Manager will assist the Applicant as necessary in planning and requesting trains or access for mechanised vehicles.

b. **T-56 Days**

All planning for engineering trains, train paths or mechanised vehicles must be completed & received by T-56 days, after which train optimisation will be carried out by the Access Manager.

From T-56 days onwards the requested access for an engineering train or mechanised vehicle will be entered onto RailSys and a check for any clashes can be carried out. The Access Manager will update the request's status to 'Completed' if there are no clashes or impediments pertaining to the request at that time. If there is a clash at this stage, the Access Manager will assess whether the clash is likely to be

resolvable by the train optimisation process and will work with the Applicant to identify potential alternative dates.

The Access Manager and Applicant will agree the engineering train paths, confirm the engineering train's method of working at site; access and egress to the worksite for mechanised vehicles and/or personnel, and carry out protection planning.

The Access Manager will update the Booking status to 'Approved'.

c. T-21 Days

At this time the train path, and details of the train or mechanised vehicle's working at site, will be prepared for publication. These details will be included on the Engineering Look Ahead Notice.

d. T-0 Day of the Services

The Engineering Notice is published with full details of the train or mechanised vehicle's path and its working at site.

Network Rail Infrastructure

Notwithstanding the timescales stated above, where engineering trains or other mechanised vehicles are required and which need to be positioned on Network Rail infrastructure in order to deliver the Services, a Work Request for the provision of such vehicles shall be submitted to the Access Manager before T-365. The Access Manager will advise the applicable timescales for confirmation of booking following consultant with Network Rail.

SCHEDULE 13 - APPENDIX 4: INDICATIVE TIMESCALES FOR THE PUBLICATION OF ENGINEERING LOOK AHEAD NOTICE AND ENGINEERING NOTICES

Notes

Notes

ELAN = Engineering Look
EN = Engineering Notice

NEPA = Nightly Engineering Protection Arrangements

NB. Timings are likely to change over public holidays.

SCHEDULE 13 - APPENDIX 5: CURTAILED OR DELAYED/CURTAILED ACCESS FORM

London Underground																									
Frustrated Access (Cancelled / Delayed / Curtailed) Form				FAC-001 v1																					
Directorate:		Upgrade / Asset Group:																							
Project / Work Title:		Project Id / Work Order / Job Ref:																							
Line: _____			Unique Ref.: _____																						
Access Affected: (pick one)		Cancelled: <input type="checkbox"/>	Delayed / Curtailed: <input type="checkbox"/>																						
Date: (shift start)		Day: _____ / _____ / _____	Night: (start) _____ - (end) _____ / _____ / _____																						
Access Authority Details: (must be valid)																									
Booking Ref. (1): <table border="1" style="display: inline-table; vertical-align: middle; border-collapse: collapse; width: 150px; height: 20px;"><tr><td> </td><td> </td></tr></table>																							PICER Ref (copy required) _____		
Booking Ref. (2): <table border="1" style="display: inline-table; vertical-align: middle; border-collapse: collapse; width: 150px; height: 20px;"><tr><td> </td><td> </td></tr></table>																						Access Type: TRACK / STATION / OTHER (Circle as applicable)			
<small>All details Mandatory</small>																									
Access Location (or Code):			Work Location or Code (+ SB/NB/EB/WB):																						
Station Supervisor Name:			Track Current Sections Booked Out (ref required):																						
Work to be done (brief details)																									
Time Booked on Station:		Time Booked on with TAC:	Call Back Time given by TAC:		TAC Ref. No:																				
Planned Start time:		Actual Start time:	Planned finish time:	Actual finish time:	Total Shift or Time Lost:																				
Reporters Details: (mandatory)																									
Name:		Company		Contact No.																					
				Email																					
LU Accountable Manager Details:																									
Name:		Directorate / delivery Group		Contact No.																					
				Email																					
Contractors / Sub-Contractors affected: (mandatory)																									
Contractor		Ops in work Party (no.)	Contractor	Ops in work Party (no.)	Contractor	Ops in work Party (no.)																			
Cause of Lost Time / Shift (mandatory)																									
Engineers Train Y/N	Train ref. no.	Was train published in ENLA?	If so, which no?	Was Train published in Eng Notice?	If so, which no?																				
	Reason for late running (if known)																								
Passenger Train Y/N	Train ref. no.	Line	Direction (circle one) SB / NB / EB / WB	Destination																					
	Reason for late running (if known)																								
Other Contractor		<input type="checkbox"/>	Name																						
LU Supervisor		<input type="checkbox"/>	Name																						
Late Book on TAC		<input type="checkbox"/>	Details																						
Early call back TAC		<input type="checkbox"/>																							
Other		<input type="checkbox"/>																							
Signature of station supervisor					Was further investigation completed by DOE / DOME? Y / N																				

This form must be faxed to XXXXX or emailed to XXXX

SCHEDULE 13 - APPENDIX 6: ACCESS SUBCATEGORIES

Station Services			
Access Type	Booking Description	Days	Work Type Description
Self Service Access	Self Service Access	0	For undertaking the majority of everyday access needs, using relevant tools and materials. Not to be used for works that imposes a restrictive or exclusive requirement on other access users.
Non Restrictive/ Exclusive Access	Non Restrictive/ Exclusive Access (non Track)	14	For undertaking everyday access needs, using relevant tools and materials within a defined area
Restrictive Access	Restrictive - Asbestos Site	21	Only issued to specialist Asbestos contractors registered with LUL for asbestos works. Access for asbestos works e.g. removal for which no other parties can be present on grounds of safety.
	Restrictive - Bright Lights	21	For where access introduces the use of additional lighting that could potential impact other access users. Rarely applied.
	Restrictive - Closure Area	21	To define an area of a station subject to a Closure (i.e. taken out of service for the purposes of engineering works).
	Restrictive - Movement of Materials	21	For where access necessitates the movement of materials either through a station that may impact on other access users. May include craning over of materials.
	Restrictive - Noisy Works	21	For where access will result in particularly noisy works that may have an impact on other access users.
	Restrictive - Plant / Chemicals in a confined space	21	For where access introduces the use of plant and chemicals in a confined space . Rarely used.
	Restrictive - Power Cessation- Power Outages Possible	21	For where access will introduce a cessation of power that may impact other access users (e.g. need for temporary supplies/portable lighting).
Exclusive Access	Exclusive – Asbestos Exclusion Zone	21	Only issued to specialist Asbestos contractors registered with LUL for asbestos works. Access for asbestos works e.g. removal for which no other parties can be present on grounds of safety.

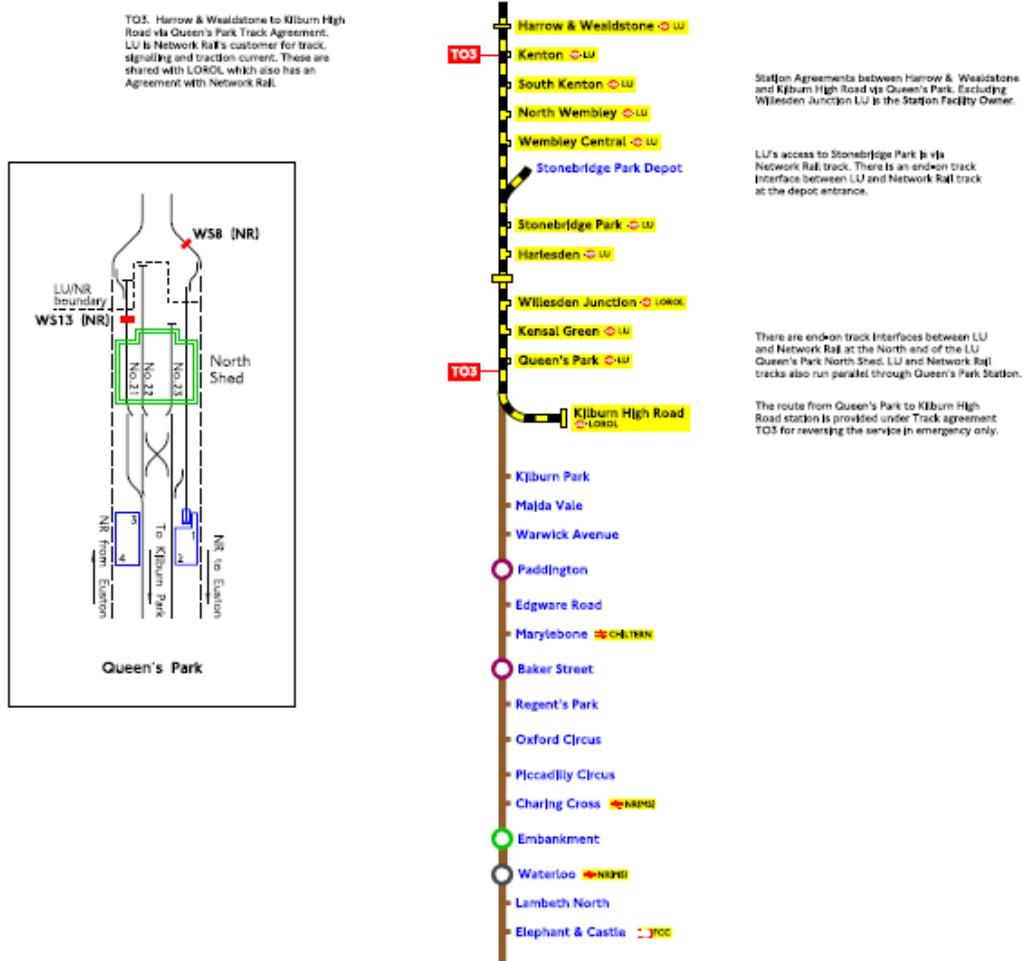
Track			
Booking Description	Booking Description	Days	Work Type Description
Self Service Access	Self Service Access	0	For undertaking the majority of everyday access needs, using relevant tools and materials. Not to be used for works that imposes a restrictive or exclusive requirement on other access users.
Non Restrictive/ Exclusive Access	Non Restrictive/ Exclusive Access (Track)	14	For undertaking everyday access needs, using relevant tools and materials within a defined area
Restrictive	Restrictive - Allied Track	56	To define an area of track used in conjunction with, or subject to impact from, another access booking e.g. unloading of materials from a train booked under an Exclusive Specified Area.
	Restrictive - Asbestos Site	56	Only issued to specialist Asbestos contractors registered with LUL for asbestos works. Access for asbestos works e.g. removal for which no other parties can be present on grounds of safety.
	Restrictive - Bright Lights	56	For where access introduces the use of additional lighting that could potential impact other access users. Rarely applied.
	Restrictive - Closure Area	56	To define an area of the LUL railway subject to a Closure (i.e. taken out of service for the purposes of engineering works).
	Restrictive - Motorised Trolley	56	For the operation of a motorised track trolley on the railway.
	Restrictive - Movement of Materials	56	For where access necessitates the movement of materials either on, over or adjacent to the LUL railway that may impact on other access users. May include craning over of materials.
	Restrictive - Noisy Works	56	For where access will result in particularly noisy works that may have an impact on other access users.
	Restrictive - Out-stabled Trains	56	To define an area of the LUL railway where a service train is stabled (normally in platforms/sidings). May restrict the type of works that can be performed adjacent to this location.

Track			
Booking Description	Booking Description	Days	Work Type Description
	Restrictive - Plant / Chemicals in a confined space	56	For where access introduces the use of plant and chemicals in a confined space (e.g. platform inverters). Rarely used.
Restrictive Cont'd	Restrictive - Power Cessation- Power Outages Possible	56	For where access will introduce a cessation of power (e.g. tunnel lighting, supply points) that may impact other access users (e.g. need for temporary supplies/portable lighting).
	Restrictive - Protection Area	56	To define an area of track used as a protecting or 'buffer' zone. Used in conjunction with another Exclusive booking e.g. Specified Area, Possession.
	Restrictive - Sub Station Works	56	Primarily for the use of LUL Power teams requiring access to sub stations supplying power to the LUL traction current system.
	Restrictive - Wheels Free Zone	56	For works that require the running rails to be free of electrically conducting plant or equipment e.g. trolleys, trains etc. Usually used for works requiring isolation of the signalling circuits e.g. commissioning.
Exclusive	Exclusive	56	For works necessitating sole access of the LUL railway, and not more appropriately catered for under other categories herein. Only used sparingly and for short durations due to its restrictive nature on other works.
	Exclusive - Asbestos Exclusion Zone	56	Only issued to specialist Asbestos contractors registered with LUL for asbestos works. Access for asbestos works e.g. removal for which no other parties can be present on grounds of safety.
	Exclusive - Current Rail Resistance Measurements	56	Primarily for the use of LUL Power teams requiring controlled current measurements of the traction current delivery system.
	Exclusive - Engineers' Current Area	56	For the running of engineering vehicles on live traction current in accordance with the Rule Book.

Track			
Booking Description	Booking Description	Days	Work Type Description
	Exclusive - Possession	56	For the exclusive control of access to a given area of the railway. Traction current may be on or off. May involve the use of engineering trains, RRVs etc. As defined in the Rule Book
	Exclusive - Running on current, moving according to signals	56	For the running of vehicles on live traction current obeying LUL signalling systems (e.g. test trains). Often referred to as 'Cancelled Engineering Hours'. As defined in the Rule Book.
Exclusive Cont'd	Exclusive - Specified Area	56	For the running of engineering machines e.g. trains, RRVs on the railway. As defined in the Rule Book
	Exclusive - Traction Current Switching During Eng Hrs	56	For access that requires traction current to be switched on and off intermittently during the engineering hours shift. Primarily used in relation to power supply testing/commissioning etc.

SCHEDULE 13 - APPENDIX 7: NETWORK RAIL INTERFACE LOCATIONS

Bakerloo line



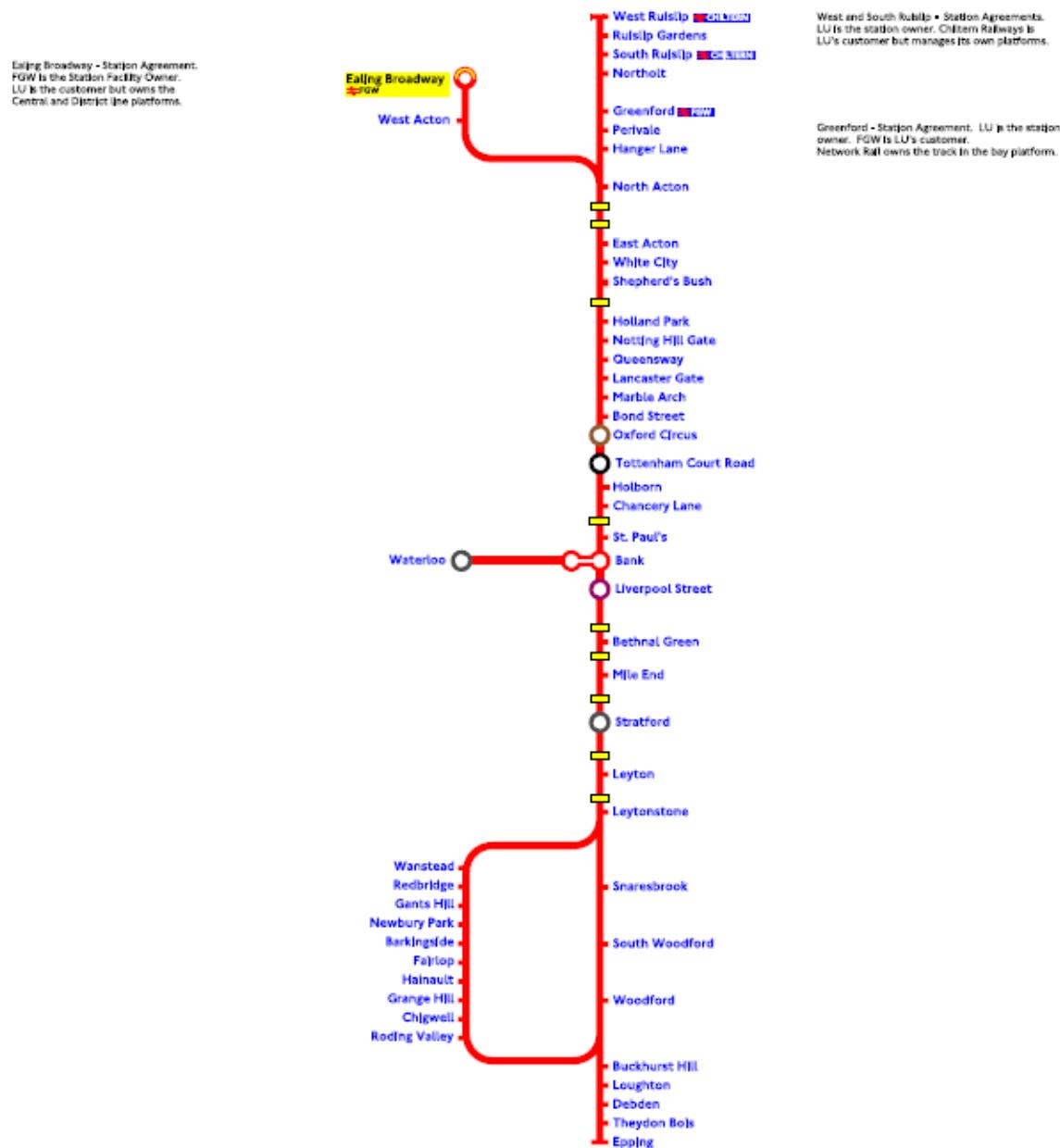
Richmond Network Rail owned station (with SFO, may be other TOCs)
TO3 Track Agreement
 Location of Track Agreement

Created: 30 March 2012

For details of Land and Property boundaries refer to Site Specific Engineering arrangements LNW-B, SE-B and WN-B

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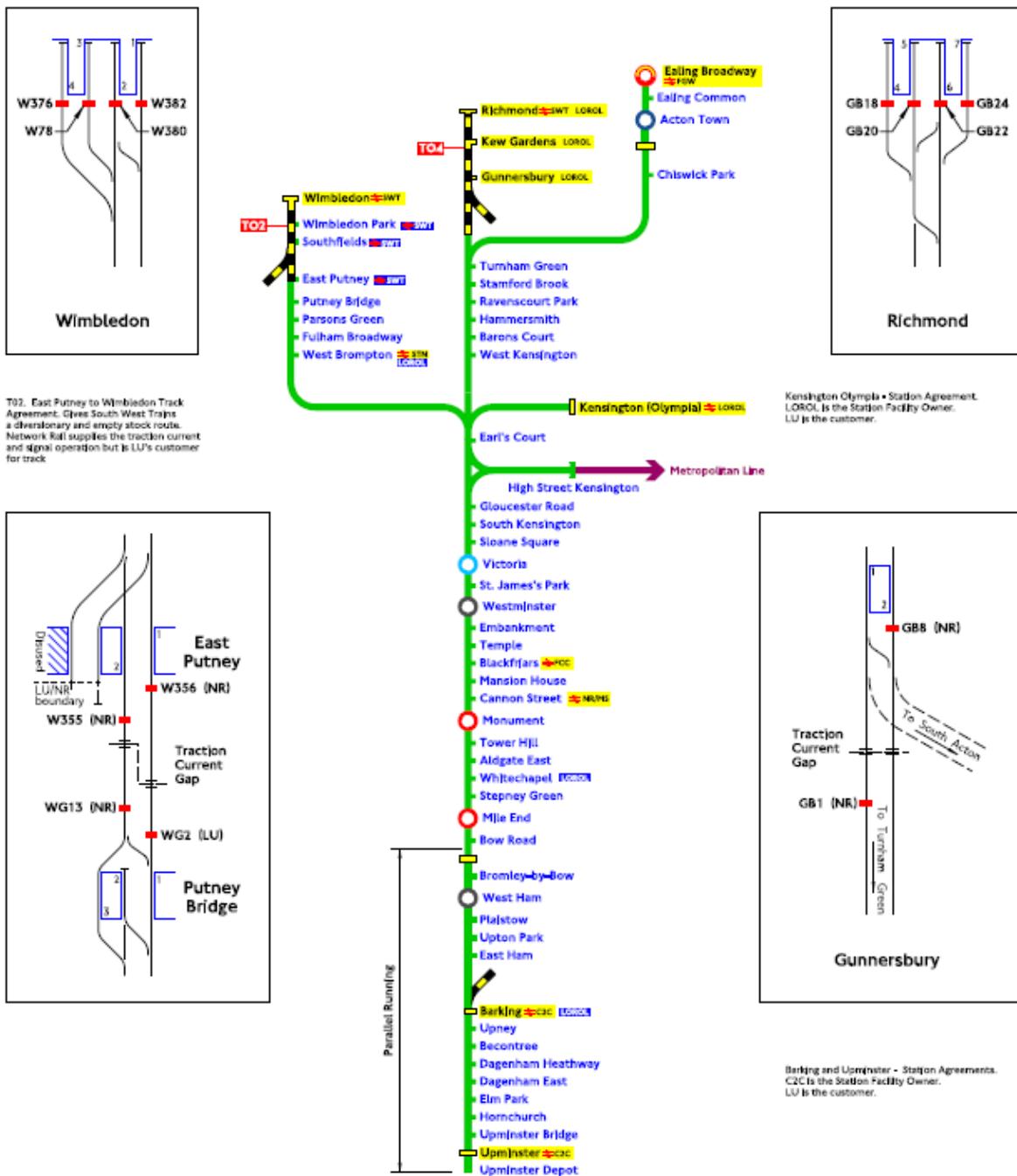
Central line



Richmond (with SFO) Network Rail owned station (with SFO, may be other TOCs)
TAs Track Agreement
 Location of Track Agreement

For details of Land and Property boundaries
refer to Site Specific Engineering arrangements
GW-C, ML-C and SE-C

District line



	Network Rail owned station (with SFO, may be other TOCs)
	Track Agreement: Location of Track Agreement:

For details of Land and Property boundaries
refer to Site Specific Engineering arrangements
SE-D and WN-D

Jubilee line



Richmond Network Rail owned station (With SFO, may be other TOCs)
TOC Track Agreement
 Location of Track Agreement

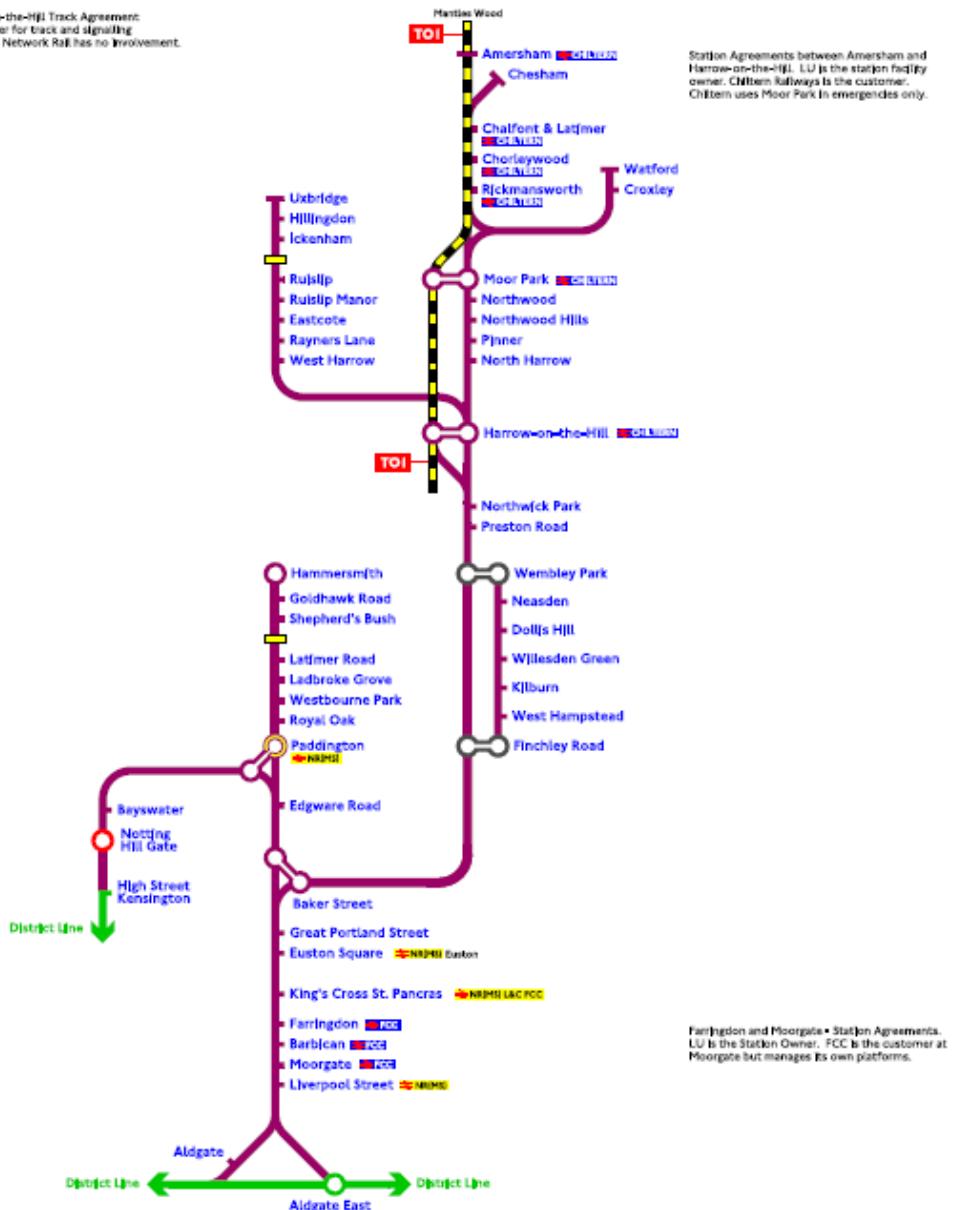
Created: 30 March 2012

For details of Land and Property boundaries refer to Site Specific Engineering arrangements SE-J and LNW-J

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Metropolitan line

TOI: Mandles Wood - Harrow-on-the-Hill Track Agreement.
Chiltern Railways is LU's customer for track and signalling over the Metropolitan main line. Network Rail has no involvement.



