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# Rolling Stock & Depot Services X2234

## INSTRUCTIONS FOR TENDERERS

29 April 2013  
Version 2.0

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## **Part A Introduction and Background**

### **1. Structure of the Invitation to Negotiate**

The Invitation to Negotiate (“ITN”) for the Crossrail Rolling Stock and Depot project comprises four elements which are described in paragraphs 1.1, 1.2, 1.3 and 1.4 below. The ITN is made available to Bidders in electronic format via the Crossrail eSourcing Portal.

#### **1.1 Instructions for Tenderers**

The Instructions for Tenderers (“IFT” - this document) provides background to the requirements for the Project, details of the procurement process and instructions to Bidders concerning the preparation and submission of the Proposal. See Part A2 for further details of the structure of this document. The IFT also contains a summary of the requirements set out in the draft contract (“RSPA”) but the detailed requirements set out in the RSPA take precedence in all matters.

A glossary of capitalised terms is provided in Part A3.

#### **1.2 RSPA**

Subject to completion of the procurement process, the RSPA represents RfL’s requirements and is the basis on which it currently proposes to contract for the Project.

Certain schedules and other parts of the RSPA require completion with Bidder supplied information. Bidders shall submit this information as part of the Proposal and the information will be subject to review, negotiation and agreement.

The RSPA is subject to contract and to TfL and RfL board approval.

#### **1.3 Proposal Template**

The Proposal Template contains proformas for Bidders to use to submit their Proposal and sets out the required structure for this. Bidders are required to submit all of the information indicated by the Proposal Template and shall comply with all specific requirements with regard to structure, file naming and format of submitted files. Further information is provided in Part G.

#### **1.4 Data Room**

CRL has established an electronic data room within the Crossrail eSourcing Portal system to provide additional material for the information of Bidders. The material falls into 4 categories:

- a) The components of the ITN
- b) Material referred to in the RSPA

This comprises standards and other material referred to in the RSPA where such material is not generally available in the public domain. CRL does not take responsibility for the accuracy of this information.

c) Reference material

Reference material is provided for information purposes only and CRL does not take any responsibility for its accuracy.

d) Proformas

Proformas for use by Bidders in preparing the Proposal.

### **1.5 Discrepancies between ITN documents**

Subject to Part A1.1, the IFT takes precedence over other elements of the ITN. If Bidders identify any potential conflict between ITN documents or any other errors within the ITN, or should the meaning of anything be unclear, then they shall immediately notify CRL by issuing a Clarification Question.

### **1.6 Status of 28 February 2012 ITN and Associated Proposals**

The 28 February 2012 ITN (and subsequent revisions thereto) and associated Proposals are completely superseded by this ITN. Responses previously provided by CRL to Bidders' Clarification Questions remain valid unless the ITN has changed in relation to the subject matter or context of the original Clarification Question. Bidders are responsible for satisfying themselves in connection with this and if a Bidder is uncertain as to whether a clarification response remains valid then a new Clarification Question must be raised.

Bidders should note that the Data Room index has been extended to include a document 'status' column. The index identifies where there have been changes (additions, deletions and modifications) to the documents within the Data Room since 4 October 2012.

A new section of the Data Room, the 'Change Guide', has been created that includes, where appropriate and available, marked-up documents and commentaries that show and describe the changes since 4 October 2012. Documents in this section of the Data Room have been provided for information only and do not form part of the ITN.

Proposals submitted by Bidders in October 2012 will be retained by CRL for legal and audit reasons but will be disregarded for the purposes of the RSD procurement process set out in this ITN and, in particular, will not be referred to in the evaluation of Proposals submitted in response to this ITN.

## 2. Instructions for Tenderers

The Instructions for Tenderers provide:

- a) an introduction to the Project;
- b) a summary of the material provided in the ITN;
- c) CRL's detailed requirements for the preparation and submission of Proposals; and
- d) details of the evaluation process and criteria which will be followed by CRL.

## 3. Glossary

Unless otherwise stated in the text or below, words and expressions used in the ITN have the meaning given in the RSPA.

References to a "Part" or "Appendix" shall be references to a Part or Appendix of the IFT unless otherwise stated.

References to a "Schedule" shall be references to a Schedule to the RSPA unless otherwise stated.

**“Act”** means the Crossrail Act 2008;

**“Advance Works”** has the meaning given in Part D2.3;

**“Agreement”** means the final version of the RSPA as executed by RfL<sup>1</sup> and the successful Bidder;

**“Approved Code of Practice”** means the Approved Code of Practice (ACoP) - Construction (Design and Management) Regulations 2007 published by the Health and Safety Executive;

**“BAFO”** means best and final offer;

**“Base Case Maintenance Model”** has the meaning given in the RSPA. Where the term is used elsewhere in the ITN as part of the description of the procurement process, it means the latest version of the Base Case Maintenance Model submitted by a Bidder in connection with its Proposal;

**“Bidder”** means an applicant who, following the pre-qualification process, has been invited to submit a response to the ITN. The term includes all members of any Consortium formed or to be formed by a Bidder;

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<sup>1</sup> Refer to Part A4

“**BREEAM**” means the Building Research Establishment Environmental Assessment Method, details of which can be found at [www.breeam.org/index.jsp](http://www.breeam.org/index.jsp);

“**C620 Contract**” means the contract between CRL and the Signalling Contractor to provide the lineside signalling system in the Central Section;

“**CBTC**” means communication based train control;

“**Change in Circumstances**” has the meaning given in Part A11.4;

“**Clarification Question**” has the meaning given in Part G1.3;

“**Combination**” means a combination of Scenarios used to determine the capital price that will be taken into account in the Evaluation Model;

“**Total Commercial Score (TCS)**” means the combination of the NPV value and the Contractual Compliance Score as described in Part C3.4;

“**Commencement Date**” has the meaning given in the RSPA. For the purposes of preparing the Proposal, Bidders shall assume that this occurs on the date stated in Part B2.1;

“**Consortium**” means any joint venture, partnership or other combination of Economic Operators formed or to be formed by a Bidder to provide the Project;

“**Contractual Compliance Score**” means the score calculated by CRL as described in Part C3.3;

“**Contract Notice**” means the notice published in the Supplement to the Official Journal of the European Union on 26 November 2010 reference 2010/S 233-356965;

“**CRL**” means Crossrail Limited which is a wholly owned subsidiary of TfL;

“**Crossrail eSourcing Portal**” means the web based portal used to manage communications with Bidders during the procurement process as more particularly described in Part G2;

“**Crossrail Services**” means the passenger services to be operated by the CTOC on behalf of TfL;

“**CTOC**” means Crossrail Train Operating Company being the company which will enter into an operating concession agreement with RfL to deliver the Crossrail Services;

“**Data Room**” means the electronic data room provided by CRL within the Crossrail eSourcing Portal;

“**Depot Interface Specification**” means Appendix 1 to Schedule C1 of the RSPA;

“**DfT**” means Department for Transport;