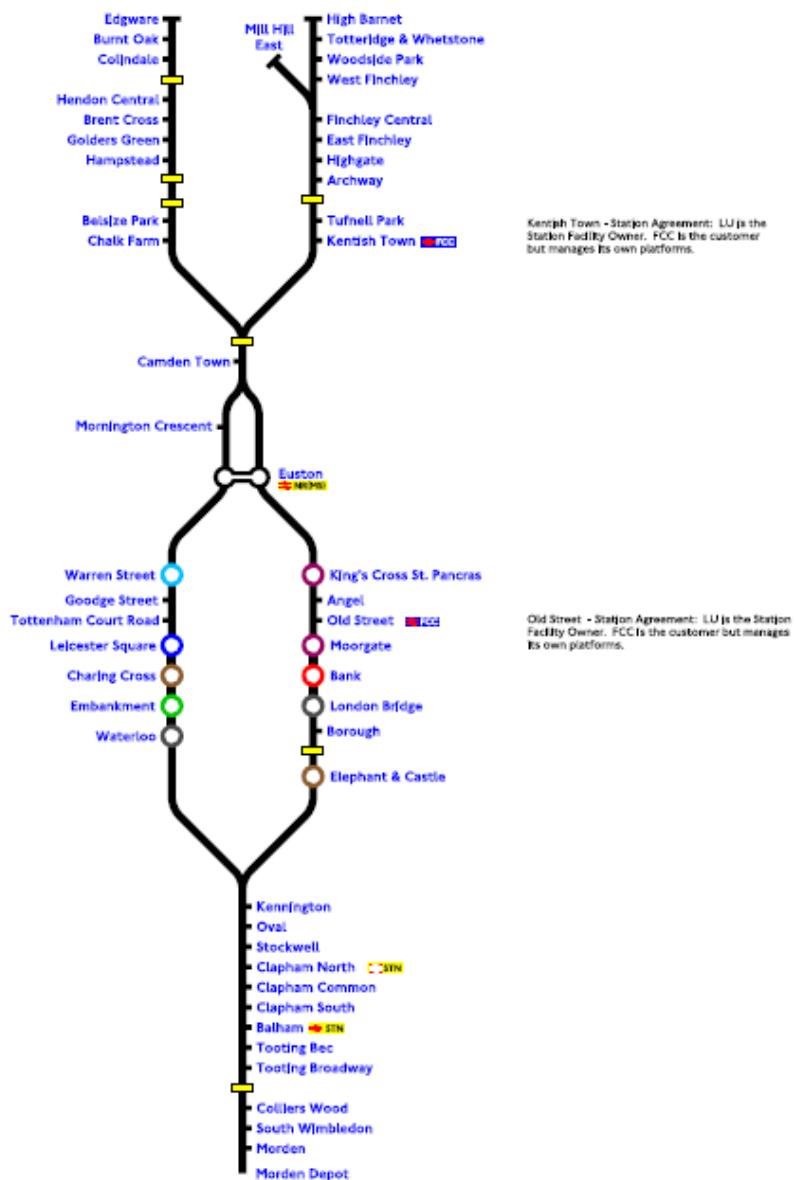
Richmond Network Rail owned station (with SFO, may be other TOCs)

TOI Track Agreement

Location of Track Agreement:

For details of Land and Property boundaries refer to Site Specific Engineering arrangements
LNE-M, LNW-M, SE-M and WN-M

Northern line



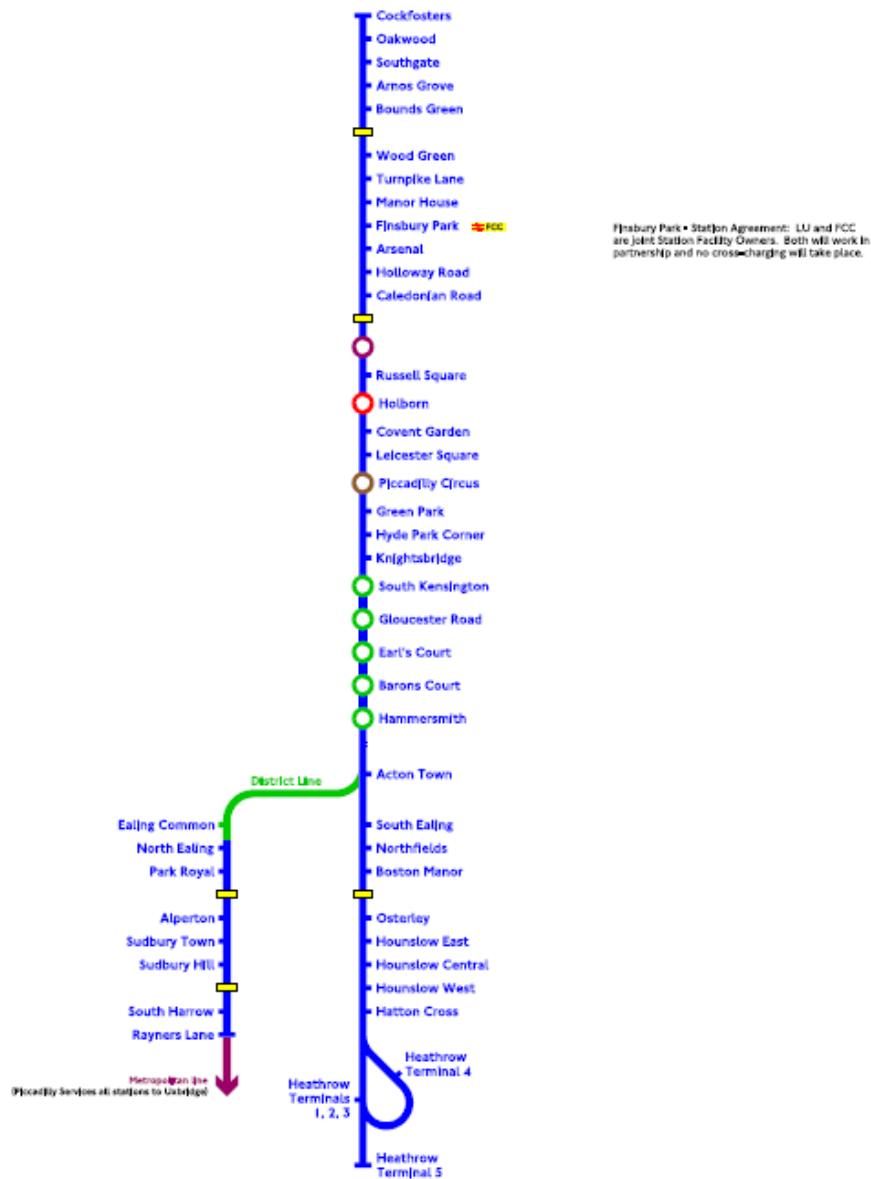
Richmond (SWR) Network Rail owned station (with SFO, may be other TOCs)
TOC Track Agreement
 Location of Track Agreement

Created: 30 March 2012

For details of Land and Property boundaries
refer to Site Specific Engineering arrangements
LNE-N, LNW-N and SE-N

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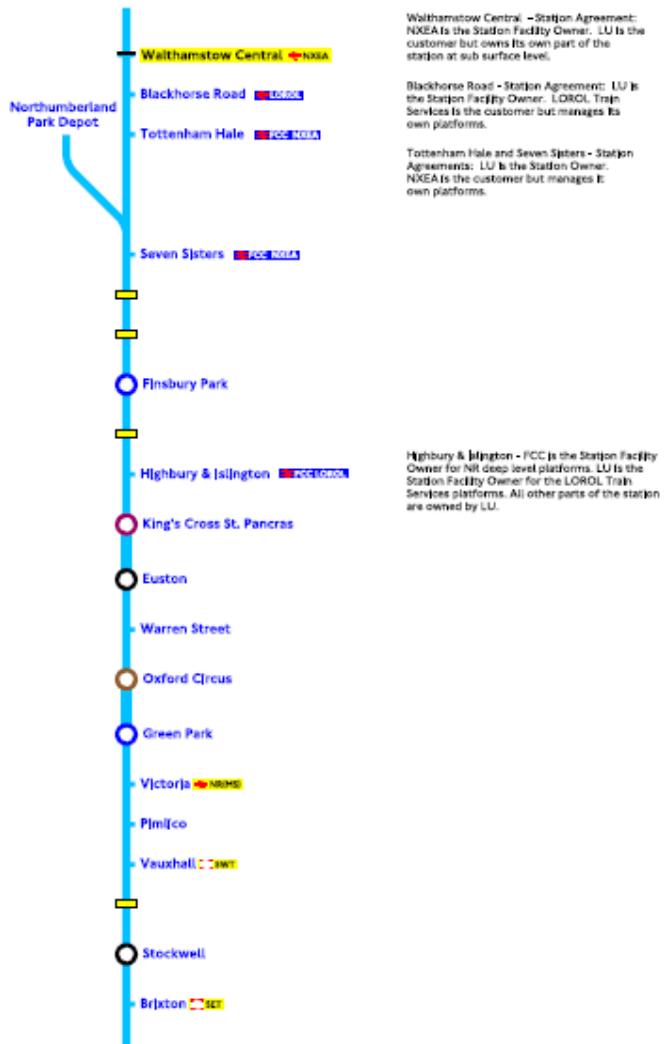
Piccadilly line



Richmond Network Rail owned station (with SFO, may be other TOCs)
TOS Track Agreement
 Location of Track Agreement

For details of Land and Property boundaries
 refer to Site Specific Engineering arrangements
 LNE-P, LNW-P, SE-P and WN-P

Victoria line



Richmond (SW) Network Rail owned station (with SFO, may be other TOCs)
TOS Track Agreement
 Location of Track Agreement

For details of Land and Property boundaries
 refer to Site Specific Engineering arrangements
 LNE-V, LNW-V and SE-V

SCHEDULE 14: Mobilisation

1. Mobilisation Plan

- 1.1 The Supplier shall (within 10 days from the Commencement Date) prepare and submit for review and approval by the Company's Representative, a mobilisation plan for the Services substantially in the form attached at Appendix 1 to this Schedule 14 (Mobilisation) and shall thereafter update the mobilisation plan as and when requested to do so by the Company.
- 1.2 The Mobilisation Plan shall detail the Supplier's proposals for the mobilisation aspects of the Services, including but not being limited to transfer of staff, intellectual property rights and manuals, spares and equipment and the like from the Current Service Provider (as that term is defined in Clause 29 of the Contract).
- 1.3 In order to support the seamless mobilisation of the Services the Supplier shall, from the Commencement Date, undertake all necessary actions in connection with the mobilisation of the Services, including but not being limited to the following:
 - (A) providing all necessary resource, including Supplier Personnel, equipment and materials to enable timely mobilisation;
 - (B) identifying its mobilisation team and mobilisation manager;
 - (C) procuring that its mobilisation team attend Company chaired mobilisation/transition meetings;
 - (D) keeping the Company's Representative fully informed on the progress of the mobilisation;
 - (E) complying with all reasonable instructions of the Company in connection with the mobilisation; and
 - (F) establishment and integration of any IT systems to be used by the Supplier in providing the Services (in particular accounting systems for the capture of Defined Cost in accordance with the requirements of the Contract).
 - (G) preparation of procurement plans and establishment of supply chain for all resources provided by the Supplier;
 - (H) preparation of the Contract Management Plan; and
 - (I) preparation of the Audit Plan in accordance with the requirements of Schedule 3 (Payment) Part E Audit Plan.

- 1.4 The Supplier shall liaise as necessary with the Current Service Provider in order to facilitate an orderly transfer and mobilisation of the Services.

2. Contract Management Plan

- 2.1 The Supplier shall prepare and submit for review and approval by the Company's Representative, no later than 4 weeks prior to the end of the Mobilisation Period, a contract management plan setting out the project control processes it proposes to put in place to support the delivery of the Services in support of its obligations to comply with the Pathway Process and End to End Process.

2.2 The Supplier shall prepare during the Mobilisation Period (and thereafter maintain and update) a Contract Management Plan detailing the agreed processes for the administration of the Contract. The Contract Management Plan shall as a minimum cover the following subject areas:

- (A) schedule of contract administration meetings;
- (B) agendas, terms of reference and required attendees for contract administration meetings;
- (C) relationship management;
- (D) safety leadership;
- (E) stage gate approval criteria;
- (F) stage gate benchmarking and cost approval process;
- (G) performance management (PI data collection);
- (H) financial reporting;
- (I) accounting processes;
- (J) strategic planning and upgrade workbank planning;
- (K) asset condition and performance monitoring; and
- (L) final accounting process for the Integrated Team Budget Breakdown and each Launched Upgrade Work Activity Target Cost Breakdown.

3. Familiarisation and Collaborative Working

3.1 To ensure that the Supplier Personnel have a full understanding of the Supplier's contract obligations and the roles and responsibilities of the Supplier Personnel within the Integrated Team, the Supplier shall prepare all necessary management training materials and shall provide management training workshops. These shall be developed and organised in consultation with the Company and the Supplier acknowledges and agrees that the Company may attend such training.

3.2 The workshops shall encompass training on expected behaviours and way of working together to achieve programme delivery objectives. The workshops shall initially focus on training senior personnel but thereafter are to be cascaded to all staff.

3.3 The training should also provide an understanding of the Company's management and accounting systems including but not limited to:

- (A) Pathway Process;
- (B) SAP;
- (C) the Supplier's accounting system and processes, in support of the payment procedure in Schedule 3 (Payment);
- (D) the Company's document management system; and

(E) the Company's 'OneLondon' platform.

3.4 The Company will provide the Supplier with an introduction to the following track programme wide documentation as may be appropriate to provide familiarisation:

- (A) project execution plan;
- (B) estimating assurance process;
- (C) gate plans;
- (D) programme and project controls;
- (E) project quality plan;
- (F) project health and safety plan;
- (G) project environmental plan;
- (H) project assurance plan;
- (I) design management plan; and
- (J) interface and communications plan.

4. Procurement and Supply Chain

4.1 The Supplier shall, during the Mobilisation Period, confirm the appointment of all key sub-contractors and suppliers.

4.2 The Company will, during the Mobilisation Period, establish procedures for the call off by the Supplier of TfL Supplied Resources and the Supplier shall engage with the Company's supply chain, through the Integrated Team, to establish working relationships and agree logistics.

4.3 The Supplier shall, during the Mobilisation Period, develop, document and implement a formal process for materials management and control to minimise waste and optimise utilisation.

SCHEDULE 14 - APPENDIX 1: MOBILISATION PLAN

Appendix 1 is the document titled "Schedule 14 Appendix 1 – Mobilisation Plan" and stored on the CD-ROM at Schedule 23 (Documents on CD-ROM).

SCHEDULE 15: Demobilisation

1. The provisions of this Schedule 15 (Demobilisation) are without prejudice to the obligations of the Supplier to continue to undertake the Services relating to the Integrated Team and Launched Upgrade Work Activities as required by the terms of this Contract. Within three (3) months of the Commencement Date, and thereafter annually, on each anniversary of the Commencement Date until the Expiry Date or earlier date of termination of the Contract, the Supplier shall submit a draft demobilisation plan for review and approval by the Company's Representative which contains the Supplier's proposals for the demobilisation aspects of the Services, including but not being limited to transfer of staff, intellectual property rights and manuals, spares and equipment. In addition to each such submission, the Supplier shall update the draft demobilisation plan at other intervals where requested to do so by the Company's Representative.
2. The Supplier shall no later than eleven (11) months before the Expiry Date or on the date of receipt of any Termination Notice commence to:
 - 2.1 prepare and submit for review and approval by the Company's Representative, a detailed demobilisation plan for the Services containing the Supplier's proposals for the demobilisation aspects of the Services, including but not being limited to transfer of staff, intellectual property rights and manuals, spares and equipment and thereafter update the demobilisation plan as requested by the Company's Representative;
 - 2.2 in order to support the seamless transition of the Services following the Expiry Date or Termination Date, undertake all necessary actions in connection with the demobilisation, including but not being limited to the following:
 - (A) providing all necessary resource, including Supplier Personnel, equipment and materials to enable timely demobilisation;
 - (B) identifying its demobilisation team and demobilisation manager;
 - (C) procuring that its demobilisation team shall attend Company chaired demobilisation/transition meetings;
 - (D) keeping the Company's Representative fully informed on the progress of the demobilisation;
 - (E) complying with all reasonable instructions of the Company in connection with the demobilisation; and
 - (F) ensuring, supporting and facilitating migration of any IT systems used by the Supplier in providing the Services;
 - 2.3 cooperate fully with and provide all reasonable and necessary assistance and information in connection with the Services and/or to facilitate the orderly transfer of responsibility for and conduct of the Services to the Company and any incoming supplier or suppliers in the transition of the Services before the Expiry Date or Termination Date (as the case may be) and for a period of three months after such date to ensure that the changeover to the incoming supplier (or back to the Company) is effected with minimal disturbance and disruption;

2.4 the requirement for the Supplier to provide cooperation pursuant to paragraph 2.3 above extends to any retender process for the Services carried out by the Company in relation to an incoming supplier or suppliers to enable it to access the Sites and/or Company personnel, and specifically an obligation to provide, on reasonable notice during the term of the Contract, information for the purpose of a competition and managing the transition to an incoming supplier or suppliers, to include:

- (A) details of the Services;
- (B) details of employees who would transfer to the replacement contractor;
- (C) management information; and
- (D) any other information that the Company may reasonably require; and

2.5 maintain records, data, files, information and Documentation relating to the Services in such form and manner as to enable the Supplier to effectively transfer them in full to the Company and/or to any third party nominated by the Company, so as to put the Company and/or the third party into a position where the Company and/or the third party can provide a level of service which is similar to or the same level as Services provided under this Contract.

3. On receipt of an instruction from the Company, the Supplier shall return to the Company's Representative all TfL Supplied Resources provided to the Supplier in accordance with Clause 22 of the Contract.

4. Without prejudice to the provisions of Clause 13 and 36 of the Contract, the Supplier shall:

- 4.1 hand back to the Company (at the Expiry Date or earlier date of termination of the Contract (as the case may be)) all records, data, files, information and documentation owned by the Company but used by the Supplier in the performance of the Services, subsequently destroy all electronic copy information in the possession of the Supplier and provide a certificate of destruction to the Company's Representative; and
- 4.2 provide the Company and/or incoming supplier or suppliers with all reasonable help, assistance and co-operation to make available and effect the transfer of records, data, files, information and documentation to an incoming supplier or suppliers so as to enable the Company and/or incoming supplier or suppliers to set up and effect the transition of the Services, in accordance with Clause 13 of the Contract; and
- 4.3 hand over to the Company (upon request of the Company's Representative but in any event, at the Expiry Date or earlier date of termination of the Contract (as the case may be)) all passes or entry permits.

5. The Supplier shall ensure that (at the Expiry Date or earlier date of termination of the Contract (as the case may be)):

- 5.1 all assets and spares, critical and non-critical, are handed over to the incoming supplier and the Company and that relevant members of the Supplier Personnel are present at handover; and

5.2 all areas which the Supplier has used for storage or operation have been left clean and tidy and all rubbish has been removed from the Sites.

6. During demobilisation the Supplier shall promptly provide all reasonable co-operation and support resource in relation to any audit or check required by the Company and commissioned by the Company's Representative, including in each particular circumstance:

- 6.1 granting or procuring the grant of access to any premises used in performance of this Contract, whether the Supplier's own premises or otherwise;
- 6.2 granting or procuring the grant of access to any equipment (including all computer hardware, software and databases) used (whether exclusively or non-exclusively) in the performance of the Supplier's obligations under the Contract, wherever situated and whether the Supplier's own equipment or otherwise;
- 6.3 making any contracts and other documents, records and information related to the provision of the Services available for inspection;
- 6.4 granting copying facilities to the Company and/or LUL's auditor for the purposes of making copies of any or all the information, records and documents;
- 6.5 complying with the Company's reasonable requests for access to senior personnel engaged in the Supplier's performance of this Contract; and
- 6.6 granting access to the Sites to staff of the incoming suppliers (with the approval of the Company) for the purpose of mobilisation and transitioning of the Services. This will include providing access to all plant, equipment, contract related records, staff, and escorting the incoming staff as requested by the Company's Representative.

7. In the event of a failure by the Supplier to comply with any of the obligations set out in this Schedule 15 (Demobilisation) in the final 12 months of this Contract, the Company shall be entitled to retain from each payment per period due to the Supplier a sum of 5% equal to the cost to the Supplier of performing the relevant obligation(s). The Parties agree that such retention shall not be a penalty and is fair and reasonable and represents a genuine pre-estimate of what the cost of performance to the Supplier would have been.

8. The Supplier is required to notify any Sub-Contractors of the relevant demobilisation procedures set out in this Schedule 15 (Demobilisation) and/or the Demobilisation Plan.

9. In relation to any Necessary Consents, these will not transfer from the Supplier to an incoming supplier or suppliers and the incoming supplier or suppliers shall be required to obtain these in accordance with Clause 6 of the Contract.

SCHEDULE 16: Health, Safety, Quality and Environmental Requirements

1. SUMMARY

1.1 POLICY

At all times the Supplier shall have and shall maintain an appropriate health and safety policy ("Health & Safety Policy") which outlines a commitment to the prevention of injury, ill health and continual improvement by establishing, implementing and maintaining a programme for achieving its objectives which includes:

- designation of responsibility and authority for achieving objectives at relevant functions and levels;
- the means and time-frame by which the objectives are to be achieved; and
- commitments to the prevention of injury and ill health, compliance with applicable legal requirements and with other requirements to which the organization subscribes, and to continual improvement.

The Supplier shall demonstrate commitment by ensuring the availability of resources essential to establish, implement, maintain and improve occupational health and safety.

1.2 ORGANISATION

1.2.1 Control

The Supplier shall define roles and allocate responsibilities and accountabilities to facilitate effective health and safety management and shall ensure that persons in the workplace take responsibility and are accountable for the aspects of occupational safety and health over which they have control.

1.2.2 Competency and Training

The Supplier shall ensure that any persons under its control are competent on the basis of appropriate education, training or experience. It shall provide training or take other action to meet these needs, evaluate the effectiveness of the training or action taken, and retain associated records.

The Supplier shall designate sufficient competent staff, subject to the approval of the Company's Representative or designated deputy, to support the Supplier to assist him them in undertaking the measures they need to take to comply with the requirements and prohibitions imposed upon them by or under the relevant statutory provisions as detailed in the Management of Health and Safety at Work Regulations 1999 regulation 7 or any subsequent amendments.

As a guide, the level of competency can be assumed to be a higher (Diploma level) qualification accredited by the Qualifications and Curriculum Authority or the Scottish Qualifications Authority.

1.2.3 Communication and Consultation

The Supplier shall establish, implement and maintain procedures for effective communication both internally and with other suppliers, visitors and interested parties.

The Supplier shall establish, implement and maintain a procedure for the participation of workers in respect of hazard identification, incident investigation and development and review of health and safety policies and objectives.

The Supplier shall consult and ensure workers are represented on occupational health and safety matters. Workers shall be informed about their participation arrangements, including who is their representative.

1.3 ARRANGEMENTS FOR ASSESSING AND MANAGING RISK

1.3.1 The Supplier shall issue health and safety procedures and associated documentation, the format and content of all documentation and procedures being subject to approval of the Company.

1.3.2 The Supplier shall establish, implement and maintain a procedure for the ongoing hazard identification, risk assessment, and determination of necessary controls. The Supplier's methodology for hazard identification and risk assessment shall be defined with respect to its scope, nature and timing to ensure it is proactive rather than reactive and provide for the identification, prioritization and documentation of risks and the application of controls. They shall be:

- when determining controls, the Principles of Prevention (detailed in the Management of Health and Safety at Work Regulations 1999, regulation 4) should be applied;
- the Supplier shall ensure insofar as is reasonably practicable, that persons (whether in its employment or not) who may be affected by the Services are not exposed to risks to their health and safety;
- the Supplier shall document the significant risks and display the assessment and method statement at point of works; and
- the Supplier shall keep the results of hazard identification, risk assessments and control measures up-to-date

1.3.3 The Supplier Personnel and any sub-contracted personnel shall hold a current and approved health and safety certification (for example an approved industry certification such as the CSCS card) in order to undertake works on any part of the TfL Network and Sites. The Supplier shall appoint a person with overall responsibility for managing health and safety when undertaking operational maintenance activities and other associated property works including verification and certification works and the operation of a permit to work system.

1.4 MONITORING AND REVIEW

The Supplier shall review their safety management system at regular and planned intervals, and adjusted as necessary, to ensure that the objectives set in the Supplier's Health & Safety Policy are achieved.

1.4.1 The Supplier shall develop implement and maintain monitoring and measuring processes including but not limited to:

- independent auditing;
- workplace inspections;
- regular meetings and communications at all levels; and
- feedback to staff regarding health and safety concerns.

1.4.2 Incident Investigation

The Supplier shall establish, implement and maintain a procedure to record, investigate and analyse safety incidents in order to:

- determine the root cause of the incident (management failings) and the subsequent underlying occupational health and safety deficiencies/other factors that contributed to the incident;
- identify the need for corrective and preventative action and opportunities for continual improvement;
- all incidents occurring on TfL premises are to be reported to the Company using the TfL Accident and Incident Reporting Systems;
- in respect of serious incidents which have (or could have) resulted in significant injury or property damage and those incidents where enforcement authorities are involved or have been informed, the Supplier shall ensure that procedures exist to ensure that TfL are informed immediately;
- the results of incident investigations shall be documented and maintained and reported to TfL at least quarterly; and
- the Supplier will fully cooperate and liaise with the Company's Representative and any other parties regarding investigation into incidents in compliance with the Company's requirements.

1.4.3 The Company reserves the right to stop any works, operations or actions of Supplier Personnel or Sub-Contractors, if in the opinion of the Company or his representative, the manner in which these are being undertaken constitutes a risk to the safety and or health of persons or damage to property.

1.4.4 When establishing and reviewing its objectives, the Supplier shall consider its technological options, its financial, operational and business requirements, and the views of relevant interested parties.

1.5 AUDIT

1.5.1 The Supplier shall ensure that all processes in respect of safety and health are in place during the life of the contract are documented and made available for inspection and/or audit by the Company or its representatives at all times.

1.5.2 The Company shall have the right to conduct or commission an audit of the Suppliers' health, safety, quality, and environmental management system and activities at any time.

2. HEALTH & SAFETY (QUENSH) – LUL sites

The Supplier shall comply with the requirements of the Contract Quensh Conditions (LUL Category 1 Standard S1552 A18) as defined by the following Quensh Menu ("QUENSH") for LUL Sites:

F0780 A18

Contract Menu

This Contract Menu must be used in conjunction with Category 1 Standard S1552 "Contract QUENSH Conditions"

Contract Menu

Contract No: TfL-01230

Contract Name FM Bundle 1 – Technical Facilities Management Services (Communications, CCTV, Access Control and Security Systems)

Client: Transport for London

Supplier: Telent Technology Services Limited

Principal Contractor: Yes

No

Guidance

The menu is a tool which is used by the Company to identify conditions that apply to specific contracts and communicate these conditions to the Supplier.

How to complete the menu

- 1) The Company evaluates the scope of work and enters 'Y' or 'N' in the 'Identified by the Client' column of the menu against each condition selected as applicable or not applicable to this Contract. In the 'Other documents / comments' column the Company can make references to other documents which are supplementary information which is available although not contained within the QUENSH manual but should be considered by the Supplier when they review the conditions. Copies of any additional documents identified in the menu shall be made available to the Supplier. All documents referenced in the menu shall be current issue, unless otherwise advised. This column can also be used to communicate information (comments) to the Supplier which may be of use to the Supplier when reviewing the conditions.
- 2) The Company fills in 'Company menu (Invitation to Tender)' section on the last page of the menu and issues the menu as part of the ITT.
 - a) The Supplier receives the ITT, evaluates the scope of work and, as a requirement of the tendering process, inserts 'Y' or 'N' in the 'Identified by the Supplier' column of the menu against each condition selected as being applicable. These selections may be different from those identified by the Company. Where the Supplier's selection differs from the Company's selection, a clear explanation of the reason for these differences shall be given by the Supplier. A reference to these explanations shall be put in the 'Reference to explanation' column on the menu.
 - b) The Supplier representative signs and dates the 'Supplier menu (Tender)' on the last page of the menu and submits it with the tender, for consideration by the Company.
 - c) Differences in the Company and Supplier menu selections will be discussed and resolved with the Company at subsequent tender review meetings. The agreed final version of the menu selections shall form a mandatory part of the Contract and shall be complied with by the Supplier and their sub-contractors.
 - d) The menu shall be subject to project version and document control.

Queries on the menu

Any queries in relation to the Contract QUENSH Conditions selected on the menu are to be referred to the Company's Representative, see contact details/address on last page of the menu.

Contract menu

Requirements in QUENSH

Applicable requirements identified by Client				Applicable requirements identified by Supplier	
Section	Topic	Other documents / Comments	Y / N	Y / N	Reference to explanation - see Section 2a in attached Guidance Notes
4	Agreement of the applicable QUENSH contract conditions				
5	Supplier's selection of sub-contractors	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Identification of Safety Critical Activities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7	Works Environmental Management	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Emergency Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Method Statements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Health, Safety and Environment File	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Pre-start LUL health, safety and environment meeting	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	Supplier's site induction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	Site Person in Charge	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14	Staff requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.1	Behaviours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.1.1	Alcohol and drugs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14.2	Control of hours worked	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.2.1	Working Time Regulations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14.2.2	Fatigue	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14.3	Knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.3.1	English language	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14.3.2	Access Card and Worksite Briefing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14.3.3	Visitors to sites	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14.4	General competence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.4.1	Evidencing competence of safety critical staff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14.4.2	Identification of safety critical staff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14.4.3	Competent external safety critical personnel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Applicable requirements identified by Client					Applicable requirements identified by Supplier	
Section	Topic	Other documents / Comments	Y / N	Y / N	Reference to explanation - see Section 2a in attached Guidance Notes	
14.4.4	Training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
14.4.5	Asset specific competence	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
14.5	Medical requirements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
14.6	Identification of Suppliers staff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
14.7	Clothing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
15	Permits and licences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
15.1	LUL specific permits and licences	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
15.2	Permits, licences and certificates for Supplier's staff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
16	The Principles of Access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
16.1	Introduction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
16.2	Access to Stations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
16.3	Access to Track	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
16.4	Access to depots	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
17	Applying for Planned Access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
17.1	Introduction	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
18	Applying for General Access	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
18.1	Constraints that apply to Generic Access	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
19	Access for fault repair	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
20	Operational Assurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
21	Closures and possessions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
21.1	Requirements for closures	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
21.2	Requirements for possessions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
22	Controls at point of access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
22.1	Publication of works	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
22.2	Checks at point of access	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
22.3	Signing-on with the Station Supervisor	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
22.4	Track specific requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
22.4.1	Person providing protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

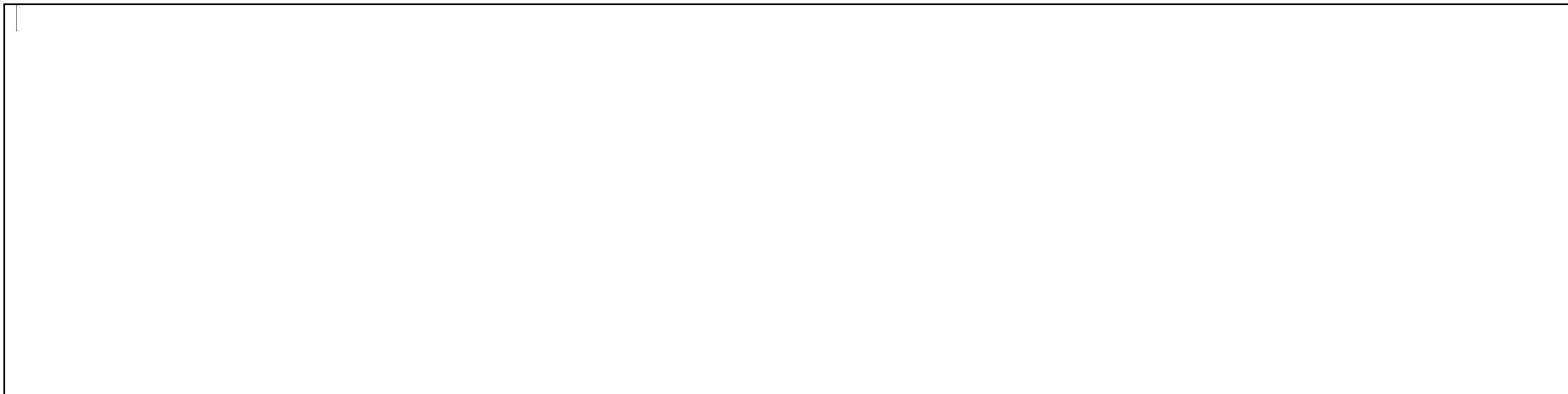
Applicable requirements identified by Client				Applicable requirements identified by Supplier	
Section	Topic	Other documents / Comments	Y / N	Y / N	Reference to explanation - see Section 2a in attached Guidance Notes
22.4.2	Possessions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
23	Removal of supplier's personnel from LUL Premises	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
24	Incidents	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
25	Notification of regulatory concern or action	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
26	Confidential Incident Reporting and Analysis System (CIRAS)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
27	Monitoring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27.1	LUL inspections	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
27.2	Monitoring the supply chain	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
27.3	Health, safety and environmental surveillance by the supplier's personnel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
27.4	Work location inspection and audit	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
27.5	Timescales for rectifying non-compliances	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
28	Radio transmitters and transceivers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
29	Mobile phones	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
30	Knives	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
31	Site health, safety and environment committee	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
32	Site housekeeping and security	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
33	Accidental damage, obstruction or interference with assets	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
34	Delivery of materials	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
35	Conveyance of loads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.1	Conveyance of loads on lifts and escalators	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
35.2	Conveyance of hazardous materials and substances	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
36	Asbestos (non asbestos removal projects)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
37	Working in or near lifts and escalators	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
38	Work on or adjacent to utilities and High Voltage cables (buried services)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
39	Working on or about the track	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
40	Access to electrical sub-stations, working equipment, relay and other secure rooms	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Applicable requirements identified by Client					Applicable requirements identified by Supplier
Section	Topic	Other documents / Comments	Y / N	Y / N	Reference to explanation - see Section 2a in attached Guidance Notes
41	Entering areas with gaseous fire suppression systems	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
42	Fire prevention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42.1	General requirements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
42.2	Temporary fire points	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
42.3	Timber	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
42.4	Composites	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
42.5	Sheeting materials	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
42.6	Gas cylinders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42.6.1	Use of gas cylinders in below ground locations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
42.6.2	Storage of gas cylinders (above ground)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
42.7	Flammable and highly flammable materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42.7.1	Use of flammable and highly flammable materials below ground	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
42.7.2	Storage of flammable and highly flammable materials below ground	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
43	Hot work and fire hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43.1	Hot work	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
43.2	Reasonable notice of works	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
43.3	Precautions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43.3.1	Buildings and assets	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
43.3.2	Gas cylinders	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
43.3.3	Gas detection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
44	Storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44.1	General requirements for storage	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
44.2	Trackside storage	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
44.3	Hazardous materials and substances	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
44.4	Allocation of space on operational property	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
45	Plant and equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
46	Clearance approvals	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
47	Access equipment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Applicable requirements identified by Client					Applicable requirements identified by Supplier
Section	Topic	Other documents / Comments	Y / N	Y / N	Reference to explanation - see Section 2a in attached Guidance Notes
48	Temporary works	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
49	Temporary fences and hoardings	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
50	Temporary lighting and power supplies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50.1	General requirements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
50.2	Lighting in tunnels and shafts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
51	Screening of lights and positioning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
52	Environmental requirements	Refer to SEPARATE Environmental Requirements in Part C of Schedule 16	<input type="checkbox"/>	N/A	N/A
52.1	General environmental requirements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
52.2	Environmental nuisance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
52.3	Water	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
52.4	Waste management	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
52.5	Noise and vibration	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
52.6	Archaeology, historical interest and listed buildings	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
52.7	Wildlife and Habitats	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
52.8	Resource Use	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
52.9	Pest control	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
52.10	Land and water pollution prevention	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
53	Quality requirements	Refer to SEPARATE Quality Requirements in Part B of Schedule 16	<input type="checkbox"/>	N/A	N/A
53.1	Records	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
53.2	Retention period	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
53.3	Availability of records for inspection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
53.4	Statistical process control, audit and inspection procedures	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
53.5	General quality requirements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
53.6	Quality Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Applicable requirements identified by Client				Applicable requirements identified by Supplier	
Section	Topic	Other documents / Comments	Y / N	Y / N	Reference to explanation - see Section 2a in attached Guidance Notes
53.7	Testing and inspection	<input type="checkbox"/>	X	X	<input type="checkbox"/>
53.8	Certification of conformity	<input type="checkbox"/>	X	X	<input type="checkbox"/>
53.9	Quarantine	<input type="checkbox"/>	X	X	<input type="checkbox"/>
53.10	Traceability	<input type="checkbox"/>	X	X	<input type="checkbox"/>
53.11	Maintenance and servicing	<input type="checkbox"/>	X	X	<input type="checkbox"/>
53.12	Design	<input type="checkbox"/>	X	X	<input type="checkbox"/>
53.13	Computer aided design	<input type="checkbox"/>	X	X	<input type="checkbox"/>
53.14	Asset commissioning and handover	<input type="checkbox"/>	X	X	<input type="checkbox"/>

Other requirements / comments

A large, empty rectangular box with a thin black border, occupying the upper portion of the page. It is intended for the user to type or write their responses to the 'Other requirements / comments' question.

Company/Supplier approval

Company Menu (Invitation to Tender)

Prepared by: [REDACTED] Signature: [REDACTED]

Approved by
(the Client's
representative): [REDACTED] Signature: [REDACTED]

Title: [REDACTED]

Address: PALESTRA, 197 BLACKFRIARS ROAD, LONDON SE1 8NU

Phone No: [REDACTED]

Email: [REDACTED]

Revision of this menu: [REDACTED] ✓

Supplier Menu (Tender)

Approved by
(the Supplier's): [REDACTED] Signature: [REDACTED]

Title: [REDACTED]

Address: POINT 3, HAYWOOD ROAD, WARWICK, CV34 5AH

Phone No: [REDACTED]

Email: [REDACTED]

Revision of this menu: [REDACTED] ✓

Contract Menu (Final Approval of Menu)

Evidence shall be recorded of any amendments to the Company's menu which were agreed in establishing the Contract Menu.

Company's
Representative
approval: [REDACTED]

Signature: [REDACTED]

Supplier's
Representative
acceptance: [REDACTED]

Signature: [REDACTED]

3. HEALTH & SAFETY – NON-LUL SITES

The Supplier shall comply with the requirements of the Health and Safety Conditions for Non-LUL sites as detailed in the following document 'Facilities Management Contract: Non LUL locations, including Surface Transport and TfL Head Office locations – Health and Safety Contract Conditions':

Facilities Management Contract: Non LUL locations, including Surface Transport and TfL Head Office locations- Health and Safety Contract Conditions

Issue no.:	A1		Issue date:	April 2016
			Review date:	April 2018

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Purpose

The purpose of the TfL Surface Transport and non-LUL locations Health and Safety Contract Conditions (the “HSCC”) is to control risk down the supply chain for contracted work on TfL Network property or other TfL premises under the remit of Surface Transport and TfL Head Offices.

Note: The requirements detailed are in addition to legislative requirements, British and European standards and industry good practice.

1 Scope

This HSCC applies to facilities management works, activities or services supplied to Company which take place on Company Operational Property or other premises under the management of Surface Transport which affect/impact upon the operation of the Company network. The Company determines the relevant conditions on the basis of risk associated with the works, activities or Services being undertaken.

2 Roles and Responsibilities

2.1 The Company

The Company shall:

- 1) be responsible for ensuring the requirements outlined in the HSCC are managed in all contracts where they are applicable; and
- 2) identify the point of contact that will represent the Company.

This representative shall be responsible for ensuring compliance with the Company’s requirements. This work may be amalgamated within other, recognised roles within the Company.

2.2 The Supplier

The Supplier shall be responsible for managing the activity of the Supplier and their supply chain so that compliance with the HSCC is achieved.

The Supplier shall:

- 1) be responsible for satisfying HSCC requirements applicable to the Services;
- 2) have or develop a comprehensive knowledge of the HSCC;
- 3) have or develop an understanding of how “works” can impact on the Surface Transport network, and non-LUL locations, including the Company’s staff, customers and assets;
- 4) ensure that all suppliers forming part of the supply chain (sub-contractors), including nominated Company contractors, comply with all applicable HSCC; and
- 5) upon award of the Contract, identify the point of contact who will represent the Supplier and their supply chain, where applicable.

This representative shall assure the Company that full compliance with the HSCC is being achieved by the Supplier and its supply chain, where applicable. This work may be amalgamated within other, recognised roles within the Supplier.

Note: The intention is to accommodate this work within the Supplier's delivery team without creating a specific role. The point of contact should be a co-ordination function.

3 Arrangements for the Management of Health and Safety Risks

The Supplier shall develop and document arrangements for managing health and safety risks. The Supplier shall:

- 1) ensure that the arrangements demonstrate the approach and structure of the health and safety management to be employed in performance of the Contract; and
- 2) maintain and periodically review the arrangements and forward amendments to the Company.

4 Supplier's Selection of Sub-Contractors

The Supplier shall ensure that its procurement management system evaluates and selects Sub-Contractors not solely on the basis of cost, but also for their health and safety knowledge, skills, experience and their ability to meet the Company's requirements. The Supplier shall provide, with their tender, details of the basis for the selection of all proposed Sub-Contractors and how they are selected.

5 Construction (Design and Management) Regulations (CDM) 2015

See Clause 27 of the Contract.

6 Emergency Plan

Where the Supplier has control of any of the Sites or enclosed/segregated area, the Supplier shall prepare emergency plans (being a document setting out a planned and co-ordinated response to a sudden hazardous occurrence or danger, which requires immediate action) relating to fire and other health, safety and environmental emergencies and ensure that all Supplier Personnel are aware of the arrangements set out therein. The emergency plan shall define the arrangements, procedures and measures that will be implemented to eliminate or minimise the identified hazards, and the potential hazards, including those specified by the Company. The emergency plan shall:

- 1) clearly state the procedures to be adopted for each emergency;
- 2) list the duties and responsibilities of member of Supplier Personnel on site;
- 3) identify a party with responsibility for liaison with the emergency services; and
- 4) include the names and telephone numbers of the Supplier Personnel (including mobile telephones if applicable) who can organise or assist with emergency action (including safety, fire or environment) in the event of an incident occurring on any of the Sites outside normal working hours or when the Supplier is absent from the Sites.

All such plans shall reflect and be complementary to the local Company evacuation procedures for the location.

The emergency plan shall be kept on site along with any other documents, posters or notices required by law or directed by the Company. Where the works, activities or Services being provided is carried out on an “ad-hoc” basis, e.g. fault repair, the emergency plan shall always be available on site while work is in progress. The Supplier shall provide the Company with a copy of the emergency plan.

Where the Supplier is working within a non-enclosed/unsegregated area under the management of the Company, the Supplier shall ensure that all Supplier Personnel are made aware of and comply with the emergency arrangements for the relevant Sites.

7 Risk Assessments and Method Statements

The Supplier is free to use its own format for risk assessments and method statements.

The Supplier shall provide the Company with a schedule of risk assessments and method statements 21 days prior to the Commencement Date. This shall include risk assessments for any chemical being used. The Company shall notify the Supplier within seven (7) days of any risk assessments or method statements that the Company wishes to review.

In the event of any changes or additions to the documentation referenced in the schedule of risk assessments, a revised schedule of risk assessments shall be provided to the Company 21 days in advance of the application of the new or revised arrangements.

8 Health, Safety and Environment File

The Company shall provide information and any other stored health and safety information on the known or potential hazards and risks that are present at a location. The Supplier shall supply the information to any party requesting it who is either engaged or potentially involved in work at that location and shall provide the Company with all relevant information to ensure that any health, safety and environment file is adequately maintained.

9 Pre-start Company Health, Safety and Environment Meeting

The Company shall determine the need for a specific pre-start health, safety and environment meeting. Where required, the Company shall invite (as appropriate) representatives from the London Fire and Emergency Planning Authority (LFEPA), the Supplier's Representative, Supplier site representatives and any specialist representatives to attend a pre-start meeting, such as a representative from the Company Enforcement and On-Street Services team to discuss work likely to affect passenger or traffic flow, crime prevention and general security.

10 Supplier's Site Induction

The Supplier shall ensure that Supplier Personnel and any visitors to the Sites are made aware of the Supplier's health, safety and environmental requirements specified in the Contract relevant to site safety.

11 Supervision

The Supplier shall submit to the Company details of the Supplier's proposed level of supervision of activities or works on site.

12 Access to Health and Safety Advice and Support

The Supplier shall provide the name, contact details and evidence of competence of the health and safety advisor appointed to support the Contract.

13 Provision of Health and Safety Performance Information

The Supplier shall provide health and safety performance data in accordance with the requirements and timescales notified by the Company. This information may include, but shall not be limited to, incidents, hours worked and results of monitoring activities, relating to its own organisation and any Sub-Contractors employed pursuant to the Contract.