- “Economic Operator”** has the meaning set out in the Regulations;
- “EDV”** means the exterior design visualisation for the Units provided in the Data Room;
- “Evaluation Cost Adjustment”** has the meaning given in Part C3.6;
- “Evaluation Model”** means the evaluation model spreadsheet pro-forma provided in the Data Room together with data entered therein by a Bidder or otherwise pursuant to the processes described in the ITN;
- “Form of Tender”** means part A1 of the Proposal Template;
- “GLA”** means the Greater London Authority;
- “IDV”** means the interior design visualisation for the Units provided in the Data Room;
- “IFT”** means these Instructions for Tenderers and includes any amendments notified to Bidders in writing by CRL from time to time;
- “Indexation Base Month”** has the meaning given in the RSPA except that for the purpose of preparing Proposals, the Indexation Base Month shall be as stated in Part B 2.3;
- “Information”** means any information provided by CRL, DfT, TfL, their subsidiaries, advisers, representatives or agents either within this ITN, the Data Room or otherwise in connection with the procurement process;
- “ITN”** has the meaning given in Part A1;
- “LBHF”** means the London Borough of Hammersmith and Fulham;
- “Letter of Clarification”** has the meaning given to it in Part B8;
- “LMD”** means light maintenance depot;
- “LOD”** has the meaning given to it in Part D2.6;
- “London Time”** means the local time in London which may be either Greenwich Mean Time or British Summer Time depending on the time of year;
- “Mandatory Requirements”** means the requirements set out in Part C1;
- “Member”** means a participant or shareholder in a Consortium;
- “NPV”** means net present value of each Proposal as determined by use of the Evaluation Model in accordance with Appendix D Part 1;
- “NPV Score”** means the score calculated by CRL as described in Part C3.2;
- “OCA”** means the Operating Concession Agreement being the contract between

RfL and the CTOC;

“**Operational Concepts**” means the suite of documents described in Part D3.8 and provided in the Data Room;

“**PQQ**” means the pre-qualification questionnaire issued to Bidders by CRL as part of the pre-qualification process which followed issue of the Contract Notice;

“**Process Agreement**” means each agreement made between CRL and Members of a Bidder’s Consortium which governs certain aspects of the Members’ conduct in connection with the procurement process;

“**Proposal**” means each Bidder’s entire offering in response to this ITN (including any amended offerings made pursuant to the processes described herein);

“**Proposal Template**” means the document with this title provided in the Data Room;

“**Qualifications**” means any amendments to the RSPA and any other assumptions, comments or qualifications in any part of a Proposal which may impact on the proposed contractual arrangements for the Project;

“**Reference Design**” means a design for OOC Depot prepared by CRL to a level of detail consistent with GRIP4 as defined by the Network Rail Guide to Railway Investment Process (this approximates to RIBA stage E) and provided in the Data Room for Bidders’ information;

“**Regulations**” means the Utilities Contracts Regulations 2006 as amended from time to time and “**Regulation**” means any regulation set out in the Regulations;

“**Responsible Procurement**” means the GLA’s Responsible Procurement policy as described in and implemented through the RSPA;

“**RfL**” means Rail for London, a wholly owned subsidiary of TfL;

“**RSPA**” means the rolling stock and depot services agreement being a draft of the Agreement intended to be entered into between the SP and (subject to Part A4) RfL on successful conclusion of the procurement process. References to the RSPA mean the latest form issued by CRL from time to time during the procurement process;

“**Scenario**” means a scenario for which Bidders are required to provide capital and maintenance prices as described in Part B5.1;

“**Signalling Contractor**” means the contractor appointed under the C620 Contract being an unincorporated joint venture of Siemens plc and Invensys Rail Limited;

“**SME**” means Small and Medium Enterprises as defined in Schedule A12 to the RSPA;

“**SP**” means the service provider being the name given to the successful Bidder under the RSPA;

“**SP Train Proposal**” has the meaning given in the RSPA and includes draft SP Train Proposals included in Bidders’ Proposals;

“**Stage**” means either the Stage 1 Crossrail Services, the Stage 2 Crossrail Services, the Stage 3 Crossrail Services, the Stage 4 Crossrail Services or the Stage 5 Crossrail Services, as the context requires;

“**Submission Date**” means the date and time for submission of Proposals as set out in Part B2.2 or otherwise notified in writing by CRL;

“**TCSE Subcontract**” means the Train Carried Signalling Equipment Subcontract to be entered into between the Signalling Contractor and the SP;

“**TESIS**” means the Train, ETCS and S&CS Interface Specification as described in Part F2. This forms part of the Train Carried Signalling Equipment Subcontract pack provided in the Data Room;

“**TfL**” means Transport for London;

“**Variation Proposal**” or “**VP**” means an additional Proposal based on a ‘variant’ as described in the Regulations which is submitted and evaluated as described in Appendix B; and

“**VTAC Track Wear Cost Model**” means the track wear model provided in the Data Room in the spreadsheet entitled ‘Crossrail VTAC.xls’.

#### **Decimal notation**

CRL uses a full stop (period) to indicate the decimal point when stating numbers – e.g. 2.1 means two point one. A comma is optionally used as a thousands separator – e.g. 1,000 means one thousand. Bidders are required to follow the same convention throughout the Proposal.

## **4. Contract Notice and references to CRL and RfL**

This procurement was advertised in accordance with the Regulations under contract notice 2010/S 233-356965. This procurement is for a Part B services contract as defined in the Regulations. Notwithstanding this, the IFT includes provisions which are based on compliance with Regulations which do not apply to Part B services contracts and, for the avoidance of doubt, the use of such provisions may be varied and does not mean that the relevant Regulations apply.

The Contract Notice stated that the ‘contracting entity’ would be TfL but that the contract or contracts (if any) resulting from the call for competition may be awarded by and may be for the benefit of TfL and/or any of its subsidiaries and nominees. Without prejudice to this, the RSPA has been drafted on the assumption that any Agreement resulting from the procurement will be between RfL and the SP. These Instructions for Tenderers and other parts of the ITN follow the same principle.

The Secretary of State for Transport and TfL, as Sponsors of the Crossrail Project, have appointed CRL to be the entity responsible for managing the procurement and delivery of

the Crossrail Project and CRL has also been formally appointed by the Secretary of State as nominated undertaker for the majority of works authorised by the Act, including the Depot Works.

Although RfL will be the counterparty to the RSPA, it is anticipated that RfL will appoint CRL to manage the RSPA on its behalf in respect of the majority of its rights and obligations during the delivery phase of the Project, in particular those that relate to the day-to-day management and oversight of works and integration and co-ordination with other parts of the Crossrail Project. RfL will take on direct responsibility for paying Milestone Payments and for those aspects relating to operational service of the Units and the OOC Depot including meeting all Service Payments, supported by a financial guarantee from TfL in respect of termination payments.

Bidders should also note that CRL, as nominated undertaker under the Act, retains a particular role in respect of the use of statutory powers arising under the Act to construct the OOC Depot, for example in obtaining associated consents and approvals and in the enforcement of related Undertakings given to third parties. Further detail is given in the RSPA.

In the context of this procurement, CRL acts as a central purchasing body as defined by the Regulations.

## **5. Description of Crossrail**

Crossrail is planned to run 118 km from Maidenhead and Heathrow in the west, through new twin-bore 21 km tunnels under central London to Shenfield and Abbey Wood in the east. This will bring an additional 1.5 million people within a 45 minute commute of London's key business and leisure districts. When Crossrail opens it will increase London's rail-based transport network capacity by 10 per cent, supporting regeneration across the capital, helping to secure London's position as a world leading financial centre, and cutting journey times across the city.

Crossrail will deliver substantial economic benefits for all of London and the South East. Economic forecasts suggest that Crossrail will add £42 billion to the UK economy.

Further background about the Crossrail Project can be found at [www.crossrail.co.uk](http://www.crossrail.co.uk).

## **6. General description of the Project**

### **6.1 Objectives**

The purpose of the Project is to procure new rolling stock, a depot and stabling at Old Oak Common and associated maintenance and support services to enable delivery of Crossrail related train services. Further information about these train services can be found in Part D3.8.