14 Supplier Personnel Requirements

14.1 Behaviours

14.1.1 General

The Supplier shall take appropriate actions to prevent and eliminate unacceptable behaviour or conduct. The Supplier shall comply with site rules and the instructions of Company employees or representatives, where these do not conflict with the health and safety of staff or safe operation of the property/infrastructure. The Company reserves the right to object to and (where appropriate) immediately expel any of the Supplier Personnel or supply chain employed on the Services.

14.1.2 Alcohol and drugs

Supplier Personnel are prohibited from consuming alcoholic drinks or consuming or using drugs at work, or from being under the influence of alcohol, drugs or other substances that might impair the proper performance of their duties on the Sites or Company infrastructure. Drugs prescribed by a medical practitioner shall be assessed for their impact on the safe completion of tasks and compatibility with the working environment.

14.1.3 Smoking

Supplier Personnel are prohibited from smoking on the Sites, including the use of e-cigarettes or vaping devices.

14.2 English language

The default language for all Supplier Personnel and Services to the Company shall be English and this requirement shall extend to:

- 1) oral communications; and
- 2) all written communications and instructions including any training or technical material provided by any Supplier following the modification, renewal or replacement of any asset.

Those Supplier Personnel that have responsibility for managing the Contract whilst working on the Sites or Company infrastructure shall be able to communicate in both written and oral English to a standard appropriate to the tasks being performed.

The Supplier shall ensure that an English speaking supervisor is present during works at all Sites/Company infrastructure.

The Company may permit the presence of Supplier Personnel who are not competent in the English language provided that the Supplier can demonstrate to the satisfaction of the Company that:

- 1) such Supplier Personnel will receive the required safety training/briefing (including any emergency procedures) before commencing work pursuant to the Contract; and
- 2) the Supplier shall make appropriate arrangements to ensure that instructions are effectively communicated to, and understood by, all such Supplier Personnel.

15 Competence

15.1 General Competence Requirements

The Supplier shall ensure that all Supplier Personnel and those of its appointed supply chain have the necessary knowledge, skills and experience and are fully aware of the HSCC and the controls and processes to manage the risks pertinent to both the Services and individual staff roles. This shall include, but shall not be limited to, the following:

- a) H&S advisors to have Chartered H&S status;
- b) members of the management team to hold IOSH Managing Safety (or equivalent); and
- c) supervisory Supplier Personnel to hold IOSH Working Safety (or equivalent).

The Supplier shall provide, at the Commencement Date and thereafter maintain, a matrix of training certification and competencies for all parties delivering the Contract.

The Supplier shall:

- 1) hold a record of all licences, permits and certificates issued to Supplier Personnel;
- 2) allow sufficient time to ensure that Supplier Personnel are properly trained and registered before performing Services under the Contract; and
- 3) ensure that evidence of licences, permits, certificates and other training are available at the relevant Sites, or in the case of mobile workers, in their vehicles.

If Supplier Personnel fail to produce the required licences when requested to do so by any member of the Company's staff, they shall be required to leave the Site(s)

immediately. No cost or delay incurred by the Supplier as a result of such a failure will be accepted by the Company.

15.2 Asset Specific Competence

Suppliers shall demonstrate to the Company the competency to perform works on specific assets as required by the governing standards.

15.3 Company Specific Permits and Licences

Where licences or permits are required, the Supplier shall ensure these are prominently displayed at all times during performance of the Services and in a position and manner approved by the Company. If the licence or permit is defaced, removed or obstructed without authority, the Supplier shall apply for it to be replaced immediately (at its own cost).

The Supplier shall apply for permits, licences, closures or authorisations to the Company in accordance with the timescales associated with the specific permit, licence or authorisation requested, or at least 14 days prior to the proposed commencement date, whichever is greater.

Permits, certificates and licences are issued on an individual basis and are not transferable to other persons or organisations. If any of these documents are lost or damaged, the Supplier must advise the Company as a matter of urgency.

16 Identification of Supplier Personnel

Supplier Personnel shall carry a means of identification displaying their name, photograph and their employing company's name at all times, and for Sub-Contractors, this shall also include the Supplier's name.

Supplier Personnel shall wear high visibility clothing, which carries the Supplier's name, at all times when on the Sites or on or about the Company's network.

Where, following a risk assessment, the wearing of a separate high visibility garment could produce a risk of personal injury, the Supplier shall agree other arrangements with the Company's Representative to ensure that Supplier Personnel are easily identified.

17 Clothing

The Supplier shall not wear any garment or article that impedes their vision or hearing when working on the Sites/Company's infrastructure, unless required as part of a safe system of work, such as hearing protection.

The wearing of hats, clothing with hoods and any other headwear is prohibited when working on the Sites/Company's infrastructure, with the exception of:

- 1) hoods or headwear required as PPE in response of a risk assessment; and
- 2) headwear specifically designed:
 - to be compatible with PPE; **and**
 - not to impede vision or hearing.

18 Not used.

19 First Aid

The Supplier shall make its own first aid arrangements.

20 Access

20.1 General Access Requirement for Locations and Buildings

A minimum of 72 hours' notice shall be given by the Supplier to the Company's Representative in order to gain access to the Sites.

20.2 Shared Access

There may be instances where the Supplier cannot have sole occupation of a Site. In such circumstances, the Company shall facilitate a discussion between the relevant parties and shall reach a working agreement with the relevant parties.

20.3 Access to Location Under the Control of a Principal Contractor

Where access is required to a location under the control of a Principal Contractor (as defined in the CDM Regulations), arrangements shall be made via the Company's Representative. The Supplier shall comply with the Principal Contractor's access requirements, site rules and PPE requirements. The Supplier shall provide the Principal Contractor with the risk assessments and method statements for the activities being undertaken within the area under the Principal Contractor's control.

20.4 Access to Secure Rooms

Requests for access to secure rooms shall be requested via the Company's Representative. All equipment within such rooms must be protected by a dust-proof screening. The Supplier shall not use such rooms as stores or workrooms.

20.5 Entering areas with gaseous fire suppression systems

Certain rooms on the Sites are currently fitted with a gaseous fire protection system. The Supplier shall not enter these rooms without the Company's Representative's prior approval.

20.6 Controls at Point of Access

The Supplier must be prepared to show evidence of:

- 1) any required authorisation, certificates and licences (as appropriate);
- 2) appropriate Personal Protective Equipment (PPE);
- 3) the relevant health, safety and environment arrangements and safe systems of work; and
- 4) risk assessments, including Safety Data Sheets for any chemicals to be used or stored on a Site.

21 Incidents

21.1 Incident Management

The Supplier shall have contingency plans and remedial measures for incidents, including provision of support for individuals experiencing trauma as a consequence of an incident.

21.2 Notification and Reporting of Incidents

The Company shall be notified as soon as practicable of incidents which:

- 1) affected or could have affected the Company's employees, customers, or other parties affected by the Company's operations; or
- 2) occurred within the boundary of the Sites or Company infrastructure or affected the Company's operations.

To whom notification shall be made shall be agreed with the Company via the Company's Representative. The Supplier may make initial notification verbally.

The Supplier shall provide the Company with a written incident report within 24 hours of the incident occurring.

21.3 Accidental Damage, Obstruction or Interference with Assets

Should any damage occur to an asset, the Supplier shall immediately report the damage to the Company's Representative on site (where available) or to the Company's Representative for the Contract.

The Supplier is not permitted to rectify the damage for works out of scope without authorisation from the Company, as this may increase the risk of a consequential incident.

21.4 Notification to Regulatory Bodies

The Supplier shall directly notify the Health and Safety Executive ("HSE"), where required under the Reporting of Injuries, Diseases or Dangerous Occurrences Regulations ("RIDDOR"), of incidents related to the Company's business which:

- 1) involved Supplier Personnel; or
- 2) occurred outside the boundary of the Sites/Company's infrastructure.

Such notification shall be made within the time-scale and by the means specified by the relevant regulator.

21.5 Incident Investigation

The Supplier shall ensure that all incidents are subject to an appropriate investigation by a competent person. The investigation shall:

- 1) identify the immediate cause(s) of the incident;
- 2) identify the root cause(s) of significant incidents;

- 3) identify and implement actions to minimise the risk of recurrence; and
- 4) provide a record of the key findings and recommendations of the investigation.

Suppliers shall provide copies of the incident investigation report and details of the actions being taken to prevent recurrence to the Company as soon as reasonably practicable.

The Supplier shall cooperate with any Company investigation undertaken in relation to the incident(s).

21.6 Notification of Regulatory Concern or Action

The Supplier shall notify the Company of any regulatory concern or action related to the performance of the Services no later than by the end of the following Working Day. The notification shall include a description of the concern or action, the response and any additional information to aid understanding. Copies of any communication made in connection with the regulatory concern or action shall also be provided by the Supplier.

22 Monitoring

22.1 Health, Safety and Environmental Surveillance by Supplier Personnel

The Supplier shall submit to the Company details of the Supplier's proposed level of Site health, safety and environmental surveillance, together with the nomination of health, safety and environmental supervisors and officers who will have an overview of all Site health, safety and environmental matters. Such details shall include outline arrangements for:

- 1) safety tours and detailed safety inspections; and
- 2) the auditing of Site activities to ensure that the correct health, safety and environmental management procedures are being followed.

22.2 Monitoring of Supplier Personnel

The Supplier shall monitor the performance of Supplier Personnel or other parties within its supply chain and ensure that the results are used to:

- 1) control their activities; and
- 2) assess its suitability for future works.

These results (records) shall be made available to the Company upon request.

22.3 Company Inspection and Audit of Services Locations

The Supplier shall provide full and free access to the Company for the purpose of carrying out audits and site inspections to monitor compliance with the HSCC.

The Company may at any time undertake inspection of the equipment and audit or check any aspect of the Supplier's performance of the Contract. The Company shall inform the Supplier of the objective of any audit prior to its commencement.

The Supplier shall promptly provide all reasonable co-operation to the Company in relation to any inspection, audit or check, including, but not limited to:

- 1) granting access to any of the Sites, equipment, plant, machinery or systems used in the Supplier's performance of the Contract, or where such Sites, equipment, plant, machinery or systems are not the Supplier's own, using reasonable endeavours to procure such access;
- 2) ensuring that appropriate security systems are in place to prevent unauthorised access to, extraction of and alteration to data during the audit;
- 3) making any contracts, other documents and records referred to in the HSCC available for inspection; and
- 4) providing a reasonable number of copies of any contracts, other documents and records referred to in the HSCC, required by the auditor, or granting copying facilities to the auditor for the purposes of making such copies.

The Company shall have the right to carry out such inspections or audits, as it considers necessary. The Supplier shall make available, at the Supplier's own cost, any of its specialist Supplier Personnel as may be agreed necessary for the performance of such inspections or audits carried out by the Company.

The Supplier shall work closely and co-operate fully with the Company and Company staff on matters of health, safety and environment. The Supplier shall fully and unreservedly accept that responsibility for the safety of the Services and works rests with the Supplier. The participation of Company staff or their agents in inspections and audits does not in any way absolve the Supplier from that responsibility.

22.4 Timescales for Rectifying Non-Compliances

The Company and the Supplier shall agree a reasonable timescale for rectifying any non-conformances or sub-standard conditions that are identified during any audit or inspection.

23 Site Health, Safety and Environment Committee

The Company shall consider whether or not there is the need for a separate health and safety meeting, and consideration shall include the size and extent of the works and also the level of risk involved.

Where required, the Supplier's health and safety officer(s) or designated representative shall attend the meeting, to be established and chaired by the Supplier's Representative.

Where no specific health and safety meeting is required, such matters shall be dealt with through the contract performance meetings under Schedule 18 (Performance Measurement) at least once each Period or more regularly if required.

The Supplier shall assess and implement without delay any decisions or recommendations made at the meeting.

24 Protective Barriers

The Supplier shall provide suitable barriers in work areas, including provision for associated exclusion zones, where required, to prevent unauthorised access or harm to Company staff, customers and the general public.

25 Site Security

Access gates must be kept shut at all times. Where it is necessary to have a gate open for the movement of materials, the Supplier shall place Supplier Personnel at the gate to prevent unauthorised access.

The Supplier shall make the Sites safe and secure at the end of each shift and shall fit all access doors with suitable locks for this purpose.

26 Site Housekeeping

The Supplier shall keep the Sites in an orderly state appropriate to the avoidance of danger to persons and avoidance of adverse impact on the environment.

Fire exits and escape routes must be kept clear of obstructions and flammable material at all times.

Toxic or flammable substances such as paint, thinners, varnish etc. shall be stored in sealed tins at all times when not in use.

The Supplier shall ensure that the Sites are free from all of the Supplier's equipment, materials and waste at the end of each day, on completion of the works/Services or when the Sites are returned to normal operations, unless storage is authorised by the Company's Representative on site (where available) or the Company's Representative for the Contract.

The Supplier shall make suitable provision for disposing of unused or redundant assets and materials, and is responsible for determining the correct disposal methods. Consideration should be given to reusing and recycling these materials. The Supplier shall ensure that the Company is informed of plans for disposing of assets and materials.

27 Storage

27.1 General Requirements for Storage on the Sites

The Supplier shall:

- 1) ensure that all storage locations are agreed with the Company;
- 2) not store any material in a position where it could fall, slip, roll or be blown onto operational equipment and facilities, public highway, or walkways;
- 3) carry out a thorough safety inspection at the end of each shift and after use of the storage area to ensure that stored items are secure;
- 4) comply with all legislation and relevant Environment Agency guidance notes in respect to oil, liquid and other potential pollutant storage;

- 5) store liquids in enclosures or trays to contain any spills or drips;
- 6) protect and store materials in such a way as to minimise unnecessary damage, wastage, spoiling of goods or environmental harm; and
- 7) not store any hazardous materials on the Sites except where permitted and agreed in advance by the Company, in the quantities and containers and in the conditions and locations specified.

27.2 Use of Designated Cleaner's Cupboards

The Supplier may make use of any assigned cleaner's cupboards for the storage of cleaning materials. No other types of material may be stored.

No dedicated storage provision will be provided at Sites where such facilities are not available.

27.3 Roadside Storage of Materials

The Supplier shall only store at the roadside the types of materials relating to the specific activities and requirements of the works/Services at that site in the quantities required to complete the relevant task. All excess material shall be removed from the roadside on completion of the task.

28 Delivery of Materials

28.1 Conveyance of Materials

The Supplier shall not deliver materials through public areas of the Sites during operational hours, except with the approval of the relevant Company operational manager. The Supplier shall also consider the environmental impacts associated with deliveries to prevent nuisance to nearby premises.

Where it is necessary to wedge open fire or glass doors for the movement of material and equipment, the wedges must be removed immediately after the movement is complete.

28.2 Conveyance of Hazardous Materials and Substances

Where approved for use by the Company, the Supplier shall transport materials and hazardous substances in the required containment and in a manner addressed and agreed with the Company under an accepted safe system of work.

29 Asbestos (Non-Asbestos Removal Projects)

The Company shall provide information on relevant asbestos registers to the Supplier. In TfL Head Office Sites, no work is to be undertaken without first applying for and obtaining an asbestos impact assessment.

In the absence of information and prior to any works being undertaken, the Supplier shall confirm the presence or absence of any asbestos and the status and condition of the proposed work locations to the Company.

Where the Supplier believes that they have disturbed asbestos as a consequence of its works, it shall stop work immediately and notify the Company's Representative for the relevant Sites or assets.

The Supplier shall ensure that all Supplier Personnel are fully aware of the Company's requirements in respect of asbestos management.

The Supplier shall keep records of all disturbances of asbestos and details of its Supplier Personnel who were potentially exposed.

30 Isolation of Electrical Services

Under no circumstances is live working permitted. The Supplier shall not interrupt electrical services without permission from the Company's Representative.

31 Work On or Adjacent to Utilities and Overhead/Buried Services

The Supplier shall consider the presence of overhead/buried services when planning works. The Supplier shall consult with the Company as early as possible to ascertain whether any electrical distribution cables or apparatus, or other utility services will be affected by the proposed works.

The Supplier shall ensure work methods take account of overhead/buried services. The Supplier shall ensure all risk assessments consider such hazards and stipulate the controls required to prevent such hazards being realised. The Supplier shall make all necessary arrangements to safeguard the overhead/buried services.

No construction activity may be carried out in the proximity of any services unless prior permission has been given by the utility provider and the Company.

32 Illumination of Hazardous Areas and the Provision of Warning Signs

The Supplier shall ensure that hazardous areas for which it is responsible are adequately illuminated and relevant warning signs are provided/suitably displayed at all times.

33 Temporary Lighting and Power Suppliers

The Supplier shall obtain approval from the Company for the design of lighting or other electrical installations where it is proposed to use the Company's power supply. This is to allow the Company to check that the lighting will not cause any problems. The use of generators shall be approved by the Company in advance.

34 Screening of Lights and Positioning

All lights or lasers provided by the Supplier shall be placed or screened so as not to cause any confusion with or interference with any signal lights on the highway or signal lights of any local or other authority. If directed, the Supplier shall take appropriate action, and replace any such lights/lasers in positions to be approved by the Company. This approval shall not preclude the Company giving further directions about the replaced lights or lasers.

Temporary lighting festoons shall have cages around bulbs and if in exterior locations, shall have the correct IP rating.

Lights shall be angled and controlled so as to not interfere with adjacent properties and to minimise glow in the sky.

35 Fire Prevention

35.1 General Requirements for Fire Prevention

The Supplier shall not:

- 1) use solvent based products except where it is agreed with the Company that they are needed for technical reasons;
- 2) dispose of waste or other materials by burning on any site;
- 3) take or store anywhere on the Sites or Company infrastructure any cylinders of industrial or flammable gases and containers of flammable or volatile substances without the prior written permission of the Company;
- 4) overload power sockets at any time or use any adapters in connection with electrical equipment and power outlet sockets;
- 5) relocate existing fire points;
- 6) obstruct existing fire points, call points, hydrants and extinguishers ensuring that they are available for operation at all times;
- 7) obstruct or obscure exits, signs and means of access, emergency stairs and doors;
- 8) use, or permit to be used, firefighting equipment and appliances for any purpose other than firefighting;
- 9) use or provide dry powder extinguishers;
- 10) store, or allow to accumulate, any flammable or combustible materials on site, except as authorised by the Company; and
- 11) obstruct, interfere with or remove existing fire plans.

The Supplier shall:

- 1) ensure that all Supplier Personnel are fully aware of Company requirements in respect of fire prevention and protection;
- 2) take strict precautions to protect the Sites, any adjacent property and all persons from fire;
- 3) minimise the quantities of approved flammable materials temporarily stored, which shall at all times be the minimum consistent with safety and construction requirements;
- 4) remove immediately all empty drums, empty containers, surplus or waste material and used packing materials from operational premises at the end of each working shift;

- 5) minimise all fire risks, including mopping up spillages or absorbing them in sand or other suitable material which shall then be disposed of by the Supplier;
- 6) ensure that existing facilities at the Sites remain accessible;
- 7) request, via the Company, the isolation of fire detection equipment when any works may have an adverse impact on the equipment, e.g. smoke or dust, ensure that de-isolations are performed at the end of each period of work unless current exemptions are in place;
- 8) implement a system of hourly checks of the entire site in the event of such isolation being approved;
- 9) provide suitable and sufficient fire fighting equipment throughout the site when the output of a risk assessment indicates an increase in the risk of fire at any work site or when required to do so by the Company;
- 10) provide and maintain fire points in each work area and working level when the output of a risk assessment indicates an increase in the risk of fire at any work site or when required to do so by the Company. In all cases a fire point must be located within 20 metres of each of the Sites;
- 11) protect the fabric of the building, its assets and decorations with suitable non-combustible material and take every precaution to prevent damage by scorching or fire;
- 12) provide the Company with full information on moves and consequent changes, however minor, which may affect fire plans;
- 13) prepare emergency plans that reflect the Company's local arrangements;
- 14) make such alterations and additions to the fire protection arrangements as the Company may reasonably require;
- 15) make information available on request to the Company and any other authority that requires it; and
- 16) make adequate provision for raising the alarm in case of fire.

35.2 Temporary Fire Points

Where identified as being required by either a risk assessment or by the Company, the fire point shall be constructed by the Supplier in a manner which is easily recognisable.

35.3 Hot Works

Where hot works are being undertaken by the Supplier, including work causing heat, dust and smoke generation, a "permit to work" system shall be used (see paragraph 35.5 below). Where activities will create heat, dust or smoke, any smoke detection system present must be disabled, with the prior agreement of the Company's Representative on site.

35.3.1 Fire Watch

Areas containing easily ignitable materials and places affected by flame, sparks or heat are to be inspected regularly by the Supplier during the works and at the cessation of works, to ensure that no conditions exist which may lead to an outbreak of fire.

35.4 Gas Cylinders

35.4.1 Storage of Gas Cylinders

The Supplier shall:

- 1) only store gas cylinders in locations approved by the Company;
- 2) not store them in a position that will cause an obstruction to passageways, passenger areas, or staff accommodation, or be near any source of ignition;
- 3) ensure that cylinders are stored in locked cages, kept vertical and properly fixed and supported;
- 4) ensure that all hoses and cylinder keys are removed from cylinders and kept close to hand;
- 5) use cylinder trolleys for all movements of gas cylinders and all cylinders shall be secured to the cylinder trolley by either a suitable chain or strap; and
- 6) provide signage at the entrance of premises when gas cylinders are being stored.

35.4.2 Use of Gas Cylinders

Hoses connected to gas cylinders shall be of the braided or armoured type to prevent damage and risk of gas leakage and fitted with flash arresters.

35.5 Permit to Work

Due to the operational criticality of the Services, the Supplier shall appoint competent person(s) to operate stringent permit to work/access procedures. Before any work is carried out on any of the Sites, Supplier Personnel shall contact the Supplier's Representative and obtain a permit to work/access as necessary.

Permit to work systems shall include, but shall not necessarily be limited to:

- a) electrical systems;
- b) boilers and pressure systems;
- c) hot works;
- d) confined spaces; and
- e) certain working over water tasks.

Permit to access systems shall include, but shall not necessarily be limited to:

- a) access to ceiling voids in buildings;
- b) roof access; and
- c) restricted drains access. The Supplier shall note that a number of drains on the Sites are considered hazardous and any permit to access must be agreed in advance with the Company.

35.6 Electrical Services

The Supplier shall seek information on electrical integrity of the Sites or supplies and their isolation from the Company's Representative.

35.7 Working at Height

Prior to any roof construction or repair being undertaken, the Supplier shall consult with the Company's Representative with regards to the ability of a given roof to bear maintenance loads and foot traffic prior to carrying out the works.

Properly tended and secured ladders may be used if the job is one-off and does not involve 2-handed working at height. For a job which requires frequent ascent/descent, which takes more than 30 minutes or requires two handed working, proper, purpose-designed platforms shall be used by the Supplier.

35.8 Plant Rooms

The Supplier shall only enter plant rooms with the authority of the Company's Representative.

Works on the sewage systems and electrical distribution boards shall only be carried out by specialist Supplier Personnel.

Where isolation of the fresh water and sewage discharge systems is required, the Supplier shall consult with the Company's Representative prior to carrying out the works.

36 Temporary Works

The Supplier shall:

- 1) provide, maintain and remove, on expiry (or earlier termination) of the Contract, all temporary works needed for performance of the Services under the Contract;
- 2) submit detailed design drawings, calculations and specifications for all temporary works to the Company for acceptance;
- 3) ensure that designs are submitted at such times as agreed with the Company;
- 4) design all temporary structures to carry the loads they are required to support;
- 5) modify the detailed design drawings, calculations and specifications for temporary works, if required by the Company;

- 6) note that acceptance by the Company of the detailed drawings of temporary structures in no way relieves the Supplier of any responsibility under the Contract; and
- 7) the duration of the work shall be agreed with the Company.

37 Vehicles Carrying Out Mobile Works On or Adjacent to the Public Highway

The Supplier shall equip all vehicles carrying out mobile works on or adjacent to the public highway with:

- 1) a “roof-mounted” floodlight capable of providing adequate illumination of the Site; and
- 2) at least one “roof-mounted” lighting bar or flashing yellow lights which should only be activated when the vehicle is parked at any of the Sites.

All works on the highway shall comply with the requirements of the Safety at Street Works and Road Works Code of Practice as a minimum.

38 Work on Piers

38.1 Risk Assessments and Method Statements for Piers

Risk assessments and method statements for works on piers shall reflect the unusual nature of the pier environment; recognising:

- 1) piers are floating pontoons on tidal water, surrounded by water that can be fast flowing and are subject to movement (sometimes quite sudden) caused by boat operations;
- 2) there is a risk of falling in the water when working outside the pier edge barriers (guard rails);
- 3) the river is used by a large number of commercial vessels which can create hazards close to the piers;
- 4) piers are accessible to boat operators and the public during operational hours and can often have large numbers of tourists and commuters passing along them (which may include non-English speakers, children and people with disabilities);
- 5) piers have limited access via ramps/brows that vary in angle of ascent/descent throughout the day;
- 6) piers contain confined spaces and plant rooms with restricted access and egress and potential risks from depleted or hazardous atmospheres;
- 7) most of the piers have unprotected roofs requiring fall prevention measures;
- 8) as a working environment, piers have a higher than average number of trip and snagging hazards; and
- 9) rats and mice live in the river walls and regularly appear on the piers, creating the potential for infections and diseases.

38.2 Induction to Piers

Before working on piers for the first time, all Supplier Personnel must have a site induction from the duty Pier Controller to familiarise them with the specific hazards associated with the piers. The “London River Services (LRS) Guide to Contractors” forms the main part of the induction and relevant Supplier Personnel are expected to familiarise themselves with the content prior to starting work. Copies will be supplied by the Company. Additional information or site tours will be provided as deemed necessary by the Pier Controller on duty or the Piers Manager.

38.3 Authorisation to Work on piers

Before starting work on LRS property, the Supplier shall obtain an authorisation to work from the Company. The Company shall indicate the duration of the authorisation.

When working on unmanned piers, Supplier Personnel are to telephone the LRS office on 0207 941 2400 to inform LRS staff of the start and completion of work. When working on a manned pier, the Pier Controller must be informed before work starts and when work has finished.

For emergency work and call outs to unmanned piers, authorisation may be given verbally by phone. The Supplier shall inform the Company of any hazards which may be created by the work.

38.4 Access to Offices at Piers

The Supplier shall not enter the offices at Tower, Westminster and Embankment piers without the permission of the Pier Controller and the tenant of the office.

38.5 Pier Keys

The Supplier shall return all keys to the Pier Controller or Piers Manager when jobs are completed or when leaving any of the Sites.

38.6 Security of Piers

To minimise the risk to the public and in particular children from the river, the Supplier shall ensure that the boat access (barrier) gates are kept shut at all times. If it is necessary to have a gate open for the movement of materials, a member of suitably trained Supplier Personnel must be stationed at the gate to prevent public access to the water's edge.

38.7 Specific Storage Restrictions on Piers

The deck areas are not suitable for long term storage of materials and could present a slip/trip hazard to pier users and an obstruction to moorings and emergency escape routes. If storage on the deck is required by the Supplier, it must be by agreement of the Piers Manager and suitably guarded from the public at all times.

38.8 Confined Spaces on Piers

The Supplier shall manage entry into ballast tanks and other compartments on piers signed as confined spaces as confined spaces. Pier voids or tanks shall not be used for combustible material storage.

38.8.1 Additional Fire Watch Precautions on Piers

Particular attention must be paid by the Supplier to the other side of a steel bulkhead where welding is taking place.

38.9 Emergency Procedures on Piers

38.9.1 General Emergency Arrangements for Piers

In an emergency at a manned pier, the Supplier shall contact the Pier Controller, providing details of the incident type, location and nature of any injuries. At all other times, and on unmanned piers, the Supplier shall use the Emergency Call Point and call 999 and ask for the required emergency service.

38.9.2 Fire Procedures While Working at a Pier

On arrival at the pier:

- 1) If the pier is manned, the Supplier must contact the LRS Pier Controller.
- 2) If the pier is unmanned, the Supplier must familiarise itself with the fire exits, escape routes, emergency call points/alarm points and location of any fire fighting equipment.

38.9.3 Unmanned Piers - Action to be Taken on Discovering/Starting a Fire

The Supplier shall ensure that all parties working on piers are aware of the following emergency arrangements for unmanned piers:

- 1) shout "fire" loudly;
- 2) sound the pier fire alarm by breaking the glass at the fire alarm point;
- 3) if there are boat operators/staff on the pier, inform them immediately;
- 4) leave the pier by the nearest safe brow;
- 5) call the fire service by dialling 999, stating "Fire on (Name of) pier"; and
- 6) when all Supplier Personnel are safely off the pier and the emergency services have been informed, call LRS so that passenger services can be made aware of the issue and LRS staff can attend the scene.

38.9.4 Action on Hearing the Fire Alarm on Manned Piers

When the fire alarm sounds continuously, if it is safe to do so, the Supplier shall close all the windows in the work area and switch off all electrical apparatus in the work area.

The Supplier shall immediately evacuate their personnel to the fire assembly point via the brows (gangways) located near the centre of most piers. The Supplier shall report to the Pier Controller and either provide confirmation of the safe evacuation of Supplier Personnel or notify the Pier Controller of any Supplier Personnel who are unaccounted for.

If the Supplier considers that its actions have resulted in the alarm being sounded, following the evacuation, this shall be reported immediately to the Pier Controller. (On a smoke or heat detector, this will be confirmed by an illuminated red indicator and can only be reset from the main control panel).

Depending on circumstances at manned piers, the Pier Controller may arrange evacuation by boat. The Supplier shall follow the instructions of the Pier Controller at all times.

The Supplier shall not attempt to re-enter the pier until authorised by the senior fire officer or Pier Controller.

38.9.5 Medical Assistance on Piers

In the event of an emergency, the Supplier shall inform the Pier Controller if the pier is manned and then telephone 999 for an ambulance or the fire and rescue service at the pier.

The Supplier is required to make its own arrangements. Where this is not possible, the Company must be informed and agreement on first aid provision reached.

38.9.6 Spillage on Piers

The Supplier shall report any spillage to the Pier Controller.

38.10 Person accountable for the document

Person accountable for the document
Catherine Behan - Head of H&S – Surface Transport

38.11 Document history

Edition	Date	Changes	
A1	April 2016	1 st issue	CB
A1	May 2016	2 nd issue	CB. NH

PART B: QUALITY

1. Records

1.1 The Supplier shall maintain such records that are specified by the Company, or required under legislation, and this shall include (as a minimum):

- 1.1.1 details of any non-compliance against any Standard;
- 1.1.2 records of audits and site inspections;
- 1.1.3 records of the qualifications, competence and training of staff;
- 1.1.4 quality assurance inspections conducted (including the identity of the inspector concerned);
- 1.1.5 equipment test calibration and verification checks conducted (including the identity of the inspector or tester concerned);
- 1.1.6 process and manufacturing data relating to this Contract, including an audit trail for material or component identity, source and status; any process, inspection or test activity so directed by special instructions or any contract quality management plan invoked by this Contract (including those set out in paragraph 6.1 of Part B (Quality) of this Schedule 16 (Health, Safety, Quality and Environmental Requirements));
- 1.1.7 non-conforming service or product records;
- 1.1.8 records of all related incoming and outgoing certificates of conformity and associated release documentation;
- 1.1.9 records of tender and contract reviews; and
- 1.1.10 the Supplier's policy with regard to quality.

2. Retention Period

Records shall be retained by the Supplier for a minimum of twelve years unless otherwise specified by the Company, or for any longer period as required by Applicable Laws.

3. Availability of Records for Inspection

The Supplier shall make all such records available to the Company within three (3) Working Days of any request by the Company.

4. Statistical Process Control, Audit and Inspection Procedures

Where, for quality management purposes, statistical process control procedures, audit or inspection procedures are adopted, full details of the proposed procedures used by the Supplier are to be submitted to the Company for approval prior to implementation.

5. General Quality Requirements

5.1 The Supplier shall:

- 5.1.1 appoint member(s) of its management team who, irrespective of other responsibilities, have defined authority which includes:
 - (A) ensuring that a quality management system is implemented and maintained;
 - (B) reporting to senior management on the performance of the quality management system, including any areas for improvement;
 - (C) ensuring awareness of customer requirements throughout the Supplier; and
 - (D) liaison with customers on matters relating to the Supplier's management system that result from auditing or non-conformances;
- 5.1.2 ensure that during internal processing and final delivery of a product or service to the intended destination, that the identification, packaging, storage, preservation and handling do not affect conformity with that product or Service requirements;
- 5.1.3 not proceed past "hold points" until all the specified activities have been satisfactorily completed and the related documentation is available to and authorised by the Company;
- 5.1.4 following receipt of a rejection, take immediate action to inspect all stocks and work in order to assess risk and loss and advise the Company of the findings;
- 5.1.5 take preventative action to avoid a recurrence of the non-conformities;
- 5.1.6 immediately inform the Company when the Supplier has reason to suspect non-conformities with previously supplied products or Services;
- 5.1.7 be responsible for ascertaining the cause of and responsibility for non-conformance, and for taking suitable corrective action to prevent reoccurrence;
- 5.1.8 document all corrective actions undertaken by the Supplier;
- 5.1.9 ensure that its supply chain work to correct practices, including accepted documentation defining the techniques to be used, workmanship criteria, safety of Others (including the public), health precautions, plant and equipment to be used and training and licensing requirements;
- 5.1.10 ensure that the works comply with any manufacturer's recommendations, instructions and guidelines, unless otherwise directed by the Company;
- 5.1.11 operate and maintain all plant, equipment and processes in accordance with the relevant manufacturer's or supplier's specification or procedures, unless otherwise directed by the Company;

- 5.1.12 take all necessary steps to identify, recall, re-inspect and replace any equipment or parts which have been inspected using inspection, measuring or test equipment whose calibration is found to be defective or unknown;
- 5.1.13 store and protect inspection, measuring and test equipment and materials to prevent misuse, damage and deterioration;
- 5.1.14 ensure that all equipment bears an identification of its calibration or maintenance status, in a manner that clearly indicates it is within the calibration or maintenance period; and
- 5.1.15 deliver all Services, technical and non-technical, in accordance with the Specification and relevant ISO standards.

6. Quality Plan

6.1 The Supplier shall:

- 6.1.1 provide a recognised quality management plan and quality assurance and management system applicable to the compliant delivery of the Services, certified to the BS EN ISO 9001 2015 standard, or equivalent, by a United Kingdom Accreditation Service ("UKAS") (or equivalent accredited certification body);
- 6.1.2 have in place a quality management policy to the standard of BS EN ISO 9001, or equivalent; ensure the quality management plan and quality assurance and management system applied to this Contract shall be annually and independently audited and verified by a UKAS accredited body. This applies equally to environmental management, health and safety, and any other policy or plan which may be included in this Contract or which may be introduced at any time;
- 6.1.3 oversee all activities and tasks needed to maintain optimisation and delivery of the Services. This includes creating and implementing quality planning and assurance, as well as quality control and quality improvement. The Supplier shall ensure that the quality management plan demonstrates the Supplier's process control system as required for the Contract. It shall include the practice and fundamental principles of Total Quality Management ("TQM") including: plan, do, check act;
- 6.1.4 ensure the quality management plan shall be operated by the Supplier throughout the duration of this Contract and the Supplier shall maintain and periodically revise the quality management plan as required (and in accordance with Schedule 10 (Contract Management)) and provide it in its amended form to the Company each time it is amended; and
- 6.1.5 have in place a robust audit regime to ensure optimisation of quality and standards of the delivery of the Services.

6.2 The format of the quality management plan shall be determined by the Company and should be developed in accordance with BS ISO 10005:2005 (Guidance on Quality Plans).

7. Testing and Inspection

7.1 When required by the Company, the Supplier shall:

- 7.1.1 demonstrate to the Company's satisfaction that acceptance sampling techniques are utilised and such sampling shall meet the requirements of BS 6001- 1:1999/ISO2858: 1999; BS6001-2:1993/ISO2859:1985; BS6001-3: 2005 and BS6001-4:2005/ISO2859-5: 2005 "Sampling procedure for inspection by attributes";
- 7.1.2 identify which sampling plan the Supplier intends to apply to the Contract and forward it to the Company's Representative for approval by the Company;
- 7.1.3 reference the sampling once it has been approved in all relevant quality management plans submitted to the Company;
- 7.1.4 be prepared to revert to 100% inspection in such cases where the failure rate exceeds the level of acceptance identified within the sampling plan;
- 7.1.5 prepare for the approval of the Company an inspection and test plan which shall include such hold points agreed with the Company; and
- 7.1.6 maintain sampling inspection records in accordance with the Company's requirements.

8. Certification of Conformity

8.1 The Supplier shall:

- 8.1.1 provide (for the Company) certificates of conformity for the Services and products that include:
 - (a) the Supplier's name and location address;
 - (b) the Supplier's full company name and manufacturing address, if different to the above;
 - (c) the Company's supplier rating system number;
 - (d) the unique certificate reference number and date of certificate;
 - (e) details of valid third party approvals applicable to the Services provided and the establishment undertaking the Services to the Company;
 - (f) the Company's contract reference and, if applicable, quality plan number;
 - (g) a full description and quantity of supplies, including specification, drawing number and issue numbers and British, EC or relevant standards applicable;
 - (h) identification marks and serial numbers as appropriate;

- (i) details of authorised non conformities, Company concession or production permit references and a full statement of authorised deviations, operations or processes not conducted; and
- (j) for all materials (raw or finished):
 - i. cast and/or batch number(s);
 - ii. test report reference and, if called for, copies of test results and additionally for metallic materials;
 - iii. the condition of the material despatched;
 - iv. recommended heat treatment if the material is being delivered not in a final use condition;
 - v. chemical analysis and/or mechanical testing certificates;
 - vi. inspection stamp and/or authorising signature;
 - vii. details of packaging and transportation where appropriate;
 - viii. country of origin (EC requirement);

8.1.2 ensure that all certificates include one of the following statements of conformity signed by an authorised signatory, on behalf of the Supplier:

- (a) for supplies from a manufacturer, the format shall be "Certified that the whole of the supplies detailed hereon have been inspected and tested, and (unless otherwise stated) conform in all respects with the requirements of the Contract";
- (b) for supplies from an agent, stockist or distributor (i.e. where the Supplier is not the manufacturer) the format shall be "Certified that the whole of the supplies detailed hereon have been inspected and tested and (unless otherwise stated) conform in all respects with the requirements of the Contract"; and
- (c) for works the format shall be "Certified that the services detailed hereon have been inspected and tested, and (unless otherwise stated) conform in all respects with the requirements of the Contract";

8.1.3 provide a copy of the Supplier's authorised signatory list, showing as a minimum, name, job title, signature, designated authority level at the Commencement Date;

8.1.4 ensure that any certification from Sub-Contractors for parts or Services related to this Contract accompanies the Supplier's certificate of conformity;

8.1.5 agree with the Company a certificate of conformance for use where projects or part projects are handed over;

8.1.6 include in the certificate of conformance a "Statement of Design Performance" where design work is provided; and

8.1.7 provide statutory test certificates, where applicable.

9. Quarantine

The Supplier shall provide secure quarantine storage for the storage of materials and products that are the subject of investigation regarding their conformance or non-conformance.

10. Traceability

The Supplier shall ensure that all the materials to be incorporated into the Services or services delivered to the Sites are controlled at installation and are able to be traced to the manufacturer, unless indicated otherwise by the Company.

11. Maintenance and Servicing

The Supplier shall provide the Company with written details of how its arrangements for maintenance and servicing will ensure the reliability, maintainability, durability and serviceability of the assets.

12. Design

12.1 In respect of the Company only, no person shall change the design of any engineering or training system for the installation, operation and maintenance of infrastructure equipment without complying with Standard S1538 (A12) (Assurance).

12.2 The Supplier shall:

12.2.1 operate a change control system so that the appropriate issue of drawings, technical specifications, training material and current deviations and concessions, including customer supplied standards, can be readily determined at all times;

12.2.2 ensure that all design changes and modifications are identified, documented, reviewed and approved by the Company prior to implementation;

12.2.3 record the results of all design assessments and hand over such records to the Company;

12.2.4 appoint or nominate a design authority for each design; and

12.2.5 ensure that designers hold BS-EN-ISO-9001 certification relevant to the Services or, if the design supplier is not certificated to BS-EN-ISO 9001, a documented management system which includes design shall be required.

13. Computer Aided Design

The Supplier shall provide computer aided designs in a style, format and software as specified by the Company.

14. Asset Commissioning and Handover

- 14.1 No project shall be considered complete unless the Company agrees it has in its possession complete and final information deliverables specified within the project contract documents.
- 14.2 As a minimum, these shall include:
 - 14.2.1 as-built drawings;
 - 14.2.2 installation drawings;
 - 14.2.3 O&M documents;
 - 14.2.4 warranty documents;
 - 14.2.5 commissioning certificates; and
 - 14.2.6 handover certificates.

PART C: ENVIRONMENTAL REQUIREMENTS

Definitions

For the purposes of Part C of this Schedule 16 (Health, Safety, Quality and Environmental Requirements), the following expressions shall have the following meanings:

“Congestion Charge” means the fee charged on most motorised vehicles operating within a defined charge zone in London under a scheme managed by TfL.

“Environmental Management System” or “EMS” has the meaning given to it in paragraph 1.2 of Part C (Environmental Requirements) of this Schedule 16 (Health, Safety, Quality and Environmental Requirements).

“Environmental Management Plan” or “EMP” means the Supplier’s environmental management plan set out in Appendix 8 to Schedule 16 (Health, Safety, Quality and Environmental Requirements) as amended from time to time..

“HSE Policy” means the policy set out in Appendix 1 of this Schedule 16 (Health, Safety, Quality and Environmental Requirements).

“Pollution Response Plan” or “PRP” has the meaning given to it in paragraph 8.5 of Part C (Environmental Requirements) of this Schedule 16 (Health, Safety, Quality and Environmental Requirements).

“Site Noise and Vibration Evaluation and Control” means the process set out in Appendix 6 of this Schedule 16 (Health, Safety, Quality and Environmental Requirements).

“TfL Corporate Environment Framework” means the policy set out in Appendix 4 of this Schedule 16 (Health, Safety, Quality and Environmental Requirements).

“Resources and Waste Management Plan” or “RWMP” has the meaning given to it in paragraph 7.2.1 of Part C (Environmental Requirements) of this Schedule 16 (Health, Safety, Quality and Environmental Requirements) and as set out in Appendix 7 of this Schedule 16 (Health, Safety, Quality and Environmental Requirements).

1. Section 1

1.1. Introduction

1.1.1. The Mayor wants London to be recognised as a world leader in improving the environment, locally and globally. The Greater London Authority (“GLA”) has published a number of detailed strategic aims on air quality, water, waste, climate change adaptation, and climate change mitigation and energy. These build on the GLA’s “Leading to a Greener London” document (<http://www.london.gov.uk/priorities/environment/vision-strategy/leading-to-a-greener-london>), published in 2009, which sets out London’s aim to be one of the greenest cities in the world. There is an ambition to cut London’s carbon emissions by 60% by 2025.

1.1.2. More specifically, the Company has set the following targets within the TfL Corporate Environment Framework (set out in Appendix 4 of this Schedule 16 (Health, Safety, Quality and Environmental Requirements)), to help achieve the Mayoral goals:

- (A) the Company will contribute towards achieving the Mayor’s target of a 60 per cent reduction in CO₂ emissions by 2025 (against a 2013 baseline) by aiming for a 40 per cent cut in TfL CO₂ emissions;
- (B) the Company will further reduce the amount of carbon emitted per passenger journey by cutting emissions of CO₂ per passenger kilometre by 40 per cent by 2025 (against a 2013 baseline);
- (C) the Company will seek to support the Mayor’s air quality targets for London by delivering a 50 per cent reduction in NOx emissions from the bus fleet by 2020, against a 2013 baseline;
- (D) the Company will seek to support the Mayor’s air quality campaign for London to reducing the toxic content of exhaust emissions from diesel engines (in open and enclosed environments) by using direct replacement low emission (EN590) fuels;
- (E) the Company will reduce particulate matter (“PM”) emissions from the bus fleet by 25 per cent by 2020, against a 2013 baseline; and
- (F) the Company will reuse, recover and recycle 99 per cent of non-hazardous waste by 2031. The Company will set interim targets to achieve this and will use 30 per cent of non-hazardous waste specifically for energy from recovery.

1.1.3. The Company expects the Supplier to play a leading role in helping the Company achieve its current and future environmental objectives and targets, by using the best technology available at all times, to ensure the delivery of all current and future Mayoral policies and strategies relevant to the Company.

1.2. Environmental Management System

1.2.1. The Supplier shall have in place an environmental management system ("EMS") that is bespoke to the Contract and which, as a minimum, meets the requirements set out below:

- (A) the EMS shall be certified to the BS EN ISO14001 standard, or equivalent standard, by a United Kingdom Accreditation Service ("UKAS") (or equivalent) accredited certification body or the Supplier shall have an environmental management policy, and also an independently audited EMS to the standard of BS EN ISO14001, or equivalent;
- (B) the Supplier shall carry out environmental aspect and impact assessments to identify all potential environmental aspects and impacts related to its activities, products and services it delivers and the Supplier shall provide details of any necessary environmental control measures to the Company. These are included in risk and benefit identification control and mitigation resources outlined in designs and safe systems of work for any element of the works forming part of the Services;
- (C) the Supplier shall review the environmental aspect and impact assessments as a minimum once a year, but must ensure they, and any associated control and mitigation measures, remain pertinent to the works forming part of the Services; and
- (D) the EMS shall be consistent with and support the principles of the Rail and Underground HSE Policy, set out in Appendix 1 and the Company's Corporate Environment Framework set out in Appendix 4 of this Schedule 16 (Health, Safety, Quality and Environmental Requirements).

1.3. Environmental Management Plan

1.3.1. The environmental management plan ("EMP") shall be updated annually and not later than on each anniversary of the Commencement Date.

1.3.2. The Supplier shall make the EMP available to the Company for regular review (but not less than annually) at the quarterly review meetings and annual strategic review meetings held in accordance with Schedule 10 (Contract Management).

1.3.3. Within the EMP, the Supplier shall demonstrate its contribution towards delivering the Company's environmental objectives including, but not limited to, how the Supplier shall:

- (A) ensure environmental aspects are considered and incorporated in to its activities;
- (B) use partnership working on environmental matters (for example, regulators, environmental bodies, industry groups, client and supply chains);

- (C) identify all potential environmental aspects and impacts of the Contract, specific to its activities (from planning to delivery) demonstrating how the Supplier intends to minimise the potential risks and impacts;
- (D) ensure its environmental key performance indicators and targets contribute to the objectives and targets set out in the Company's Corporate Environment Framework (set out in Appendix 4 of this Schedule 16 (Health, Safety, Quality and Environmental Requirements)) in relation to:
 - (1) **carbon, energy and climate resilience:** demonstrating that the Supplier is actively minimising use of energy derived from fossil fuels in performing its obligations under the Contract; setting and achieving a target/reduction in CO₂ emissions in line with the Company's environmental objectives and targets;
 - (2) **reduction of air pollutants:** setting and achieving targets for reduction in air pollutants (PM and nitrogen oxides) in line with the Company's environmental objectives and targets from sources under the control of the Supplier, and demonstrating how the Supplier is meeting the Company's vehicle and fuel powered machines, plant and equipment emissions requirements;
 - (3) **reduction of noise, nuisance and vibration:** setting and achieving a target/reduction in noise in line with the Company's environmental objectives and targets;
 - (4) **materials, resources and waste management:** demonstrating a reduction in use of resources, such as water, minimising the generation of waste, avoiding the use and production of hazardous materials and the prevention of pollution, and achieving a % of waste diverted from landfill rate of 99% (or an equivalent reuse and recycling rate); and
 - (5) maintaining and, where possible, enhancing the quality of the built and natural environment;
- (E) demonstrate that the Supplier is meeting the requirements of the Company's Sustainable Timber (as that term is defined in Schedule 17 (Responsible Procurement)) policy for temporary and permanent works; and
- (F) provide the Company with an environmental staffing plan, setting out the Supplier's environmental management organisation structure, identifying roles, accountabilities and responsibilities, and points of liaison with the Company. The environmental staffing plan must demonstrate resources are appropriate to the scale and nature of the relevant Services.