### **6.2 Rolling Stock**

A minimum fleet (excluding any extra Units) of 60 new 25kV AC overhead line electric multiple units (referred to in the RSPA and herein as "Units") shall be provided to sustain the provision of approximately 55 Diagrams. The Units are required to meet European



Union standards for interoperable main line rolling stock as well as providing particular features necessary to deliver the Crossrail service such as:

- a) traction, braking and passenger flow capacity to support a service of at least 24 trains per hour in each direction in the Central Section;
- b) integration of train and lineside systems to support use of CBTC based ATO, platform screen doors and train / platform CCTV in the Central Section;
- c) a design concept that can accommodate large numbers of passengers for metro style operations in the Central Section but which also provides a comfortable environment for longer journeys to and from the outer suburban areas; and
- d) be of fixed formation and 205 metres maximum length, but with the capability to configure as a 163 metre maximum length train.

These requirements are fully specified in the RSPA and a more detailed summary is provided in Part E.

### **6.3 Depot**

The RSPA requires the SP to design, construct, operate and maintain the OOC Depot for the term of the Agreement. The OOC Depot shall:

- a) provide overnight stabling for a minimum of 33 Units;
- b) enable all aspects of train cleaning (internal and external) to be undertaken; and
- c) provide facilities for all aspects of rolling stock maintenance up to and including light overhaul activities such as the exchange of bogies, wheelsets, motors and other principal on-train equipment to be undertaken.

These requirements are fully specified in the RSPA and a summary (including details of the Site at Old Oak Common in West London) can be found in Part D2.

### **6.4 Services**

By the Stage 5 Crossrail Services date the RSPA requires the SP to have delivered a fleet containing no fewer than 60 FLUs and to make available from that fleet sufficient numbers of reliable Units meeting minimum condition requirements to allow the CTOC to operate a specified level of service based on working up to 55 daily passenger Diagrams, including two Operational Spare Units ('hot spares'). This will require the SP to provide a comprehensive maintenance service for the Crossrail rolling stock fleet for the life of the concession.

The SP will also maintain and operate the OOC Depot as well as providing cleaning and other services at Stabling Sites and elsewhere on the Crossrail route.

These requirements are fully specified in the RSPA and a more detailed summary is provided in Part D3. Bidders should note that options for the provision of additional Units are described elsewhere in the IFT.

## 6.5 Payment

The RSPA makes provision for the SP to be paid as follows:

- a) the Total Contract Price for the Units and Equipment and for the Depot Works to be paid in instalments on the achievement of defined Milestones as described in Schedule E11 (Milestones and Security) of the RSPA; and
- b) periodic Service Payments which commence on Acceptance of the Units and continue for the duration of the Concession as described in Schedule E2 (Payment Mechanism) of the RSPA.

## 6.6 Duration

Subject to the provisions of the RSPA, the initial duration of the Concession will be 32 years from the Commencement Date.

The RSPA also includes provision for the Services to be extended for an additional period of up to 8 years.

## 7. Stakeholders

### 7.1 Stakeholder parties

The Crossrail Project is complex and its construction and future operation involve a wide range of stakeholders. These include:

- a) TfL and the Secretary of State for Transport (as Sponsors for the Crossrail Project);
- b) CRL (as the party responsible to the Sponsors for delivering the Crossrail Project);
- c) Network Rail; Canary Wharf Group and Berkeley Homes (as industry partners to CRL in the construction of Crossrail infrastructure);
- d) CRL and the industry partners' contractors and subcontractors engaged in delivering the Crossrail infrastructure and associated services;
- e) Heathrow Airport Limited (HAL) and its Associated Companies and Network Rail (as owners of infrastructure over which Crossrail services will operate);
- f) RfL as counterparty to the RSPA and manager of infrastructure in the Central Section of the Crossrail Project;
- g) Network Rail (as manager of part of the infrastructure over which Crossrail Services will operate);
- h) various statutory bodies (in their roles as approvers of the trains, depot and railway operations)
- i) various public and private bodies who may be affected by the Works and / or the Services;

- j) CTOC (as the operator of the trains and user of the depot);
- k) London Underground, Network Rail and various train operating companies (as users of the infrastructure or operators of stations on the Crossrail route);
- l) neighbours of the OOC Depot; and
- m) members of the public (as users of the Crossrail Services).

## 7.2 Stakeholder management

During the procurement process, Bidders are subject to the terms of the Process Agreements entered into with CRL and may not contact stakeholders in connection with the Proposal except where either:

- a) specifically permitted by the ITN; or
- b) permission has been granted in writing by CRL.

Bidders must immediately notify CRL if the Bidder considers that contact with a stakeholder not specifically permitted by the ITN is essential for the preparation of their Proposal. The name of the stakeholder, the nature of the proposed contact, and the reasons why the contact is necessary must be provided to CRL.

Following award of the Agreement, undertaking the Project will require the SP to manage a wide range of stakeholder relations. Bidders shall include the cost of complying with these requirements in the Proposal.

## 8. Key considerations for Bidders

Without prejudice to the evaluation criteria described in Part C or the particular requirements set out in the ITN, Bidders shall ensure that the following matters are clearly addressed in the Proposal.

### 8.1 Safety

CRL places great importance on achieving high standards of health, safety and environment management and creating a positive health, safety and environment culture during all phases of the Project.

In addition to the requirements of CRL, the SP will be:

- a) a ROGS duty holder and will also be responsible for supporting the CTOC's role as a ROGS duty holder in connection with its Crossrail operation; and
- b) a client under the CDM Regulations for the Depot Works.

The ability of the SP to provide high quality documentation to support the various approval processes required to allow the Works and Services to enter and remain in use will be key to ensuring the success of the Project.

## 8.2 Pre-qualification and Process Agreements

As part of the pre-qualification process, Bidders were required to enter into a Process Agreement with CRL. CRL requires full compliance with these agreements and further information is provided in Part A11.

## 8.3 Conflicts of interest

When selecting potential technical advisers, consultants or advisers and the like, Bidders shall ensure that such suppliers do not have a conflict of interest (whether actual or perceived) arising from any other work for CRL, RfL or the Sponsors.

Bidders should note that:

- a) the following organisations are directly involved with the Project and are precluded from working with Bidders: Ashurst LLP; PricewaterhouseCoopers LLP; Quasar Associates; Ingram Pitt Limited; Mott MacDonald and Gallagher Heath.
- b) the following organisations are closely involved in the management of the Crossrail Project and / or the Project and therefore there is a high risk of conflicts arising: Members of the Crossrail project delivery partner (Bechtel, Halcrow and Systra); members of the Crossrail programme partner (AECOM, CH2M Hill, Nichols Group, Turner & Townsend, Unipart Rail and First Class Partnerships); and the project representative (Jacobs Engineering). In addition, Aon currently advises TfL on insurance matters. Bidders should raise any proposed involvement of any of these companies with CRL before engaging them (communications will be treated as confidential).
- c) CRL has engaged a large number of design and other consultants in connection with the Crossrail Project. Under their contracts, these suppliers are obliged to declare and clear any potential conflicts of interest (whether actual or perceived) with CRL and Bidders shall ensure that this has been done before engaging any such suppliers. If in doubt, Bidders shall raise the matter with CRL (such communications will be treated as confidential).

## 8.4 Compliance with the RSPA

CRL requires Proposals which are complete, compliant and without Qualifications. Bidders shall therefore include the price of full compliance with the ITN in the Proposal. The process by which CRL will manage any Qualifications and the way in which they may affect a Bidder's chances of success are described in Part B.

Bidders should note that CRL very strongly discourages any Qualifications to the terms set out in the RSPA.

Any Qualifications must be clearly stated and cross referenced to relevant clauses of the RSPA and a full explanation provided as set out in part A3 of the Proposal Template.

## 8.5 Programme

Delivery and commissioning of the Works in accordance with the programme is vital to the success of the Crossrail Project. Bidders shall ensure that the programmes included in

the Proposal are well developed, robust and consistent with the dates and constraints of Schedule A1 (Project Programme) to the RSPA and in the format required by part 1 of Schedule A3 (Contract Management) to the RSPA.