1.4. Report on Progress

- 1.4.1. The Supplier shall provide the Company's Representative with an environmental performance report, including information on the performance

of the EMS. The report shall be submitted annually and not later than on each anniversary of the Commencement Date, and shall contain, but shall not be limited to:

- (A) any updates to previous EMPs;
- (B) a summary of the environmental statistics for the previous year, including *inter alia*, environmental reviews;
- (C) a summary of findings and trends from audits, inspections and evaluations of compliance with legal and with other requirements;
- (D) a summary of any changing circumstances, including developments in legal and other requirements; and
- (E) proposed environmental improvement targets, together with commentary on the previous year's improvement targets, including status of corrective and preventative actions undertaken by the Supplier.

1.5. Environmental Planned General Inspections

As part of the EMP and within six (6) weeks of the Commencement Date, the Supplier must review and update the current Environmental Planned General Inspection ("EPGI") template (set out in Appendix 5 of this Schedule 16 (Health, Safety, Quality and Environmental Requirements)) with current legislation and other requirements, relevant to this Contract. The template must be kept up to date by the Supplier at all times.

1.6. General Requirements

Without prejudice to its other obligations contained in this Contract, the Supplier shall ensure that it carries out its obligations in response to any environmental incidents and their reporting in a manner approved by the Company.

- 1.6.1. The Supplier shall employ a sufficient number of competent and appropriately qualified and experienced environmental and sustainability professionals to ensure the full implementation of all the environmental and sustainability requirements.
- 1.6.2. The Supplier shall obtain the Company's Representative's written consent before the proposed personnel take up the above positions and prior to implementing any changes to the personnel undertaking these roles.

2. Section 2

2.1. Sustainable Operations

- 2.1.1. The Supplier shall maximise the sustainable performance of its activities including, but not limited to:

- (A) designing systems and installing and maintaining equipment that will reduce energy use and the operational cost of the track assets; and
- (B) installing and maintaining equipment that minimises water use during installation and operation of the asset. Maintenance of water consuming equipment will include dust suppression systems.

3. **Section 3**

3.1. **Climate Resilience**

- 3.1.1. The Supplier shall ensure that any design, installation and maintenance work it performs as part of the Services takes into account the climate parameters over the whole design life in which the asset must perform, to support resilience to extreme weather.
- 3.1.2. The Supplier shall ensure that the asset remains fit-for-purpose for the Company's needs during its design life period, taking into account the range of extreme weather and climate parameters that may occur during that time. This shall include, but shall not be limited to:
 - (A) keeping the assets within specified temperature tolerances as defined in the Company's standards relevant to the asset type applicable to this Contract; and
 - (B) all refits including measures to assist with keeping assets resilient during their design life including, but not limited to, water efficiency, natural ventilation and shading, greening, and sustainable drainage.

4. **Section 4**

4.1. **Reducing Carbon Emissions and Water Usage**

The Supplier shall:

- 4.1.1. measure and report on carbon emissions and water use and develop plans to reduce carbon emissions / energy usage and water use that supports the Company in delivering its programme to improve energy and water efficiency, helping reduce the toxic content of emissions and lower costs;
- 4.1.2. make use of the Company's automated Monitoring and Targeting ("aM&T") software to analyse site performance, control out of hours consumption and also suggest, measure and verify efficiency enhancement projects;

5. **Section 5: Air Quality and Dust**

5.1. **Control of Road Vehicle Emissions**

- 5.1.1. The Supplier shall ensure that in the procurement or leasing of vehicles for use in the delivery of the Services:
 - (A) consideration is given to CO₂, air quality and noise impacts; and
 - (B) a technology neutral approach is adopted.
- 5.1.2. All vehicles used in the delivery of the Services shall meet or exceed the

following CO₂ limits and European emission standards at the Commencement Date:

- (A) M1 category cars - maximum certified CO₂ emissions of 99 g/km as measured on the NEDC (New European Driving Cycle) or equivalent as tested on the WLTP (Worldwide Harmonised Light Vehicle Test Procedure) and a minimum of Euro 6 emission standard;
- (B) N1 class I vans equal to or less than 1205 kg kerb weight – maximum certified CO₂ emissions of 115 g/km as measured on the NEDC or equivalent as tested on the WLTP and a minimum of Euro 6 emission standard;
- (C) N1 class II vans between 1205 and 1660 kg kerb weight – maximum certified CO₂ emissions of 155 g/km as measured on the NEDC or equivalent as tested on the WLTP and a minimum of Euro 6 emission standard;
- (D) N1 class III vans greater than 1660 kg kerb weight – maximum certified CO₂ emissions of 189 g/km as measured on the NEDC or equivalent as tested on the WLTP and a minimum of Euro 6 emission standard; and
- (E) N2 and N3 category heavy duty commercial vehicles (exceeding 3500 kg maximum mass) – Euro 6 emission standard.

5.1.3. If any vehicles used in the provision of the Services are due for replacement before the Expiry Date, the Supplier shall ensure that the replacement vehicle/engine meets or exceeds the European or UK regulated emissions standard in force at that time for new vehicles (currently Euro 6). Replacement vehicles must also meet the CO₂ limits, as applicable, set out above (if applicable) for the year in which it is introduced into the fleet. Standards and the years in which they apply are set out in paragraph 5.3.3 below. If compliant vehicles/engines are not available by the specified deadline, the Company may (at its sole discretion) consider acceptance of an alternative standard proposed by the Supplier until such time as those vehicles become available.

5.2. European Emission Standards for Road Vehicles

5.2.1. In line with Mayoral transport and environmental strategies and the Company's commitments to reduce pollutant and carbon dioxide emissions, the Supplier is required to increasingly use zero or ultra low emission vehicles in their fleet where and when feasible. The Supplier will be required to mirror the GLA group, London boroughs and wider public sector support fleet aims, to achieve:

- All cars to be zero emission capable by 2025;
- All new cars and vans (not exceeding 3500 kg maximum mass) to be zero emission capable from 2025;
- All heavy duty commercial vehicles to be fossil fuel-free from 2030.

5.2.2. Any necessary recharging/refuelling infrastructure required for low carbon

vehicles to be supplied by the Supplier on the Company's Sites will only be permitted subject to the Company's written acceptance and by separate agreement on maintenance, installation and running costs. Where the Supplier operates such vehicles, operating experience and data will be shared with the Company on request.

- 5.2.3. The Supplier shall select vehicles for the performance of the Services which meet the highest environmental criteria and will be eligible for a 100% discount from the Congestion Charge. The Supplier shall be solely responsible for payment of any Congestion Charge and the Company does not accept any claims for reimbursement of Congestion Charges.
- 5.2.4. The Supplier shall ensure that all vehicles used in the performance of the Services are operated in such a way to ensure that environmental impacts are reduced as far as reasonably practicable. Operating data for all vehicles will be shared with the Company when requested.
- 5.2.5. The Supplier shall:
 - (A) ensure vehicles used in connection with the Services are regularly serviced in line with the manufacturers recommendations;
 - (B) ensure all faults or problems on such vehicles are repaired/addressed as soon as practicable; and
 - (C) monitor and record all vehicle fuel and mileage in connection with the performance of the Services.
- 5.2.6. The Supplier shall report the following information to the Company on a Quarterly basis in advance of each Quarterly Review as set out in Schedule 10 (Contract Management):
 - (A) vehicle make and model;
 - (B) vehicle servicing frequency;
 - (C) vehicle fuel (fuel type and litres used);
 - (D) vehicle mileage (excluding hire vehicles); and
 - (E) percentage of the fleet on hire.The Company reserves the right to include additional monitoring requirements if required.
- 5.2.7. The Supplier shall ensure that all driving staff undertake a fuel efficient and safe driver training course within three (3) months of commencing performance of the Services. The Supplier shall ensure that the training course consists of theoretical training and practical implementation skills and is a minimum duration of one (1) hour.
- 5.2.8. The Supplier shall provide the driver training records to the Company as instructed by the Company's Representative.

5.3. **Equipment and Non-Road Mobile Machinery**

5.3.1. The Supplier shall ensure that the adverse impacts to personnel located in or adjacent to the work site from the toxic content of exhaust fumes and emissions generated by the fuel machines, plant and equipment used in the performance of the Services are minimised. Measures to be considered for limiting emissions and avoiding nuisance and risk to health will include the following as appropriate:

- (A) ensuring that the engines of all machines and plant used in connection with the Services, have valid certification confirming compliance with LUL emission limits specified in LUL Standards S1172, S1173 and S1174;
- (B) ensuring that the engines of all vehicles, machines and plant are not left running unnecessarily;
- (C) using low emission, environmentally friendly direct replacement fuels to EN590 in machines and plant powered by diesel engines in enclosed environments. The use of catalyst's and particulate filters is not a preferred option;
- (D) using low emission, environmentally friendly direct replacement alkylate petrol for small plant and equipment;
- (E) requiring equipment and vehicles to be well maintained, with routine servicing to be completed in accordance with the manufacturers' recommendations and records maintained for the work undertaken;
- (F) requiring all vehicles, to hold valid certification in compliance with the relevant EU Directives, UK Legislation, Regulations and LUL Standards;
- (G) using routes and operating equipment away from potential receptors such as houses, schools and hospitals;
- (H) avoiding the use of diesel or petrol powered generators and instead using mains electricity, battery powered or hydrogen powered equipment;
- (I) maximising energy efficiency (this may include using alternative modes of transport, maximising vehicle utilisation by ensuring full loading and efficient routing); and
- (J) providing all operating data which complies with the schedules, deadlines and timelines as required to the Company as part of the Supplier's quarterly reporting obligations (as set out in Schedule 10 (Contract Management)).

5.3.2. All of the Supplier's non-road mobile machinery ("NRMM") must meet or exceed the emission standards relevant at the Commencement Date, which are as follows:

- (A) NRMM of net power between 19 and 36 kW –Stage IIIA of EU

Directive 97/68/EC (as amended) emission standards;

- (B) NRMM of net power between 37 and 55 kW –Stage IIIA of EU Directive 97/68/EC (as amended) emission standards;
- (C) NRMM of net power between 56 and 560 kW –Stage IIIB of EU Directive 97/68/EC (as amended) emission standards;
- (D) from 1 September 2020: NRMM of net power between 37kW and 560kW used on any site within Greater London – Stage IIIB of EU Directive 97/68/EC (as amended) emission standards; and
- (E) machines and plant used on the LUL infrastructure must meet the exhaust emissions specified in the LUL Plant Standards (S1171 to S1174 – revisions valid at the date of the tender).

5.3.3. In addition, where the requirements of “[The control of dust and emissions during construction and demolition - Supplementary Planning Guidance \(SPG\) Greater London Authority \(2014\)](#)” are applicable, all of the Supplier’s NRMM must comply with the following additional requirements for the NRMM Low Emission Zone detailed in the SPG:

- (A) NRMM used on any site within the Central Activity Zone or Canary Wharf will be required to meet Stage IIIB of EU Directive 97/68/EC (as amended) emission standards as a minimum; and
- (B) from 1 September 2020: NRMM used on any site within the Central Activity Zone or Canary Wharf must meet Stage IV of EU Directive 97/68/EC (as amended) emission standards as a minimum.

5.3.4. All NRMM must meet the applicable standards unless it can be demonstrated that the machinery is not available or that a comprehensive retrofit to meet PM10 and NOx emission standards is not feasible. In this situation, every effort must be made by the Supplier to use the least polluting equipment available, including retrofitting technologies to reduce particulate emissions.

5.3.5. The Supplier must comply with the GLA’s NRMM exemption policy (which can be found at [nrmm.london](#)) for any NRMM which cannot meet the emissions requirements. The Supplier shall seek exemption from the Company’s Representative for any NRMM of net power between 19 and 36 kW that cannot comply with the emissions standards.

5.3.6. The Supplier shall also:

- (A) an inventory of all on-site NRMM using the GLA’s [nrmm.london](#) database; and
- (B) regularly service all machinery and keep records on site.

5.4. **Dust**

5.4.1. The Supplier shall use the best practicable means to reduce dust and other emissions at all times during performance of the Services and shall not create a dust nuisance.

5.4.2. If the Company's Representative decides that the Supplier is not dealing adequately with the control of dust or other emissions, the Company's Representative may instruct the Supplier to carry out such additional measures as the Company's Representative considers necessary. Such measures are not subject to the Contract variation procedure set out in Part A of Schedule 4 (Contract Variation Procedure and Maintenance Renewal Services) of the Contract.

6. **Section 6: Noise and Vibration**

6.1. **General**

6.1.1. The Supplier shall:

- (A) use the best practicable means to control and limit noise and/or vibration levels so that affected properties, and other sensitive receptors, are protected from excessive or prolonged noise and vibration associated with all activities;
- (B) develop and maintain a Noise and Vibration Management Plan, as part of the EMP, for activities with the potential to generate noise and/or vibration. The Noise and Vibration Management Plan shall set out how noise and vibration requirements shall be managed and the Supplier shall undertake the Services in strict adherence to this plan;
- (C) apply the best practicable means to reduce noise and vibration at all times having regard to the provisions of the latest edition of BS5228 (Code of Practice for Noise and Vibration Control) or other relevant Good Industry Practice;
- (D) stipulate and ensure adherence to behavioural conditions for workers in relation to minimising impacts to neighbours, such as conduct when arriving and leaving the Company's Sites during any night works; and
- (E) employ a trained and competent person to undertake noise and/or vibration monitoring if required and comply with any additional measures required including relocation or modification of equipment to reduce noise and vibration. The monitoring scope shall be agreed with in advance with the Company's Representative and monitoring results shall be provided to the Company on request.

6.1.2. In its performance of the Services, the Supplier shall comply with the requirements of the Company's Site Noise and Vibration Evaluation and Control (set out in Appendix 6 of this Schedule 16 (Health, Safety, Quality and Environmental Requirements)).

6.2. Prior Consent

6.2.1. If activity with the potential to generate noise and vibration is to be carried out outside of normal working hours, and/or the noise and vibration generated is likely to cause significant disruption or harm, the Supplier shall:

- (A) liaise with the Company to determine whether a Section 61 consent (under the Control of Pollution Act 1974), or other form of noise agreement, will need to be in place prior to commencing the relevant works;
- (B) provide the Company with the following information to enable a decision to be made on whether a Section 61 Consent, or other form of noise agreement, is required:
 - (1) the nature of the activity being undertaken;
 - (2) the time of day the activity will be undertaken;
 - (3) the duration of the activity;
 - (4) the proximity of neighbours; and
 - (5) the sensitivity of neighbours (for example, residents, schools, hospitals and places of worship) that would likely be considered more sensitive to noise than industrial areas); and
- (C) be responsible for obtaining the consent prior to commencing the relevant works, and for complying with all aspects of the consent.

6.3. Notifications

6.3.1. The Supplier shall take a proactive approach to notifying neighbours and other relevant stakeholders in advance of the commencement of any construction or maintenance works being performed by the Supplier as part of the Services that will affect them in any way, including noise and vibration impacts, impacts from staff noise, access and welfare or staff parking and travel.

6.3.2. The Supplier shall submit to the Company's community relations representative (via communityrelations@tfl.gov.uk) the draft notification letters for approval no less than 14 days prior to the works commencing.

6.3.3. Notification letters shall include details of the:

- (A) allocation of works;
- (B) reason for the works;
- (C) information about potential impacts: noise and vibration, parking, staff access and welfare locations;
- (D) duration of the works;
- (E) working hours; and

(F) TfL customer services details.

6.3.4. Letters shall be produced on TfL letterhead and the Company shall provide a template when required.

6.3.5. Once the details of the notification letters have been accepted by the Company's community relations representative, the letters shall be distributed to all properties potentially affected by the proposed works no less than 10 days prior to works commencing. In most instances, distribution will be arranged by the Supplier. In ascertaining the distribution area, the Supplier shall carefully consider potential noise and vibration, areas affected by staff parking, access or welfare requirements, delivery and loading of equipment.

6.4. **Complaints Handling**

6.4.1. The Supplier shall develop a complaints handling process agreed with the Company's Representative. As a minimum, the complaints handling process shall include the following:

- (A) TfL's customer services details on all public facing communication;
- (B) information on how complaints and enquiries will be responded to when passed on by TfL customer services;
- (C) details of the emergency response system that will be employed for dealing with emergency issues; and
- (D) reporting all complaints/enquiries and their responses within 24 hours of receipt to the Company using TfL customer services and to the Company's community relations representative.

7. **Section 7: Waste and Resources Management**

7.1. **Waste Electronic and Electrical Equipment**

With regard to the latest version of the Waste Electrical and Electronic Equipment Regulations 2006 ("WEEE 2006"), the Supplier shall indemnify and keep indemnified the Company as a result of any losses which it incurs as a result of any failure on the part of the Company or the relevant producer to comply with the requirements of WEEE 2006.

7.2. **Waste Other**

7.2.1. The Company requires the Supplier to promote recycling, minimise its waste and play a leading role in helping the Company achieve its environmental targets. The Supplier shall develop, implement and maintain a Resources and Waste Management Plan ("RWMP"), as part of the EMP, to cover the resources used and waste arisings it is responsible for, support the Company's objective to use materials more efficiently and reduce waste to landfill in order to achieve the following target:

"the Company will reuse, recover and recycle 99 per cent of non-hazardous waste, with interim targets by 2031 and 30 per cent for specifically for energy from recovery".

7.2.2. The Supplier's RWMP shall document how the Supplier will:

- (A) implement the waste hierarchy with a particular focus on waste reduction and waste reuse;
- (B) comply with current legislation in relation to the storage, handling, treatment, transfer and disposal of all waste materials produced in the performance of the Services. As a carrier of waste, the Supplier shall be registered as a Waste Carrier with the Environment Agency and shall provide evidence of registration within the WMP and on renewal of the registration;
- (C) set waste reuse, recovery and recycling targets that meet or exceed the Company's targets;
- (D) monitor and report waste arising in line with the Supplier's reporting requirements under Schedule 10 (Contract Management) each Period in advance of the Period Progress Meeting;
- (E) ensure all Supplier Personnel are trained in waste minimisation and management techniques;
- (F) increase recycled content of materials used in construction and any other materials purchased; and
- (G) document all decisions taken during any design work to reduce waste, and ensure this information is passed to Company.

7.2.3. The Supplier shall implement and update the Resources and Waste Management Plan, and maintain records in the online tool SmartWaste throughout the duration of this Contract and make available these records for review by the Company on request.

7.2.4. TfL will provide a login for the Smart Waste system.

7.2.5. The Supplier is responsible for the management and removal of all waste arisings as soon as practicably possible in accordance with Good Industry Practice.

7.2.6. The Supplier shall make available to the Company, within 3 Working Days of request, any waste records (such as consignment notes and transfer notes).

8. **Section 8: Pollution Prevention**

- 8.1. The Supplier shall comply with all Applicable Laws and Good Industry Practice to prevent pollution and environmental nuisance.
- 8.2. The Supplier shall ensure that the EMP and aspect and impact assessments for specific tasks and activities adequately identify all potential pollution sources, pathways and sensitive receptors.
- 8.3. The Supplier shall ensure that the EMP will detail how pollution risks will be managed including specific controls to be put in place, which must be strictly complied with.
- 8.4. The Supplier shall ensure that all controls identified will be included in safe systems of work and briefed to all Supplier Personnel.

8.5. The Supplier shall ensure that a Pollution Response Plan (“PRP”) and all necessary pollution response equipment required to reduce risks to as low as reasonably practicable are in place within one (1) month of the Commencement Date. The PRP shall set out actions to be taken in the event of an environmental incident. The Supplier shall ensure all Supplier Personnel are familiar with the plan and trained in actions to take if an incident occurs.

8.6. **Deliveries and Storage**

8.6.1. Where the Supplier manages bulk fluid deliveries (over 25 litre drums) it shall:

- (A) ensure that a spill kit of appropriate size and content, commensurate with the risk, is located in an open access location immediately adjacent to the risk;
- (B) set up a call-off contract with a suitable supplier who can be called in an emergency if the spillage is too large for the spill kit on site. Or make arrangements with another part of London Underground; and
- (C) seek written assurance from the supplier that the third party delivery operatives are trained, competent and familiar with making deliveries to the Sites and if not, they shall be accompanied by the Supplier’s Representative until such time they become so.

8.6.2. Where bulk storage tanks (above 55 gallon/250 litres) are provided and maintained by the Supplier:

- (A) the Supplier shall ensure they are fitted with serviceable engineering controls, appropriate to site risk, to prevent environmental harm, such as fitting and maintaining alarms and other notification systems.
- (B) the Supplier shall ensure all bulk storage tanks are used, serviced and maintained in accordance with the manufacturer’s instructions.

8.6.3. The Supplier shall manage the testing, licensing, maintenance and other regulatory regimes related to the tanks on the Sites as required by the Company from time to time.

8.7. **Site set-up**

8.7.1. Where reasonably practicable and appropriate the Supplier shall ensure that:

- (A) Sites are secured and screened using existing features where appropriate;
- (B) storage sites, any plant and machinery equipment and temporary staff facilities located to limit environmental impacts, as far as reasonably practicable, having due regard to neighbouring accommodation, as far as allowed by the constraints of each of the Sites;
- (C) security cameras (if required) sited and directed so that they do not intrude into occupied residential properties;
- (D) site plant and facilities powered from mains electrical sources wherever practicable;

- (E) the Supplier shall display a contact name, telephone number and address, and the helpline number at appropriate locations on the boundaries of the Sites;
- (F) the extent and height of hoarding or fencing at a particular location will be selected to maintain effective security and achieve appropriate noise attenuation and visual screening;
- (G) all vehicle access and egress points with gates positioned such that no gate will be permitted to open out onto the highway. As far as reasonably practicable, gates will be located to allow vehicles to drive clear of any public highway. Where provided for noise control, gates will be of a similar material and construction to the boundary in which they are situated and will be closed except when being used for access; and
- (H) disturbance of environmental features such as vegetation and watercourses will be minimised.

8.8. **Monitoring and reporting**

- 8.8.1. The Supplier shall employ a trained and competent person(s) to undertake environmental monitoring. The Supplier shall comply with any additional measures required by the Company's Representative including relocation or modification of equipment to reduce noise, vibration, nuisance, light, dust, pollution and other disturbances.
- 8.8.2. The Supplier shall report all complaints/enquiries and their responses within 24 hours of receipt to the Company using TfL customer services, the Company's Representative and the Company's community relations representative.
- 8.8.3. Environmental contract information such as pollution incidents and waste produced will be reported via the Information Exchange 2 software.

8.9. **Effluent discharge consents**

- 8.9.1. When providing maintenance of drains and interceptors, the Supplier shall ensure that it maintains effluent discharge within the legal effluent discharge consent limits.
- 8.9.2. When required by the Company, the Supplier shall also support the maintenance of effluent discharge consent within legal limits, by providing ad-hoc maintenance of drains and interceptors.

8.10. Contaminated land

- 8.10.1. The Supplier shall comply with all relevant statutory requirements and Good Industry Practice in relation to contaminated land.
- 8.10.2. The Supplier shall notify the Company if any contaminated land or water has been discovered.
- 8.10.3. The Supplier will not bring soils or infill materials onto the site unless they have been satisfactorily proven to be uncontaminated and to present no risks to human health, property or the environment. Documentary evidence to confirm the origin of all imported soils and infill materials, supported by appropriate chemical analysis test results, shall be maintained by the Supplier.

9. Section 9: Natural Environment

- 9.1. The Company has a legal duty to have due regard to biodiversity, as well as duties from the Mayor of London to improve biodiversity. Therefore, when providing services to the Company, the Supplier shall:
 - 9.1.1. take into account relevant Company and London Borough biodiversity plans including the development of biodiversity net gain objectives;
 - 9.1.2. preference the use of native plant species appropriate to the location and maintenance requirements of the site as a minimum; and
 - 9.1.3. when selecting control methods, ensure they prevent harmful effects to any other species other than those intended for treatment.

10. Section 10: Reducing the environmental impact of materials

10.1. VOCs and chemicals with adverse environmental impacts

The Supplier shall develop a plan within the first year of the Commencement Date to identify all products used in the performance of the Services and then risk assess and propose the phased replacement of high VOC products or similar e.g. paints, aerosols, degreasers, adhesives, sealants etc. herbicides, drain cleaners pesticides, biocides and other similar products with a “lower” environmental impact. The intention of the plan is to remove over time all high impact or high risk products over the first three years of the period of the Contract.

11. Section 11: Water

- 11.1. The Supplier shall undertake the Services in a manner which protects the water environment – including any change to water quality, flow volume or levels.
- 11.2. To achieve this, the Supplier shall, as a minimum:
 - 11.2.1. identify any water sensitive receptors (such as ponds, watercourses, drains or groundwater) which may potentially be affected by the Services, and assess the risk to them;
 - 11.2.2. identify any mitigation measures which shall be employed to minimise the risk to these water sensitive receptors – including any necessary pollution

prevention measures; and

11.2.3. obtain and comply with any necessary abstraction, discharge and other water environment consents.

11.3. The Supplier shall not make temporary or permanent connections to any mains, drains, pipes, watercourses or utility services without the necessary consent.

SCHEDULE 16 - APPENDIX 1: HEALTH SAFETY AND ENVIRONMENT POLICIES

TfL Health, Safety and Environment Policy

April 2018

Our commitment

Our customers, users, employees and suppliers have an expectation that when using or delivering our services or assets they will remain harm free. Our vision is "Everyone home safe and healthy every day". We are committed to meeting our vision and these expectations.

We want to ensure that:

- every journey is a safe journey for our customers and users
- the security of our customers and employees is assured
- our employees, agency staff and contractors go home safe and healthy every day
- we maintain our assets and deliver projects safely
- we fulfil our commitments to prevent pollution and nuisance; protect biodiversity; improve air quality; and reduce waste and carbon emissions
- we are inclusive and accessible to all customers and users, including those with disabilities.

How we go about this

We have put in place health, safety and environment rules and procedures, including emergency procedures that are regularly updated. These are for you to use. If you do not know where to find them ask your line manager or your Health, Safety and Environment (HSE) manager.

We assess risks and introduce HSE measures to ensure risks remain as low as reasonably practicable. We tell you the risks and the measures we have taken to control risks. We will comply with legislation. There is regular review of safety, health and environment statistics to identify positive and adverse trends and their root causes, so necessary action can be taken. We also assure ourselves that our suppliers maintain a good health, safety and environment record.

Each year we develop detailed HSE improvement plans to enhance what we do. These plans are regularly reviewed by the Directors in your part of the business.

When working for TfL or one of its companies you will receive the necessary training and equipment to ensure that you can

undertake your job safely, ensure the safety of customers and protection of the environment.

As an employee, your physical and mental health and wellbeing is also important and we provide occupational health services to help you stay healthy and in work and provide suitable welfare facilities at your work place.

We want to maintain a fair culture and employees or their representatives are consulted on health and safety matters as they arise, in a meaningful way through scheduled health and safety meetings or more regularly where needed.

What we can all do

We all need to look out for each other and speak up if anything is unsafe or damaging to health or the environment.

We all have a duty to follow our HSE rules and procedures. Do not take shortcuts. If you think rules or procedures are unhelpful let your manager know. Where necessary rules and procedures can be changed.

We can learn from the past, so always report and investigate accidents, incidents and near misses/close calls.

Demonstrate the TfL behaviours in everything we do.

In this way we can work together so that our vision for a safe and healthy environment is achieved.

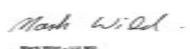
Mike Brown MVO
Commissioner



Gareth Powell
Managing Director
Surface Transport



Mark Wild
Managing Director
London Underground
and TfL Rail



Graeme Craig
Director of Commercial
Development



Stuart Harvey
Director of Major
Projects



SCHEDULE 16 - APPENDIX 2: HEALTH AND SAFETY MANAGEMENT PLAN

SCHEDULE 16 - APPENDIX 3: QUALITY MANAGEMENT PLAN

SCHEDULE 16 - APPENDIX 4: TFL CORPORATE ENVIRONMENTAL FRAMEWORK



TfL Corporate Environment Framework

MAYOR OF LONDON

 **TRANSPORT
FOR LONDON**
EVERY JOURNEY MATTERS

Contents

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- 2 Linking the framework to our goals**
- 3 Managing environmental impacts, current and future performance**
 - Carbon, energy and climate resilience
 - Air quality
 - Noise
 - Materials and resources management
 - Pollution prevention
 - The built environment
 - The natural environment

Introduction

Setting the context

At Transport for London (TfL) we play an important role in supporting the Capital's economy and quality of life. We run a large operation; our services accommodate 30 million journey stages every day. We provide vital transport services and promote sustainable options that keep our city moving. In doing this, we have a responsibility to manage the environmental impacts of our activities.

London's population is increasing, and our services are growing to meet this need – we're delivering new services, greater frequency, more capacity and improved reliability.

There are challenges to be met in terms of rising costs, legal pressures and also opportunities to use good practice, innovation and smart technology.

However, we start from a good position – our environmental performance has some world class examples of good practice and we have already met some of our previous targets.

Environmental issues present us with both opportunities and challenges. Some enable us to manage costs more effectively through, for instance, reducing energy and water use. We are also improving the potential of habitats that are around our networks, so contributing to London's quality of life. Some of the challenges relate to changes in legislation, public health issues, provision of stable energy supply and planning for the impacts of extreme weather on service delivery.

This framework describes our vision and ambition for environmental performance over the longer term. It clarifies our priorities and explains how they will be delivered in a way that meets stakeholders' needs. The important environmental areas for us are set out along with objectives and targets. They illustrate why these issues are important, what we want to achieve, how they will be achieved and how we will measure progress.

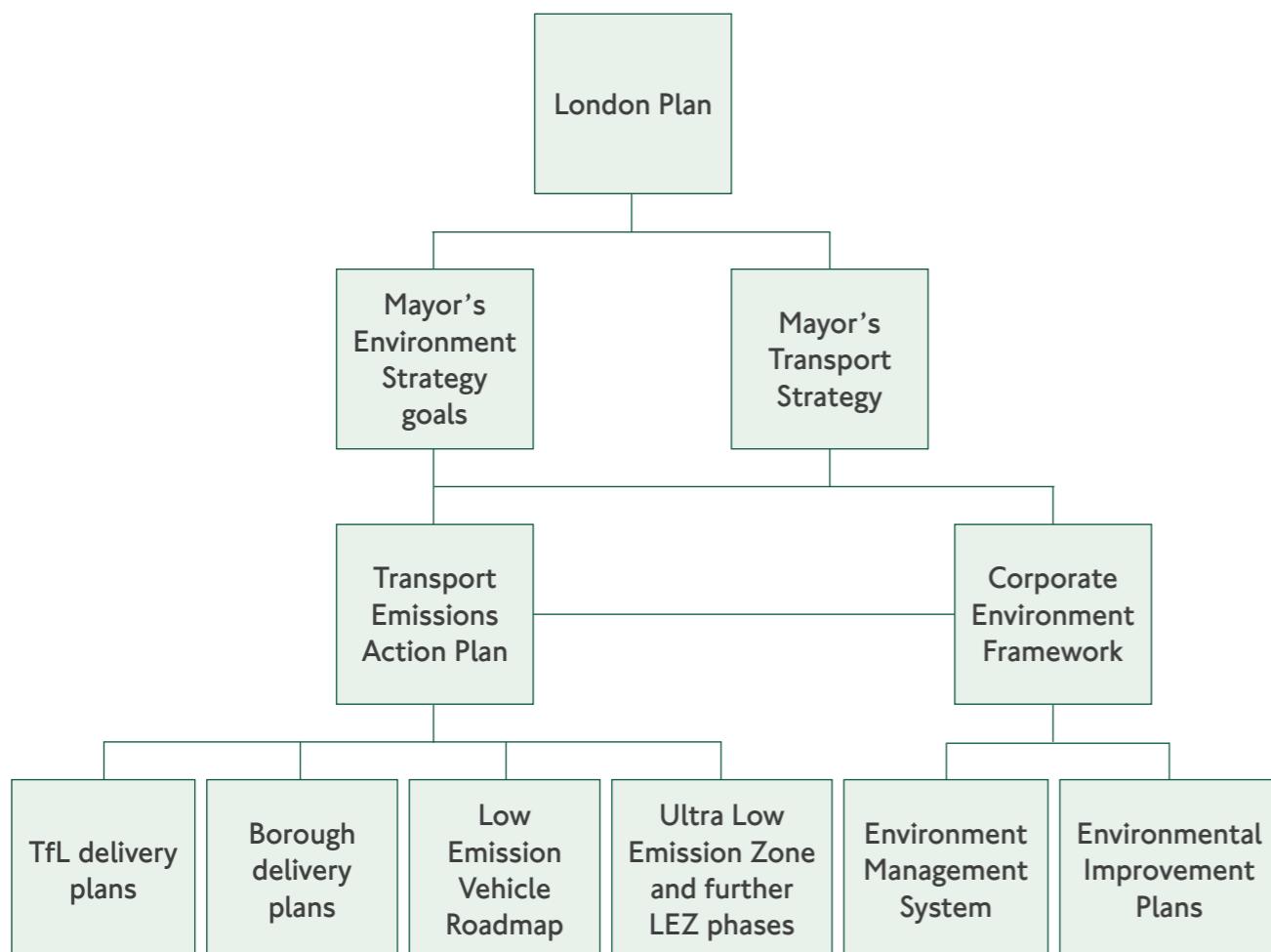
The framework covers the environmental impacts of our directly managed activities and operations, for example, delivery and operation of transport services, projects, maintenance and office functions. It also describes measures that will help us to deliver, and where possible improve, environmental legal compliance and meet other needs, for example, national requirements.

One of the principal aims of this framework is to show the contribution that our directly managed activities can make towards achieving the Mayor's environmental goals. Other elements of the Mayor's environmental aims that affect private transport across the city, are covered by other work we do, such as encouraging a reduction in emissions from vehicles in London.

It is designed to support our Business Plan and the Mayor's transport and environmental strategies. It is not intended to change existing priorities, but is focused on maximising the benefit of current and future plans.

About us

The figure below shows how this framework fits into a programme of work that we are doing to help achieve Mayoral environmental strategies and policy.



We are the integrated transport authority for the Capital and part of the Greater London Authority (GLA). We deliver the Mayor's Transport Strategy in partnership with London's boroughs and other transport providers, such as Network Rail and the train operating companies.

We comprise the following business areas:

- London Underground (LU) – operates London's Tube network, which sees more than 3.5 million passenger journeys a day. LU has 11 lines covering 402km and serving 270 stations. During peak hours, more than 500 trains operate
- London Rail – responsible for Tramlink, the Docklands Light Railway (DLR), London Overground, Emirates Air Line and the development of Crossrail

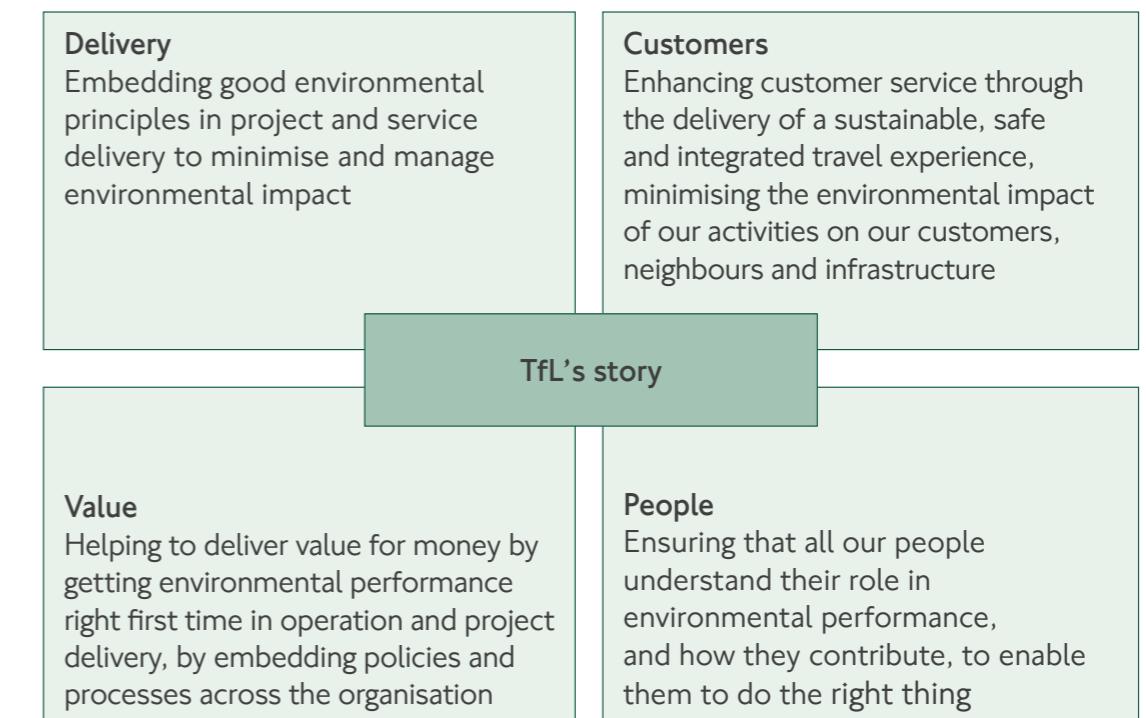


Linking the framework to our goals

This framework shows how delivery of a sound environmental performance within our directly managed operations can help to achieve our Mayoral goals and our business goals.



Our goal is to keep London working and growing and make life in London better. When decisions are taken within our organisation we consider our customers and users, our people, our delivery and value for money. This framework helps to deliver in each of these four areas, as shown below:



External influences that provide the context for this framework

We have set this framework in the context of potential influences or drivers that are likely to continue, increase or begin over the longer term:

- There will be more than 10 million people in London by the 2030s and we are committed to delivering a sustainable, effective system, both now and in the future
- We will continue our investment to provide a growing transport system to meet the predicted population rise in London. This will include new infrastructure and services, increased frequency, improved systems and new technologies
- We will continue to develop and deliver world-class services and policies that encourage people to choose more sustainable modes of transport
- We will continue to use world-leading technologies, including customer information systems
- There will be an increased emphasis on the importance of living and working in healthy environments. We will continually focus on improving London's air quality and reducing transport-related air pollution emissions
- Energy costs are likely to rise owing to the increasing uncertainty of fuel sources, volatility of world markets and the Government's energy market

reform. There will be a growing focus on the need to achieve energy efficiency and security of energy supply

- There will be a need to reduce transport-related carbon emissions to help tackle climate change and to meet the targets set out in national plans and the Mayor of London's statutory strategies
- We must prepare for future extreme weather and the changing climate, for example warmer, wetter winters; hotter, drier summers; and more frequent storm events and the associated likelihood of an increase in pests and diseases
- There will be an increased focus on delivering resilience to water shortages, reducing the overall use of water and water-related costs, and using more non-potable water where this is more suitable
- The cost of waste management will rise while the availability of landfill is decreasing. There will be a corresponding move from 'generating waste' to reusing and recycling materials because they a valuable resource
- There is likely to be an increased value placed on the provision of natural environments in urban settings, including using green walls and roofs
- There will also be a higher value placed on having a well-structured, cohesive urban realm

Essential principles

Underlying and supporting the strategic areas, objectives and targets set out in this framework are a set of common good practice environmental management principles. These are, and will continue to be, vital to ensuring their delivery:

- We consider the environment an issue that is integral to our business delivery, from inception to completion and operation of our capital projects and programmes
- We prevent and design out potential causes of negative environmental impacts in the early stages of our work
- We set and regularly review environmental targets and report publicly on how we are doing
- We deliver good environmental performance, both in-house and through our suppliers
- We identify and use good practice and innovation when designing, procuring, operating and maintaining transport infrastructure, vehicles and rolling stock
- We exceed, where possible, relevant environmental legislation to ensure that all our operations comply with legislation and encourage good practice
- We apply responsible environmental management techniques

- We will continue to implement and develop our environmental staff engagement programme

How we deliver environmental performance

We operate a well developed Health, Safety and Environmental Management System (HSEMS) to ensure that our environmental impacts and performance are well managed. The HSEMS is regularly reviewed to take into account changes in business activities, responsibilities and legislation.

At the heart of the HSEMS are the health, safety and environment (HSE) policies, supported by a number of standards and procedures, that set requirements for our activities. The HSE policies call for us to comply both with the spirit and the letter of environmental legislation and to improve our environmental management and performance.

We also manage the environmental performance of our projects and programmes through procurement and project management processes.

Our businesses and many of our contractors produce annual Environmental Improvement Programmes, which set objectives, priorities and targets for the year ahead. We will continue to deliver some of our environmental performance in partnership with our supply chain, setting specifications, franchise and contract requirements that are closely aligned to our goals and targets.



■ London Tramlink

We monitor and report on our environmental performance regularly – periodically to internal business units, quarterly to our Safety and Sustainability Panel and annually to the public, through our Health, Safety and Environment Report. This includes information on our environmental performance and that of our main suppliers.

Why have we developed this framework?

It is important for us to set out how we will deliver our plans while maintaining the

best environmental performance possible. While our Business Plan and funding is set out for the next decade, having this vision for environmental performance helps us to identify where further effort and support will be needed.

Our environmental performance is good. However, using the underlying principles set out previously, we are committed to improving it further, especially as we are delivering more infrastructure and services.

There are strategic environmental areas that are important to us and our stakeholders. For each one, this framework sets out updated objectives and targets to illustrate why these issues are important, what we want to achieve, how they will be achieved and how we will measure progress.

Our key strategic areas are:

Air quality

Reducing polluting emissions and exposure to air pollution in London

Carbon, energy and climate resilience

Reducing carbon emissions and preparing for the potential impacts of climate change and extreme weather

Resource management

Using resources (including water) wisely and minimising waste

Noise

Managing and controlling transport-related noise and vibration

Natural environment

Respecting, protecting and enhancing the natural environment and its contribution to the quality of life

Pollution prevention

Proactively managing our activities to minimise and control pollution

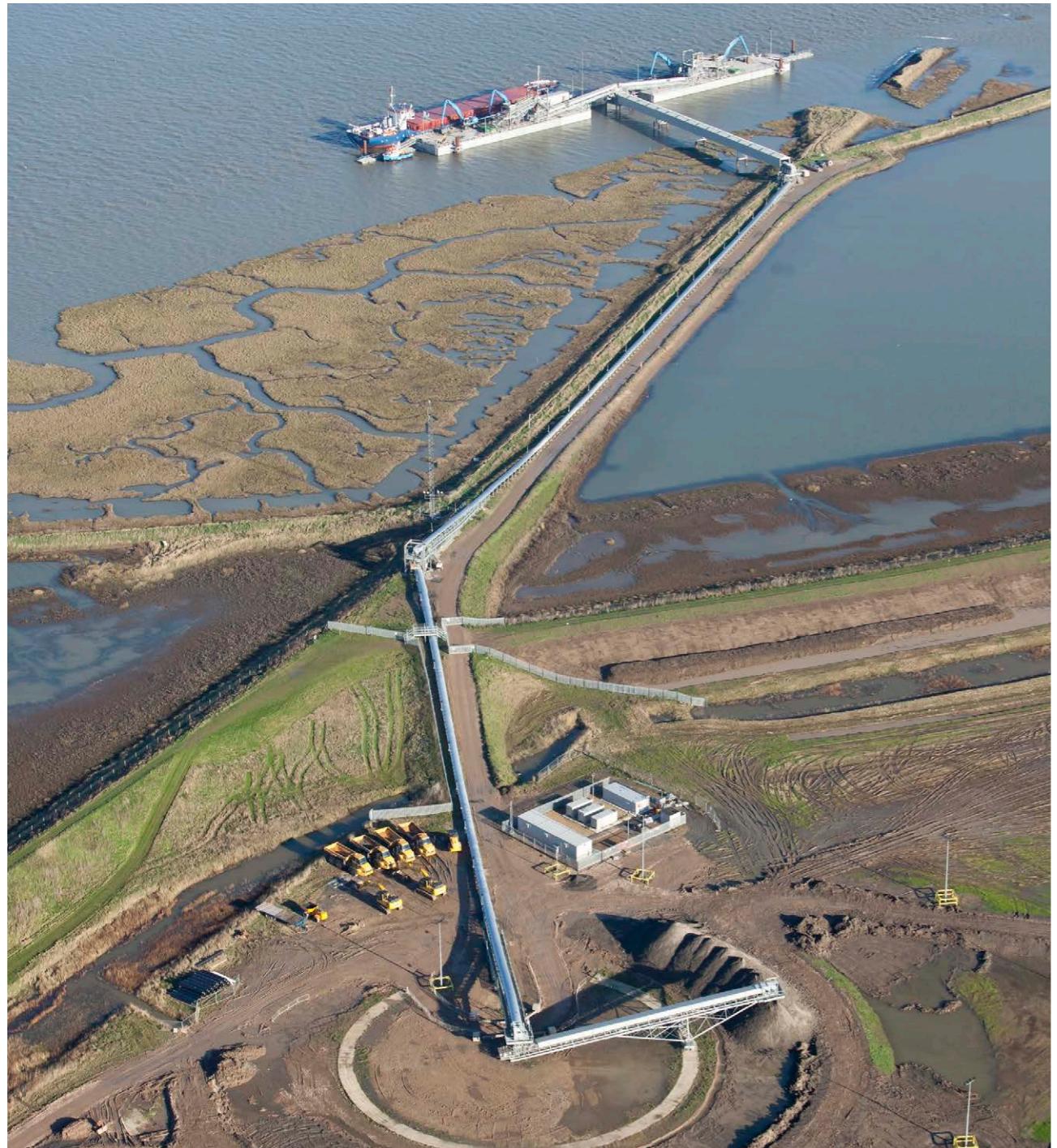
Built environment

Respecting, protecting and improving the built

environment and enhancing the quality of the travel experience

We have developed five-year delivery plans that support each of the strategic goals. Highlights are summarised in the following sections.

Managing environmental impacts, current and future performance



■ Crossrail is reusing excavated materials at Wallasea Island for the Royal Society for the Protection of Birds

Carbon, energy and climate resilience

Reducing carbon emissions and preparing for the potential impacts of climate change and extreme weather

We are currently the single biggest consumer of electricity in London and one of the top 10 in the UK. Electricity consumption is a significant contributor to climate change and we have a responsibility to use energy efficiently.

As we continue to invest in transport infrastructure and service capacity, one of our major challenges is how to reduce total carbon emissions. Progressively improving the efficiency of our operations is essential if this is to be achieved.

Approximately half of our carbon dioxide (CO₂) emissions come from electricity used for powering the Tube; the other half is associated with hydrocarbon fuel use in buses, support fleet vehicles and emissions from the taxis and private hire vehicles that we license.