## **8.6 Availability & reliability**

Payment for the Services provided under the Agreement depends on the SP making Units available to deliver the Diagrams specified by the Train Plan and payment is modified by a Performance Regime based around the reliability, availability and condition of the Units in service. Bidders shall ensure that the Proposal clearly demonstrates how they will meet the required service levels in accordance with the requirements in this ITN.

## **8.7 Credit support and Security**

The RSPA requires the SP to provide:

- a) a Parent Company Guarantee;
- b) an Advance Payment Bond; and
- c) a TSA Performance Bond.

Specific requirements relating to these requirements (including specific minimum credit ratings for bond providers) can be found in the RSPA.

## **8.8 Responsible Procurement**

RfL strongly supports the principles set out in the GLA's responsible procurement policies which cover socio-economic factors such as supplier diversity, strategic labour needs and training, ethical trading and the London living wage. RfL will apply these policies to the Project as described in Schedule A12 (Responsible Procurement) to the RSPA and Bidders' proposals for compliance will be considered as part of the tender evaluation.

## **8.9 Depot planning risk**

As described in Part D2.6, CRL has obtained certain approvals for the Reference Design. These are listed in the RSPA as Existing Consents.

CRL requires that Bidders submit an SP Depot Proposal that complies with the Existing Consents. Any additional consents required shall be identified in the Depot Consents Management Plan included in the Proposal and shall be of a nature which does not put either the procurement or project programme at risk.

## **8.10 Additional infrastructure costs**

Bidders shall note that the Crossrail Project is based on the following assumptions about the Project:

- a) the OOC Depot will be constructed on the Site without the need to acquire any additional property;

- b) the OOC Depot will be connected to the Network without requiring any additional work, possessions or stage working beyond that described in the Depot Specification (including the Depot Interface Specification) or elsewhere in the RSPA;
- c) Stabling Sites and associated infrastructure are based on the Fleet not exceeding 63 Units;
- d) maintenance of the Fleet will be undertaken at the OOC Depot and using the temporary access for maintenance at Ilford described in Part F6; and
- e) Entry Points and Exit Points will be limited to the OOC Depot, Ilford Depot and the Stabling Sites.

It shall be at the Bidder's cost and risk if the Bidder's Proposal invalidates or changes any of these assumptions and in such circumstances Bidders should note that they may be required to indemnify RfL for its increased costs. Bidders shall therefore include a suitable risk allowance (which shall be entirely at their risk) in their Proposal in the event that their Proposal seeks to invalidate or change any of these assumptions. If Bidders fail to include a suitable risk allowance in their Proposal then CRL may make an Evaluation Cost Adjustment as described in Part C3.6.

## 9. Disclaimers

- a) Any disclaimers or limitations in this ITN (whether appearing under the heading of disclaimer or otherwise) shall apply to and be for the benefit of DfT, TfL, CRL, RfL, their subsidiaries, directors, advisers and/or representatives acting on behalf of CRL and shall continue to apply and to be enforceable by CRL or any of the foregoing.
- b) The Information is being provided to Bidders for information only and for the sole purpose of assisting them to submit Proposals relating to this procurement.
- c) The Information does not purport to be comprehensive or to contain all of the information that a Bidder may require to submit a Proposal. Any Bidder considering submitting a Proposal in response to this ITN shall conduct its own due diligence and seek its own professional, financial, legal and other advice as appropriate. It is the sole responsibility of Bidders to obtain, at their own expense, all further information necessary for the preparation of the Proposal.
- d) The Information does not include all legislation which is applicable in relation to this ITN and/or the Agreement. In producing the Proposal, Bidders shall satisfy themselves as to the requirements of legislation.
- e) Words such as "anticipates", "expects", "projects", "intends", "plans", "believes", "will" and terms with similar meaning indicate the present expectation held by CRL of future events, which are subject to a number of factors and uncertainties that could cause CRL's requirements to differ from those described in this ITN. If CRL's requirements change at any time during this procurement process, Bidders will be notified as soon as is reasonably practicable.
- f) DfT, TfL, CRL, RfL, their subsidiaries, directors and advisers and/or representatives or agents:

- i) accept no liability, to the extent permitted by law, arising out of or in connection with the Information including without limitation for any error or misstatement in, or omission from, the Information or for any negligence or misrepresentation or for disclosure of information originating from a Bidder;
  - ii) give no representation, warranty or undertaking, express or implied, with respect to the Information, including, without limitation, with respect to the fairness, accuracy, adequacy or completeness of any of the Information; and
  - iii) shall not, to the extent permitted by law, be liable for any loss or damage arising out of or in connection with any reliance on the Information.
- g) The Information shall not, in whole or part, constitute a contract or part of a contract in any way save to the extent that it has been specifically incorporated in the Agreement as awarded. The Information is not and shall not be relied on as a promise or representation as to CRL's ultimate decisions or that RfL will enter into a contract with any Bidder. DfT, TfL, CRL and their subsidiaries do not bind themselves to enter into any contract or contracts arising out of the procedures envisaged by this ITN and no contractual rights, express or implied, arise out of this ITN or the procedures set out in it.
- h) A response to this ITN does not guarantee that a Bidder will be awarded a contract and nothing in this ITN should be interpreted as a commitment to award the Agreement to any Bidder.
- i) CRL reserves the right, at any time and without cost to CRL, to the extent permitted by law:
  - i) to terminate or suspend, for any reason, any part of or the whole of this procurement process and/or to withdraw this ITN at any time or to re-invite responses on the same or any alternative basis;
  - ii) to waive any requirements of this procurement process;
  - iii) to vary any requirements and/or procedures relating to the procurement process; and/or
  - iv) to reject all or any proposals and to terminate discussions with all or any Bidders at any time.
- j) Neither the issue of this ITN nor any related procurement process commits DfT, TfL, CRL or their subsidiaries at any time to award the whole or part of the Agreement to any party or any person.
- k) CRL reserves the right to reject or disqualify any Bidder who:
  - i) provides information or confirmations which later prove to be untrue or incorrect at the time of provision or subsequently;
  - ii) does not submit a Proposal in accordance with the requirements of this ITN or as directed by CRL during the procurement process;

- iii) undergoes a change in identity, control or financial standing or any other materially adverse change affecting the Bidder which in the reasonable opinion of CRL would have an adverse impact on the procurement process or the ability of the Bidder to perform the Agreement;
  - v) fails to submit a Proposal of sufficient quality to satisfy CRL that the RSPA requirements will be satisfactorily delivered and/or performed;
  - vi) materially breaches any provision of a Process Agreement or whose Consortium includes a Member which has materially breached a Process Agreement; or
  - vii) in CRL's opinion, has become ineligible pursuant to the Regulations or does not have the ability, resources or economic or financial standing to perform the Agreement in accordance with CRL's requirements.
- l) CRL reserves the right to require the submission by a Bidder of any additional or supplemental information or clarification as it may, in its absolute discretion, consider appropriate.
  - m) All Bidders are solely responsible for all their costs and expenses incurred in connection with this ITN. Under no circumstances will DfT, TfL, CRL or their subsidiaries be liable for any costs or expenses (direct or indirect) incurred by or on behalf of the Bidders or any party associated with this ITN or any termination of the procurement process for any reason.
  - n) Any Information issued to Bidders in connection with this ITN remains the property of CRL or where appropriate a relevant third party. All such Information may only be used for the purpose of tendering and must, on request, be returned to CRL.
  - o) CRL's decision as to whether or not a Proposal complies with this ITN shall be final.
  - p) CRL shall not be bound to accept any Proposal.
  - q) The submission of a Proposal in response to this ITN shall be deemed to constitute the Bidder's acceptance that CRL (or any other member of the TfL Group) may, following award of the Agreement, use and reproduce in connection with the Agreement and/or any other part of the Crossrail Project, any information or material which has been submitted by the Bidder during the course of this procurement process.

## 9.1 Transparency and freedom of information

- a) The UK government is committed to greater transparency in the public sector. Accordingly, CRL and RfL reserve the right to publish the ITN and the Agreement and, post award, to publish payment information.
- b) CRL and RfL may at their absolute discretion redact all or part of the Agreement and/or the payment information prior to publication and may take account of exemptions that would be available under the FOI Legislation.



- c) CRL and RfL may at their absolute discretion consult with the successful Bidder regarding any such redactions. However CRL and / or RfL will make the final decision regarding publication and/or redaction.
- d) CRL and RfL are subject to the FOI Legislation, together with all codes of practice, guidance and directions issued pursuant to the same from time to time. Bidders should identify in Part A3.2 of the Proposal, those parts (if any) of the Proposal, the disclosure of which, pursuant to a request under FOI Legislation, would, or would be likely to, prejudice the Bidder's commercial interests. CRL and RfL will have regard to such classification but may nevertheless be obliged to disclose any information submitted by Bidders as part of their response to this ITN.

## **10. Competition law**

Bidders will be required to explain in writing whether merger control or any other regulatory clearances will be required in relation to the Proposal and their proposed steps and timing for obtaining any such clearances prior to the Commencement Date. It is the responsibility of Bidders to obtain all requisite regulatory consents prior to the Commencement Date in relation to the Proposal and to keep CRL fully informed of progress. It is anticipated that the Bidder, upon selection, will make formal regulatory filings (if required) in relation to its Proposal in order to obtain any regulatory clearance prior to the Commencement Date.

The confirmation required above shall be provided in part A3.1 of the Proposal.

## **11. Process Agreements**

All Bidders and Members of any Consortium (including any new Members) are required to enter into and comply with a Process Agreement substantially in the form provided in the Data Room. The Process Agreement sets out CRL's requirements for Bidders' behaviours during and after the procurement process and includes obligations on Bidders to report changes in their circumstances.

Amongst the matters covered by Process Agreements are:

### **11.1 Confidentiality and publicity**

Obligations on Bidders to keep all matters related to the procurement confidential and not to make public statements without the prior written approval of CRL.

### **11.2 Conduct**

Obligations on Bidders in connection with corruption, collusion, conduct and misuse of information.

### **11.3 Transparency and freedom of information**

Applicability of freedom of information legislation and management of requests for the release of information.

## 11.4 Material changes and Changes in Circumstances

Bidders are reminded that the Process Agreements oblige them to notify CRL of any material changes to any information, representations and other matters of fact relating to their prequalification submission or Proposals.

Without prejudice to this obligation, Bidders shall notify CRL of the occurrence of any of the events listed below (a "Change in Circumstances"). Notification shall be given promptly, and in any case no later than the earlier of 15 Working Days after such Change in Circumstance occurs or the Commencement Date. A Change in Circumstance means the occurrence of any of the following:

- a) any change to the Bidder's corporate structure or to the structure of the proposed SP from that set out in the Bidder's pre-qualification response to the Contract Notice or in any Proposal. This includes the grant of any options to acquire shares, any agreement relating to the exercise of rights attaching to such shares, and any amendments to a shareholders' agreement, articles of association or similar constitutional documents;
- b) any other changes to the information provided to CRL as part of the prequalification process or of any Proposal; and
- c) any other similar events or changes to their circumstances, or the basis of the Proposal, which may be expected to influence CRL's decision on the suitability of the proposed SP.

Any notification of a Change in Circumstances shall provide full details including final form copies of the documentation required to put such change into effect.

CRL reserves the right to reject a change to the corporate structure of the proposed SP.

Bidders are required to include in the Proposal details of any actual or potential Change in Circumstances or competition matters (see Part A10) that affects their bidding position.

## 11.5 Compliance requirements

Bidders are required to certify their continued compliance with their Process Agreement by completing part A2.1 of the Proposal Template.

Bidders shall note that in the event that they propose changes to their Members, CRL reserves the right to eliminate the Bidder concerned from the procurement process. Notwithstanding this, CRL may request and re-evaluate revised submissions against some or all parts of the PQQ or the evaluation criteria set out in Part C. Re-evaluation of the amended submissions may result in the elimination of the Bidder concerned from the procurement process but CRL reserves the right to accept such a re-evaluated submission. It is unlikely that CRL will accept a change to the entity nominated to manufacture the Units.

## 12. Crossrail e-Sourcing Portal

All communications with Bidders will be undertaken via the Crossrail eSourcing Portal<sup>2</sup> as further described in Part G1. Bidders shall unless instructed otherwise through the Crossrail eSourcing Portal disregard any communication from CRL, RfL, TfL, DfT or others which is not made or confirmed via the Crossrail eSourcing Portal. CRL shall be entitled to disregard any communication from Bidders which is not made or confirmed via the Crossrail eSourcing Portal.

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<sup>2</sup> Informally referred to as 'Bravo'.

## **Part B Procurement process and timetable**

### **1. The procurement process**

#### **1.1 General**

This section describes the procurement process, including the programme, submission requirements, evaluation, negotiation and contract award. The procurement process has been developed to encourage Bidders to submit fully compliant and unqualified Proposals that meet the entire range of technical works and deliverability criteria for a competitive price.

#### **1.2 Submission Requirements**

The form and content of Proposals shall be as directed in Part G of this IFT.

#### **1.3 Evaluation, Negotiation and Contract Award – Key Stages**

##### **1.3.1 General**

Proposals will be evaluated using the processes and criteria described in this IFT. The evaluation, negotiation and contract award process comprises four key stages (described in further detail below):

- Stage 1 – General Review and Mandatory Requirements
- Stage 2 – Technical and Deliverability Evaluation
- Stage 3 – Commercial Evaluation and negotiations
- Stage 4 – Contract Award

The procurement process uses the following evaluation criteria:

- a) Mandatory (see Part C1)
- b) Technical and Deliverability (see Part C2):
  - Technical
  - Deliverability
- c) Commercial (see Part C3):
  - NPV
  - Contractual Compliance

CRL may seek clarification of any aspect of a Proposal in accordance with Part B6.2.

### 1.3.2 Non compliances with the ITN

This paragraph describes the process which CRL will adopt at stages 1 and 2 in respect of any matter contained within a Proposal which constitutes a Qualification or a non-compliance (including without limitation any failure to meet the minimum thresholds set out in Part C2).

CRL reserves the following rights:

- to reject any Proposal which is identified at any time as failing to satisfy the requirements described below for stage 1 or stage 2;
- to reopen either stage 1 or stage 2 at any time if it becomes aware of information that would have led to rejection of a Proposal during that stage; and
- to request a Bidder to resubmit any aspect of its Proposal at any time for the purpose of clarifying its offer following any use of the processes set out in Part B1.3.2 and Part B6.2.

Without prejudice to this position CRL may, at its discretion, advise Bidders of any Qualification or non-compliance and request the submission of further information.

Bidders should note that CRL is not prepared to delay overall progress of the procurement process in the event that a Proposal does not satisfy the requirements of either stage 1 or stage 2. If the submission of further information is requested, the Bidder will only be afforded a limited opportunity to respond. Because of this, CRL will require the further submission to take the form of:

- i) withdrawal of the Qualification or correction of the non-compliance;
- ii) provision of clear assurances about the future resolution of the Qualification or non-compliance; and/or
- iii) provision of such other information or assurances as CRL may require.