Achievements

We set a target to reduce the normalised CO₂ emissions (measured in grams of CO₂ per passenger kilometre) from our main public transport services by 20 per cent in 2017/18, against a 2005/06 baseline (equivalent to 1990 emissions). In 2013, we reported a fall in normalised emissions to 61 grams equivalent CO₂ (CO₂e) per passenger kilometre, slightly more than 20 per cent below the baseline (77 grams CO₂ per passenger kilometre). As a result, we achieved the 2017/18 target in 2013. We are now setting a more ambitious goal to support the Mayor's aim of a 60 per cent CO₂ reduction in London by 2025.

We have looked at how we purchase electricity, including considering lower carbon and diversified sources, and have introduced

procurement processes to develop this further. We have also put in place a range of measures to help monitor and manage our electricity use. These include installing automatic meters at more than half of our Tube stations and in many surface transport operational premises and demonstrate carbon assessment into project decision-making and management.

In addition, we have implemented energy efficiency initiatives across our head offices, Underground and Surface Transport business areas. Those that ensure efficient use of electricity to power Tube trains are best delivered as lines and trains are upgraded. Measures implemented during recent improvement work, for instance on the Victoria line, include using regenerative braking – where energy otherwise lost when trains slow down is captured and made available for use by following trains.

A number of innovative measures have been tested at Vauxhall bus station, Walworth bus garage, head office buildings and at Leicester Square and Sloane Square Tube stations. These include renewable energy, lighting, centralised cooling and heat recovery systems, plus automation and control technology. The most successful measures will be introduced elsewhere across our organisation.

We have significantly reduced CO₂ emissions from our bus fleet by introducing hybrid engines. Also, in our support fleet, the specification for grams per kilometre of engine emissions has consistently improved. There is also the successful ongoing Destination Green staff engagement campaign and awards,

Head Office Environment Champions and LU's Energy Saving Challenge.

We have assessed and evaluated the impacts of extreme weather and future climate change on our assets and services, referencing the 2009 United Kingdom Climate Projections (UKCP 09). We have focused on the predictions for Greater London rainfall and temperature in the 2020s, 2050s and 2080s. With today's extreme weather, we have a proactive planning approach in response to forecasts. We aim to run as many services as possible and provide accurate real-time information as a situation develops, and this has received positive feedback following the winter storms and rain of 2013/14.

Objectives

- We will minimise our energy use and therefore the carbon emissions of assets, buildings and vehicles
- We will use energy-efficient and low-carbon principles are embedded across all levels of the organisation
- Our energy will come from verifiable low-carbon or renewable energy sources
- We will minimise the risks to people, operations and assets from extreme weather and climate change

Targets

We will contribute towards achieving the Mayor's target of a 60 per cent reduction in CO₂ emissions by 2025 (against a 2013

baseline) by aiming for a 40 per cent cut in TfL CO₂ emissions.

We will further reduce the amount of carbon per passenger journey by cutting emissions of CO₂ per passenger kilometre by 40 per cent by 2025 (against a 2013 baseline).*

A 40 per cent reduction in overall CO₂ emissions is a stretching target as our planned increase in services and infrastructure will result in a further rise in energy use. To fully meet our targets requires the reduction in the carbon intensity of grid electricity as projected by the Government's Committee on Climate Change.

We will achieve these targets by:

- Diversifying energy supply to increase the amount of decentralised energy from local generators in London. Our aspiration is to achieve 20 per cent of annual demand from these sources by 2016 and 40 per cent by 2020
- Embedding energy efficiency and resilience in business processes, for example business cases, design and procurement
- Introducing a programme of energy efficiency improvements for our assets and buildings, using the GLA's RE:FIT methodology where appropriate
- Developing a culture of energy efficiency and low-carbon behaviour across the organisation through, for example, staff engagement initiatives and performance management
- Using low-carbon fuels and vehicles in our fleet, including the hybrid bus roll-out; biodiesel bus pilot; trialling and promoting electric vehicle and hydrogen fuel cell technology for buses, Dial-a-Ride vehicles and our support fleet; and working with Government agencies to achieve our goals
- Taking a risk-based approach to identifying and managing key weather and climate vulnerabilities. We will keep our identified risks as low as is reasonably practical and will review them on a regular basis



TfL is delivering energy efficient lighting at many tramstops, stations, tunnels and buildings

Measuring progress

We will measure and publicly report on our carbon emissions against an annual forecast. This will cover the emissions that we have control over, for instance arising from buses, Underground and Overground trains, DLR, Tramlink and head office buildings.

We will also report on weather and climate change resilience reviews and plans.

Air quality

Reducing polluting emissions and exposure to air pollution in London

We are a key partner in delivering the Mayor's Air Quality Strategy, through policy measures such as the Low Emission Zone, delivering sustainable transport options and promoting low-emission vehicles, walking, cycling and smarter travel choices.

We aim to reduce emissions to air from our bus fleet, the taxis and private hire vehicles we license and our support fleet. We also aim to lead by example, demonstrating good practice in the type of vehicles we use and how they are operated. Combustion of fuel results in emissions of pollutants into the air as particulate matter (PM) and oxides of nitrogen (NOx).

The Transport Emissions Action Plan sets out our continuing work to achieve air quality improvements from wider, private transport in the Capital. This includes plans to develop an Ultra Low Emission Zone in central London by 2020. The environmental performance related to this is outside the scope of this framework.

Achievements

We are proud to have the cleanest bus fleet in the UK as a result of fitting diesel particulate filters (DPFs) to Euro II and III vehicles and introducing diesel-electric hybrid buses, including the New Routemaster. NOx emissions will be reduced further with the early replacement of approximately 900 Euro III vehicles with Euro VI models and retrofitting the remaining Euro III buses in the fleet with selective catalytic reduction equipment.

Similar efforts are being made to reduce emissions from other parts of our fleet. Trials

of ultra low-emission vehicles will continue in the support fleet and DPFs are being fitted to Woolwich Ferry vessels. We are also working with the taxi and private hire industry to encourage the introduction of ultra low-emission vehicles.

The Mayor has called on local authorities to introduce innovative measures to improve air quality through the Mayor's Air Quality Fund. This builds on lessons learnt from the Government-funded Clean Air Fund, which:

- Trialled dust suppressants
- Fitted DPFs on buses on routes through air quality priority areas
- Encouraged behaviour change through public campaigns and advice for drivers of taxis and private hire vehicles
- Researched the air quality benefits of green walls

We have reduced dust from our construction activities, for example, at the Tottenham Court Road and Victoria station upgrade projects, and cut vehicle air emissions associated with freight transport by developing detailed delivery and equipment removal plans.

Objectives

- We will work towards zero pollutant emissions from our fleet vehicles
- We will include air quality requirements in policies, projects and contracts



■ Our electric bus on trial from Victoria to Waterloo

Targets

We will seek to support the Mayor's air quality targets for London by delivering a 50 per cent reduction in NOx emissions from the bus fleet by 2020, against a 2013 baseline.

We will reduce PM emissions from the bus fleet by 25 per cent by 2020, against a 2013 baseline.

These targets are ambitious but will be achievable through a range of measures including:

- Delivering selective catalytic reduction to reduce NOx emissions from Euro III buses
- Introducing 1,700 hybrid buses by 2016
- Implementing a technology and fuel demonstration programme to reduce emissions from buses, including trialling hydrogen and electric buses

- Continuing to implement our support fleet environmental policy, working with the Office for Low Emission Vehicles to achieve air quality and carbon reduction goals

- Working in partnership with Government, the EU and other transport organisations and technical experts to continue trialling new technologies and fuels. Hydrogen buses are a small but important part of the fleet and the first electric buses began running in London 2014. Infrastructure development will continue to support these emerging technologies and trials of wireless induction charging is the next important step

- Specifying, through procurement and contracts, that our suppliers must meet emission requirements for their vehicle fleets

Measuring progress

We will measure and report publicly on the 50 per cent reduction target for NOx and 25 per cent reduction target for PM emissions by 2020, against an annual forecast.

Noise

Effectively managing and controlling transport-related noise and vibration

Noise is an important part of determining quality of life in the Capital. Sound levels or vibration from transport, such as train and vehicle movements, construction works or public announcements, can affect those who work or live close to the transport system.

We want to ensure that noise disturbance is minimised wherever possible. As a result we make every effort to specify noise limits and good practice on construction sites, trains and vehicles that are at least as good as statutory standards. We also make sure public announcements at stations are limited to the minimum required.

We have to balance the need to deliver improvement projects quickly with an obligation to reduce noise nuisance, especially at night, to residential and business neighbours, in partnership with local planning authorities.

Achievements

Construction activities are monitored carefully to ensure that agreed noise limits and operating hours are adhered to. We communicate plans for out-of-hours working to neighbours in advance.

We have recently seen a significant increase in construction works as part of our improvements, including for Crossrail and on major LU projects. This is in addition to our regular maintenance. While associated noise complaints often mirror the amount of construction work taking place, there has been a gradual decline in the number of noise complaints that we receive.

Much has been done to reduce noise from buses, trains, support fleet vehicles, rail and road surfaces, and we will continue to trial and use improved technology and materials. Measures have been implemented that help us minimise noise, especially during night-time engineering hours.

Objectives

- We will reduce noise and vibration from our vehicles and rolling stock
- We will reduce noise and vibration from our transport infrastructure and operations
- We will reduce noise and vibration from our maintenance and improvement programmes
- We will develop a target for surfacing the TLRN with lower-noise materials

Targets

- Reduce the number of noise-related complaints
- Respond to 100 per cent of noise and vibration complaints regarding rail services within 10 working days, and deal with 90 per cent of these within the target date
- Review the Section 61 (construction noise consenting) process and deliver improvements applicable to large, medium and small projects
- Ensure 90 per cent of buses in our fleet are at least two decibels quieter than the required legal limit by 2015

We will achieve these targets by:

- Continuing to test and use improved technology and materials, including targeted trials for solutions relevant to specific locations, with the aim of reducing noise impacts
- Ensuring effective communication with local residents and businesses potentially affected by noise or vibration from construction and maintenance activities

- Producing a regular summary of rail complaints by, for instance, service area
- Developing a tool showing areas with jointed track and a programme for replacement
- Completing the roll-out of quieter trains on all LU sub-surface lines by 2016

Measuring progress

We will measure and report annually on progress in achieving our noise targets and the associated delivery plans.



■ Our new trains are quieter for customers and neighbours

Materials and resources management

Using resources (including water) wisely and minimising waste

We aim to ensure that we use resources responsibly, by minimising our consumption of natural resources and encouraging the reuse and recycling of materials. The amount of waste produced increases or decreases in direct relation to the volume of maintenance or construction activities carried out as we expand our transport services. We intend to minimise waste as much as possible and reach a position where 'unwanted' materials are no longer referred to as 'waste', but are considered a potential resource.

Some of our businesses have a good track record in recycling up to 99 per cent of waste materials, but we can do more by sharing good practice across the entire organisation. While the amount of unwanted materials produced depends on the nature of the work being carried out, opportunities for designing-out waste and reusing and recycling apply to all construction projects.

Achievements

Our head offices achieve the Department for Environment, Food and Rural Affairs (Defra) good practice water consumption target of 6m³ per full time equivalent (FTE) person per year. They also achieve recycling rates of 62 per cent (working towards a target of 75 per cent).

We have standards promoting the use of sustainable drainage. There are also growing numbers of water recycling systems for train, bus and coach depots and stations. Green roofs have been installed at key head offices, depots and stations to help capture rainfall.

We have worked to achieve excellent local reuse of waste on construction or maintenance projects. For example, some of the work on the Metropolitan line embankments achieved 100 per cent reuse of waste materials.

Objectives

- We will continue to minimise generation of waste as far as possible
- For any waste still generated, we will develop a normalised target for reduction, for example, per project spend or passenger kilometre
- We will develop a target for reducing hazardous waste
- We will prioritise reuse of resources and maximise opportunities for recycling unavoidable waste, using innovation and new systems where practical
- We will optimise opportunities to recover energy from remaining waste
- We will continue to purchase reused materials or those with a high recycled content

Targets

- We will reuse, recover and recycle 99 per cent of non-hazardous waste, with interim targets of 30 per cent for recovery by 2031, in line with The London Plan

- Our head offices will aim to achieve a shift from current Defra good practice performance of 6m³ water consumption per FTE to Defra best practice of 4m³ per FTE

We will achieve these targets by:

- Designing-out waste in construction and design
- Delivering a reduction programme for hazardous waste
- Continuing to invest in low-use and recycled water technologies
- Developing a system to quantify how much

we spend on having our waste treated, recycled and disposed of to help us target priorities for where to reduce waste

- Creating a waste exchange process for our organisation and contractors
- Requiring larger capital projects and programmes to achieve external sustainable building or infrastructure certification, equivalent to 'very good' or 'excellent' where possible

Measuring progress

We will measure and report annually on progress made towards achieving our targets and key programme delivery.



■ Our construction site at Tottenham Court Road is recycling and reusing all of its waste

Pollution prevention

Proactively managing activities to minimise and control pollution

Our activities require the use of materials and substances such as fuels, oils and solvents that could pose an environmental risk if not managed properly. Our HSEMS puts controls in place to prevent spills, leaks and incidents. There are opportunities to further prevent pollution through designing-out or minimising the use of harmful substances where possible, as well as good management practices.

Achievements

We have assessed the risk of pollution and ensured controls and contingencies are built into local emergency plans. Our HSEMS, along with training for staff and contractors, helps to encourage good management practices, but there is more that could be done to improve some of our operating premises, and those of our main suppliers. Opportunities to 'design-out' pollution will be taken, where possible, for new premises or during refurbishment.

Audits are carried out to check that procedures are being followed at our buildings, construction sites and main suppliers' operational premises. We follow an incident reporting procedure to establish trends and inform the audit and remedial works programme.

Objectives

- We will embed best practice to prevent pollution
- We will minimise the risk of pollution and ensure no pollution incidents occur as a result of our activities

Targets

- Zero pollution incidents each year

We will achieve this target by:

- Annually assessing and reducing risk for our highest risk sites
- Improving processes for reporting and investigating environmental incidents

Measuring progress

We will measure and report annually against our pollution prevention target and on progress with our delivery programmes.



■ We regularly deliver spill prevention training

The built environment

Respecting, protecting and improving the built environment and enhancing the travel experience and wider quality of life that London offers

We are helping to achieve the London-wide aim of improving the built environment, or urban realm. This contributes to the quality of life in the Capital and helps to create a strong sense of place, for example at interchanges.

Through sustainable design and construction, we can reduce exposure to pollution and noise and help to prevent crime. We aim to lead the way in designing measures to manage rainwater run-off and make the city increasingly resilient to more frequent extreme weather events.

In addition, many of our buildings, stations and assets have a strong heritage that contributes to London's identity, that we have a responsibility to preserve.

Achievements

Steps have been taken to enhance the pedestrian environment by removing clutter, recognising the needs of people with disabilities and improving the appearance of the urban realm. In addition to improving our own networks, we support work through the boroughs' Local Implementation Plans.

Huge efforts have been made to improve cycling infrastructure, stations and interchanges, which is helping to enhance London's reputation as a place to visit and do business. Working with other transport authorities and partners, we have achieved excellent design on schemes including Windrush Square in Brixton, Kingsland High Street in Hackney, the King's Cross terminal

and new Crossrail stations. Several projects have received honours, including Civil Engineering Environmental Quality Assessment awards and Building Research Establishment Environmental Assessment Method awards, in recognition of best practice.

We share experience and good practice with borough councils, housing associations and built environment professionals through guidance documents that make up the Streetscape toolkit and supporting Urban Design London to share best practice.

Objectives

- We will develop a target for the number of schemes achieving an improvement in urban realm scores
- We will improve the built environment to support an integrated, safe and seamless travel experience
- We will protect and restore our heritage assets
- We will embed sustainable design and maintenance solutions to enhance development of the built environment
- We will apply a holistic approach to design governance across the organisation
- We are recognised as a leader in design standards for the built environment

The natural environment

Respecting, protecting and enhancing the natural environment and its contribution to the quality of life

We will achieve these objectives by:

- Implementing a programme to update design and material guidance and, in 2014, we will publish:
 - Refreshed London cycling design standards
 - Refreshed Streetscape guidance for the TLRN
 - Guidance for the development of our stations and interchanges
 - Pedestrian Design Guidance
- Surveying, recording and understanding our assets and their heritage value, to identify opportunities for conservation and restoration

- Exploring and developing a method to measure improvements in the quality of the built environment starting in 2015
- Continuing to work with English Heritage, conservation officers and other interested stakeholders to share information and develop best practice
- Communicating the value of the built environment across our organisation

Measuring progress

We will measure and report annually on progress against our built environment activities and delivery plans.



■ We deliver schemes to improve all aspects of the urban realm

We have significant land holdings across London, particularly along track sides and the verges of the TLRN. These spaces provide vital habitat for flora and fauna as well as green links through the Capital. The natural environment is a key contributor to improving the quality of life in London.

In addition, adding 'green infrastructure' can provide ecosystem services including ecological benefits, capturing polluting particulate matter, providing shading and cooling and reducing the speed and nature of run-off water.

The pressures on the natural environment continue to increase as there is more competition for space, both on and off our networks. We are also seeing a rise in pests, diseases and weed species such as Japanese knotweed.

Achievements

LU's Biodiversity Action Plan and the Green Estate Management Plan for the TLRN set out our plans to continue managing the natural environment responsibly, and to look for opportunities to enhance the value of our land as a habitat and resource to be enjoyed by residents and visitors.

We have robust processes in place to protect the natural environment and install green infrastructure whenever possible. These also help us to react quickly to threats, such as outbreaks of oak processionary moth caterpillars.

Objectives

- We will protect, manage and enhance the natural environment within our land holding
- We will develop the habitat and biodiversity potential of the natural environment
- We will develop a valuation system to measure losses and gains, building on the experience we gained when working with the boroughs to place a value on street trees
- We will manage the natural environment to help alleviate the impacts of extreme weather and climate change

Target

- We will measure and report on the percentage of our land holding with improved habitat and biodiversity quality

We will achieve this by:

- Publishing a refreshed Green Estate Management Plan for the TLRN
- Communicating the value of the natural environment across the organisation, including improving skills and competence relating to key biodiversity issues
- Developing a method to measure biodiversity losses and gains starting in 2015
- Surveying and recording the biodiversity value of our assets to identify priority areas for protection and enhancement as part of management plans



■ The Emirates Air Line

- Developing and improving plans to inform future management and enhancement of the natural environment and to help reduce the impacts of extreme weather events and climate change. Starting in 2015, this will include:

- Biodiversity protection and enhancement
- Succession planting
- Control of pest and diseases
- Control of harmful weeds and invasive plants

- Continuing to work with Natural England, the Forestry Commission, the London Tree Officers Association, RSPB and other interested stakeholders to share information and develop best practice

Measuring progress

We will measure and report annually on progress against our objectives and target for improved habitat and biodiversity quality.

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**SCHEDULE 16 - APPENDIX 5: ENVIRONMENTAL PLANNED GENERAL INSPECTION
TEMPLATE**

Environmental Planned General Inspection (EPGI) Report



Ref :		Inspectors:		Period No:	
Date:		Location:		Work Order No:	

No	Aspect	Description of Inspection Finding, Action Required, Responsibility:	D code	A1	A2	B	C	GP	Sample Picture	Action By, Date Rectified, Comments:
1										
2										
3.										
4.										
5.										

General Comments

[Insert comments here]

Environmental Planned General Inspection (EPGI) Report



Ref :		Inspectors:		Period No:	
Date:	18/04/18	Location:	Track area Leytonstone – Leyton..	Work Order No:	

DISPARITYCODES (Determined by the MGC checklist included in MR-GN-10018)

Please include category & number in the Disparity Code column on the front sheet/first page					
SAE	E	DF	CH	PC	HW
Site Access & Egress	Environment	Documentation & Files	Control of Hazards	Personnel Certification	Health & Welfare
1 Signage	1 Waste & Litter	1 Licenses	Physical hazards	1 ID cards/entry permits	1 Lighting
2 Security	2 Noise, Nuisance & Vibration	2 Method Statements	2 Falling from height	2 Fire safety	2 Fire precautions
3 PICER	3 Hazardous Substances	3 Registers	3 Objects falling from height	3 Track training	3 Toilets
4 Passport to safety	4 Atmospheric pollution	4 Fire arrangements	4 working space	4 Machine room	4 Hot water
5 Briefings	5 Water system pollution	5 H&S/Design Risk assessments	5 Ergonomics	5 Fire watchman	5 Drying/mess room
6 Emergency planning	6 Land contamination	6 PAT testing	6 Manual handling	6 SPIC	6 Changing areas
7 NOWAS	7 Natural Resources & Energy	7 Quality Plans	7 entrapment/entanglement	7 Electrical Isolation	7 Drying room
8 HSE notification	8 Harm to Wildlife & Landscape	8 HSE Plan	8 Road/pedestrian	8 First Aid	8 Potable drinking water
9 Sabre Access	9 Harm to Heritage & Highway	9 Aspects & Impacts assessment	9 Rail/derailment	9 Track Posession	9 Pipework/waste clearance
10 Signing In		10 Site Waste Manage Plan	10 Fire & explosion	10 Track Protection	10 First Aid facilities
		11 Accident book	11 thermal environments	11 Train Master	11 HSE law poster
		12 IRF's	12 repetitive tasks	12 Track Lookout	12 General Housekeeping
		13 Permits to work	13 Violence	13 Leptospirosis card	
		14 Tool Box Talks	14 Stored energy	14 Security/guarding	
		15 Training	15 harmful energy emissions	15 Other CSCS certification	
		16 Site files	16 Non-ionising radiation		
		17 Scaffold Management	17 ionising radiation		
		18 Equipment manuals	Chemical Hazards		
			18 Inhalation of dusts/fumes		
			19 contact/absorption		
			20 Ingestion		
			21 oxidising		
			22 lack of oxygen		
			Biological hazards		
			23 Inhalation of virus/bacteria		
			24 Blood-Born Pathogens		
			25 Ingestion		
			Psychological hazards		
			26 Workload		
			27 Intimidation/threat of Violence		
			28 Stress		
			29 Fatigue		

Environmental Planned General Inspection (EPGI) Report



Ref :		Inspectors:		Period No:	
Date:		Location:		Work Order No:	

HAZARD CODES		
Hazard	Response	Definition
A1	IMMEDIATE ACTION REQUIRED Work must cease immediately and not restart until appropriate controls have been put in place to reduce the hazard classification to at least A2.	Contravention of a legal requirement and/or LU standards and/or practice likely to cause, death, permanent disability, loss of body part, extensive loss / impact on structure, equipment, materials, major pollution, destruction of local eco- systems, habitat or other environmental impact.
A2	The identified conditions should be rectified as soon as practicable in less than 14 days or as directed by the inspecting authority.	Contravention of Health and Safety and Environmental legal requirements and/or LU regulations, standards, procedures, industry standard good practices or failure to adequately contain and store material, fuels or waste.
B	The identified conditions should be rectified as soon as practicable in less than 28 days .	A condition or practice likely to cause injury, illness, pollution, destruction of local eco- systems, habitat, or extensive loss / damage to equipment, materials and structures. Less severe or disruptive than Class A1, or A2
C	As agreed at time of inspection	Any condition or practice likely to cause minor (non-disabling) injury, illness or non-significant environmental impact if not acted upon as soon as practically possible.
GP	None Required	Good Practice – this information should be shared with other areas and contractors to promote learning and continuous improvement.

Environmental Planned General Inspection (EPGI) Report



Ref :		Inspectors:		Period No:	
Date:		Location:		Work Order No:	

Environmental Planned General Inspection (EPGI) Report



Ref :		Inspectors:		Period No:	
Date:		Location:		Work Order No:	

Comments

Incidents or Near Hits identified during the PGI must be reported via the LUL incident line: 08442920292 Auto 1558

	Name (Print)	Signature	Date
Inspector			
Acceptor			
All remedial actions certified as completed			

Distribution:

Acceptor, Relevant Line Manager or DER, Local HSEQ Team

Continued on another sheet: /No

SCHEDULE 16 - APPENDIX 6: SITE NOISE AND VIBRATION EVALUATION CONTROLS