If the Bidder wishes to increase its price as a part of any further submission requested by CRL, it shall comply with CRL's instructions with regard to the resubmission of financial and associated parts of its Proposal.

Bidders should note that a Proposal which is rejected at either stage 1 or stage 2, shall not proceed to the next stage of the evaluation.

### 1.3.3 Stage 1 - General review and mandatory requirements

#### a) Review process

CRL's review of each Proposal at Stage 1 will involve three elements:

**i) Completeness and Compliance of the Proposal**

CRL will review each Proposal to ascertain its completeness and check that it complies with the full scope of work and the submission requirements set out in the ITN. Proposals which do not meet these requirements may, at CRL's discretion, be rejected.

**ii) Qualifications**

CRL will review each Proposal to identify any Qualifications therein.

Proposals which contain Qualifications may, at CRL's discretion, be rejected. In exercising such discretion, CRL will have regard to the number and/or materiality of any Qualifications.

Provided that a Proposal is not rejected as part of stage 1 or stage 2, any Qualifications that remain in the Proposal will be evaluated and scored as set out in stage 3.

Bidders are cautioned not to rely on being allowed an opportunity to make any further submissions or enter into any dialogue with CRL regarding any Qualifications in their Proposals. Qualifications may lead to rejection of a Proposal at any time or, if not so rejected, they may affect the stage 3 scores in a way which adversely affects the Bidder's prospects of success.

**iii) Mandatory Requirements**

CRL will review each Proposal to ascertain compliance with the Mandatory Requirements set out in Part C1. Proposals which do not meet these requirements may, at CRL's discretion, be rejected.

Any Proposal which is rejected during stage 1 shall not proceed to be evaluated at stages 2 and 3.

**1.3.4 Stage 2 - Technical and deliverability evaluation**

Preparatory work for stage 2 will be undertaken in parallel with stage 1.

Those Proposals which progress past stage 1 will be evaluated further taking account of the quality of the technical and deliverability proposals using the processes and scoring guidelines described in Part C2.

Any failure to meet the minimum thresholds described in Part C2 shall be treated as a non-compliance and CRL will apply the process described in Part B1.3.2. Following review of any further information submitted by a Bidder in response to a request made under Part B1.3.2, CRL will finalise its scoring and may reject a Proposal.

Any Proposal which is rejected during stage 2 shall not proceed to be evaluated at stage 3.

### 1.3.5 Stage 3 - Commercial evaluation and negotiations

Preparatory work for stage 3 will be undertaken independently but in parallel with stages 1 and 2.

Those Proposals which pass stages 1 and 2 will be evaluated further to assess the Total Commercial Score (TCS) of the Proposals following the principles set out in Part C3. ECAs in accordance with Part C3.6 may be applied at this stage. The TCS is a score based on the weighted NPV Score and weighted Contractual Compliance Score as described below.

#### a) **Weighted NPV Score**

CRL will assess the NPV of the Proposals using the Evaluation Model and following the principles set out in Appendix D Part 1. The NPV will be converted into a weighted NPV Score following the method described in Part C3.2.

#### b) **Weighted Contractual Compliance Score**

Proposals will be evaluated taking account of any Qualifications using the processes, weightings and scoring guidelines described in Appendix D Part 2. The Contractual Compliance Score will be converted into a weighted Contractual Compliance Score following the method described in Part C3.3.

#### c) **TCS**

The TCS will be calculated from the weighted NPV Score and the weighted Contractual Compliance Score as described in Part C3.4.

Bidders will be ranked in descending order of their TCS such that the Bidder with the highest TCS is ranked 1st, that with the second highest TCS is ranked 2nd and so on. CRL will, at its discretion, undertake negotiations with one or more Bidders according to this order of ranking. CRL does not commit to holding negotiations or any other discussions other than with the first ranked Bidder.

Negotiations will cover such topics as CRL in its discretion determines may be necessary and (without limitation) may seek to improve the acceptability of any matters identified as being less than fully satisfactory to CRL against the requirements set out in the ITN. Time will be of the essence and CRL requires any Bidder invited to negotiate to do so in good faith and to use its best endeavours to complete this negotiation stage within 6 weeks or any other reasonable time which CRL may at its discretion require. If, during this negotiation stage, a Proposal is changed in any way that has a net negative impact on the economic advantage offered by the Proposal then CRL may suspend negotiations with that Bidder, and pursue negotiations with the next ranked Bidder.

If CRL enters into negotiations with more than one Bidder at stage 3 then following completion of initial rounds of negotiation CRL reserves the right to request Bidders involved in these negotiations to resubmit any aspect of their Proposals or submit BAFOs. Re-submissions would not be invited from the Bidders that have not been invited to negotiate with CRL.

Any resubmitted aspects of Proposals will be evaluated and CRL will calculate an updated NPV Score and a Contractual Compliance Score, which will be combined to produce a final TCS using the processes and scoring guidelines described in Part C3.

### 1.3.6 Stage 4 – Contract Award

Following completion of stage 3, CRL will notify Bidders of its contract award decision. The successful Bidder will be required to use its best endeavours to undertake all activities necessary to execute the Agreement on or before 17 April 2014..

## 1.4 Most economically advantageous offer

The most economically advantageous offer from the point of view of CRL will be the Proposal that passes stage 1 and stage 2 and achieves the highest Total Commercial Score at stage 3 following the process set out in Part B1.3.

## 2. Procurement programme

### 2.1 Overall procurement programme

CRL intends to complete the procurement to the following timescales:

Milestone	Date
Issue ITN	29 April 2013
Submission Date for Proposals	29 July 2013
Commencement Date (see Part B2.4)	17 April 2014

CRL reserves the right to vary these timescales and will endeavour to give Bidders as much notice as possible of any changes.

### 2.2 Submission Date

The Submission Date for Proposals is midday (London Time) on 29 July 2013 (or such other time and day as may be advised by CRL in writing).

### 2.3 Indexation Base Month

Bidders shall use an Indexation Base Month of January 2012. CRL will advise Bidders of any revisions to the Indexation Base Month to be used at any stage of the procurement process.



## **2.4 Commencement Date**

Bidders shall assume that the Agreement will be executed by 17 April 2014 and that this will be the Commencement Date. CRL will advise Bidders of any revisions to the projected Commencement Date during the procurement process.

## **3. Bidder Undertakings**

### **3.1 Certificate of bona fide Proposal**

Bidders are required to certify that they have not colluded with others or participated in other anti-competitive practices in preparing the Proposal by completing part A2.2 of the Proposal Template.

### **3.2 Prohibited Acts**

If CRL becomes aware that a Bidder or some other person acting on their behalf or associated with them has committed a Prohibited Act and/or if any of the circumstances specified in Regulation 26 of the Regulations apply to the Bidder (or any of its Members) then the Bidder may at CRL's discretion be excluded from any further involvement in the procurement process.

Bidders are required to certify that they have not committed any Prohibited Acts and that none of the circumstances specified in Regulation 26 of the Regulations apply to the Bidder by completing part A2.3 of the Proposal Template.

CRL may request further information from any Bidder or from any competent authority in any relevant jurisdiction in order to verify the Bidder's status, or the status of any person associated with the Bidder including any person named in Bidder's Proposal, as regards these requirements.

### **3.3 Certificate of freedom to tender**

CRL is aware that as part of their bidding arrangements pursuant to the ITN dated 28 February 2012 ("the Original ITN"), Bidders may have entered into joint venture agreements, shareholder agreements, bidding agreements, letters of intent, binding heads of terms or other contractual arrangements in relation to tendering for the Project. CRL requires to be assured that there are no residual contractual provisions between the Bidder and any third party which related to the Original ITN but continue to restrict the Bidder or will otherwise in any way influence the Bidder's behaviour in submitting a response to this ITN in a manner that is no longer appropriate.

Bidders are therefore required to provide the declaration in part A2.4 of the Proposal Template.

## **4. Briefings, reviews, meetings and site visits**

### **4.1 RSPA reviews**

While Bidders are preparing their Proposals, CRL will meet with Bidders at CRL's offices to provide clarification on any areas of the RSPA which Bidders would like to discuss.

Subject to written confirmation of the arrangements, CRL intends to hold these meetings approximately 2 weeks after issue of the ITN and will require Bidders to have substantially completed their review of the RSPA by this time. CRL may (at its absolute discretion) amend the RSPA to take account of such discussions and any such amendments will be notified to all Bidders in writing but Bidders should note that CRL does not intend to do so unless considered absolutely necessary to preserve the procurement timetable.

## **4.2 Meetings**

Additional meetings or reviews may be arranged by CRL for all Bidders at any stage in the procurement process and reasonable notice of such meetings will be given to Bidders. Meetings will be held in CRL's offices (or any other location specified by CRL) and each Bidder shall make relevant personnel available. An agenda will be issued prior to the meeting and the key points recorded and issued to all Bidders after the meeting. Definitive records will be maintained by CRL.

## **4.3 Site visits**

### **4.3.1 Visits to Crossrail sites**

Within 2 weeks of issue of the ITN, Bidders shall identify any sites, preferably in order of priority, where they believe a visit is necessary in order for them to develop the Proposal. CRL will manage the stakeholder arrangements for site visits. In all cases, Bidders should indicate in advance the purpose of the visit so that appropriate arrangements can be made. All visitors will be subject to the safety arrangements mandated by the facility owner and / or Network Rail, these include provision and use of specific items of personal protective equipment and possession of CSCS cards. For visits to operational railway sites, personal track safety certificates will also be required.

### **4.3.2 Visits to Bidders' sites**

CRL reserves the right to visit any or all of the facilities referred to by Bidders in the Proposal for the purposes of verifying statements made therein. Such visits may be made at short notice and Bidders are required to provide all necessary assistance to and attendance on CRL in connection with any such visits.

## **5. Options and Variants**

### **5.1 RfL Options**

#### **5.1.1 Option for extra Units**

RfL requires the option to purchase up to an additional 23 Units (and associated spares) through the RSPA.

The Proposal Template requires Bidders to provide capital and maintenance prices applicable to the exercise of this option based on three Scenarios. The additional Units may be contracted for under none, each or all of the Scenarios up to the maximum of 23 Units. The Scenarios are:

- Scenario 1: to deliver up to 5 additional Units as part of a continuous production of Units in circumstances where RfL increases the number of units included in the Agreement and contracts for all associated maintenance and performance requirements from the Commencement Date;
- Scenario 2: to deliver Option Units as part of a continuous production of Units with such Option exercisable by RfL after the Commencement Date; and
- Scenario 3: to deliver Option Units after a break in production with such Option exercisable by RfL after the Commencement Date.

### **5.1.2 Option Unit evaluation**

The prices submitted for the extra Units and their maintenance will be taken into account in the NPV evaluation as described in Appendix D Part 1.

### **5.1.3 Concession extension**

RfL will have an option to extend the Concession Period for up to 8 years on the basis of either a TSA Extension or a TSSSA Extension with relevant changes to the RSPA to reflect the new arrangement. This option does not form part of the NPV evaluation.

## **5.2 Changes to scope**

In addition to standard change mechanisms the RSPA also contains specific provisions which allow RfL to implement either a Major Depot Change where significant changes are required to the OOC Depot and / or a TSSSA Change if RfL wishes to change the nature of the maintenance services and/or a GW Services Change if RfL wishes to run Revised Services on the Great Western route.

In the event that these matters are instructed by RfL, the SP shall be obliged to undertake the work (subject to the grounds for objection specified in the RSPA) and compensation shall be determined at the time in accordance with the Agreement.

## **5.3 Variant Proposals**

Bidders may only submit Variant Proposals in accordance with the procedure described in Appendix B.

Bidders shall note that they are required to submit a Variant Proposal if they wish to offer a Unit reliability in excess of 60,000 miles MDBSAF.

Variant Proposals will be evaluated as described in Appendix B.

## **6. Clarifications**

### **6.1 Bidder clarifications**

Bidders shall submit requests for clarification ("Clarification Questions") to CRL via the Crossrail eSourcing Portal messaging facility following the detailed instructions provided in Part G1.3.

### **6.2 CRL queries**

CRL may seek clarification of any aspect of a Proposal at any stage in the procurement process and Bidders will be expected to respond to such questions within 3 Working Days unless otherwise agreed.

### **6.3 Validity of Proposals**

Proposals shall be submitted on a fixed price basis.

Proposals will be based on firm construction and manufacturing prices and Bidders are to take the risk of movements in underlying construction and manufacturing costs.

Proposals shall be valid for a period of 365 calendar days from the Submission Date. The price of Proposals shall not increase between submission of Proposals up until the Commencement Date except as specifically permitted by the IFT.

### **6.4 Bidder agreements and letters of clarification**

Prior to any decision by CRL regarding the award of the Agreement, one or more Bidders may be required to:

- a) enter into an agreement with CRL prior to the commencement of negotiations regarding Bidder conduct during such negotiations; and/or
- b) exchange a letter with CRL (a "Letter of Clarification") confirming the terms of the Agreement (reflecting any changes from the ITN) which would be entered into in the event that the Bidder's offer was accepted.

A request for any such agreement or Letter of Clarification shall not constitute any indication of an intent by CRL to enter into the Agreement with the Bidder or at all.

## **7. Standstill period and award of the Agreement**

CRL will apply the principles of Regulation 33A and notify Bidders as described therein of any decision as to the award of the Agreement to the successful Bidder. CRL will operate a standstill period as described in Regulation 33A commencing on the date of this notification.

The Agreement will not be entered into until the period of time indicated by Regulation 33A has elapsed. Details of the award will be published in the OJEU.

## Part C Evaluation criteria and application

### 1. Mandatory requirements

#### 1.1 Procurement and commercial

Bidders are required to comply with the following mandatory requirements:

- a) Proposals shall cover the entire scope of Train Works, Depot Works and Services.
- b) A Process Agreement shall be completed and signed by each Member of the Consortium, in the form provided in the Data Room or as otherwise agreed by CRL.
- c) Provision of a certificate of continued compliance with the requirements of all applicable Process Agreements in the form set out in part A2.1 of the Proposal Template.
- d) Provision of a certificate of bona fide proposal in the form set out in part A2.2 of the Proposal Template.
- e) Provision of a Prohibited Acts certificate in the form set out in part A2.3 of the Proposal Template.
- f) Provision of a certificate of freedom to tender in the form set out in part A2.4 of the Proposal Template.
- g) Provision of a letter of support from the Guarantor(s) and board minutes in accordance with the requirements of part H1 of the Proposal Template;
- h) Provision of letters of support from the bond provider(s) for the Advance Payment Bond and the TSA Performance Bond in accordance with the requirements of part H2 of the Proposal Template.

#### 1.2 Train Technical Specification

Bidders are required to comply with the following mandatory requirements (references in brackets are to relevant sections or clause numbers in the Train Technical Specification):

##### Section 3.1 (Unit Lengths and Formation)

- a) FLUs shall not exceed 205m in length across coupling planes (3.1.1.2);
- b) RLUs shall not exceed 163m in length across coupling planes (3.1.1.3);
- c) RLUs shall be capable of conversion to FLUs by the addition of intermediate vehicles (3.1.1.4);
- d) Units shall operate in passenger service as fixed consists, with open wide gangways between vehicles (3.1.1.6);

### Section 3.2 (Unit Performance and Journey Times)

- e) Units shall achieve the following key Journey Times at all loading conditions up to and including Normal Payload, and with the stopping patterns and Dwell Times itemised in Appendix A of the Train Technical Specification:

Shenfield to Tottenham Court Road	47 minutes	
Abbey Wood to Tottenham Court Road	24 minutes	
Maidenhead to Liverpool Street	53 minutes	
Paddington to Canary Wharf	17 minutes	(3.2.1.1);

- f) Unit performance shall be such as to permit an FLU in any load condition to rescue another unpowered FLU in an equivalent loaded condition and at minimum line voltage, over any part of the Crossrail Infrastructure. Such a train formation shall be able to stop and restart at any point on the route (3.2.1.11).

### Section 3.4 (Energy Consumption)

- g) Units shall incorporate energy metering equipment to permit the energy consumption of the Unit to be measured and recorded. The energy metering system shall:
- (i) meet the requirements of Annex D of the CR-TSI;
  - (ii) measure energy taken from the Traction Power Supply;
  - (iii) measure energy regenerated to the Traction Power Supply;
  - (iv) measure energy consumed due to auxiliary loading;
  - (v) allow energy measurement over a time span definable by RfL (3.4.1.4).

### Section 3.5 (Unit Weight Targets)

- h) The Design Mass in Working Order (calculated in accordance with BS EN 15663:2009 Railway applications - Definition of vehicle reference masses) of an FLU shall not exceed 350 tonnes. This requirement applies to the Unit including provision for DC equipment, but not converted for DC operation (3.5.1.1);
- i) The un-sprung mass on any individual axle shall not exceed 2 tonnes, including when converted for DC operation (3.5.1.4);

### Section 3.6 (Environmental Operating Conditions)

- j) Units shall be capable of Normal Operation under the following environmental conditions when operating in the Central Section tunnels:
- (i) maximum ambient temperature, 40°C; and
  - (ii) normal ambient temperature range, 30°C to 35°C (3.6.1.2).

### Section 3.7 (Gauging, Routes and Stepping Distance)

- k) Units (including all physical features such as underframe equipment, bogies, door light indicators, buttons, roof mounted antennae, but excluding footsteps) shall have a swept envelope no larger than that generated by the Crossrail Class 345 Vehicle Model for all movement and behaviours (including operation in degraded conditions) (3.7.1.1).
- l) Level Boarding shall be provided between Units and any platform having a height of 1100mm above rail level and an offset from the track centre-line of 1510 mm. This condition shall be met with the train stationary on straight and level track (3.7.1.5).

### Section 3.11 (Fire Performance)

- m) Units shall comply with the requirements of the SRT-TSI, Fire Safety Category A and:
  - (i) the obligation to fulfil running capability in accordance with SRT-TSI in respect of the braking system, shall be extended to the traction system, and the running capability shall be maintained for five minutes;
  - (ii) running capability shall be sufficient to ensure that, in the event of a fire being initiated immediately on departure from a sub-surface station, the Unit shall be capable of reaching within five minutes the next station or a location where a passenger evacuation can be performed;
  - (iii) Unit design shall ensure that for all reasonably foreseeable fire scenarios, the peak heat release rate does not exceed 8.8MW within a period of 30 minutes from ignition of the fire. Scenarios shall include a passenger luggage fire source of up to 500kW (3.11.1.1).

### Section 3.13 (Traction Power Supply)

- n) FLUs shall:
  - (i) be capable of operating on 25kV AC Traction Power Supplies within the range of voltages and frequencies defined in BS EN 50163:2004 and NR/GN/ELP/27010;
  - (ii) draw no more than 300A RMS from the Traction Power Supply when the line voltage is 24kV RMS when operating on Network Rail routes (3.13.1.1).

### Section 3.16 (Future DC Operation)

- o) Units shall include passive provision for the future fitment of equipment to permit dual voltage operation. As a minimum passive provision shall include:
  - (i) capability to adapt the traction motors and traction control system to operate from a 750V DC 3rd Rail supply;
  - (ii) capability to mount current collection equipment on the bogies or running gear; and

- (iii) space provision on the Unit to mount other equipment necessary for 3rd Rail 750V DC operation (e.g. cables, fuses etc.) (3.16.1.1);

#### Section 3.20 (Braking System)

- p) The braking system on Units shall combine a friction brake with a dynamic electric brake (3.20.1.2);
- q) The braking system shall achieve Full Service braking in compliance with GM/RT2044 Appendix 3 (3.20.1.6);
- r) The dynamic electric brake shall function as a Regenerative Brake to maximise the recovery of energy. Any use of rheostatic braking shall be limited to that necessary to assure, in conjunction with the friction brake, emergency braking performance as required (3.20.1.15);
- s) The Regenerative Brake shall be sized and configured to maximise energy recovery during a Full Service brake application (3.20.1.16).

#### Section 3.21 (Wheel Slip/Slide Protection System)

- t) A wheel slip / slide protection system, complying with BS EN 15595 and taking account of the guidance in the national foreword regarding UK adhesion levels, shall be provided on all axles to control the level of traction and braking during conditions of reduced wheel to rail adhesion (3.21.1.1).

#### Section 3.29 (Passenger Bodyside Door Systems)

- u) The passenger bodyside door controls shall be in accordance with the requirements of the CR-TSI. The door controls shall allow the following modes of operation:
  - (i) driver only operation;
  - (ii) driver and train crew operation;
  - (iii) automatic operation;
  - (iv) ASDO;
  - (v) PED operation; and
  - (vi) emergency detrainment and evacuation (3.29.2.1).

#### Section 3.30 (Train Control and Protection)

- v) Units shall be fitted with train protection systems necessary to operate on routes fitted with the following systems:
  - (i) AWS (standard strength) and TPWS;
  - (ii) ERTMS; and
  - (iii) CBTC (3.30.1.1).



Section 3.33 (CCTV Systems)

- w) Units shall operate in conjunction with a platform camera based CCTV system enabling DOO. Units shall include all Unit mounted equipment to allow the CCTV system to operate, including cab monitors and interfacing equipment (3.33.1.1).

Section 3.34 (Passenger Environment)

- x) Unit interiors shall provide accommodation for a minimum of 1500 passengers total capacity (seated and standing) measured in accordance with clauses 3.34.3.9, 3.34.3.10, 3.34.3.11 and 3.34.6.3 (of the Train Technical Specification) (3.34.3.2);

Section 3.37 (Heating, Ventilation and Air Conditioning System)

- y) The passenger saloons of Units shall be fitted with an HVAC system which is independent of the cab HVAC system, and which shall conform to the requirements of BS EN 14750-1:2006. This system shall include a cooling function in conformance with BS EN 14750-1:2006 (3.37.1.1);
- z) Units shall incorporate an emergency ventilation capability to ensure that, in the event of failure or loss of the normal HVAC function, the internal air quality requirements of the CR-TSI are maintained for a minimum duration of 60 minutes following loss of the normal function (3.37.1.12);
- aa) The driver's cab of Units shall be fitted with an HVAC system which is independent of the passenger saloon HVAC system, and which shall conform to the requirements of BS EN 14813-1:2006. This system shall include a cooling function in conformance with BS EN 14813-1:2006 (3.37.2.1).

**1.3 Depot Specification**

Bidders are required to comply with the following mandatory requirements (references in brackets are to sections or clause numbers in the Depot Specification):

- a) The OOC Depot shall contain stabling tracks for a minimum of 33 FLUs. Such stabling shall be in addition to space provided within the main building maintenance areas (CRL-DTS-1117).
- b) The layout and facilities of the OOC Depot shall support patterns of arrivals and departures of Units that shall allow up to 12 inbound or 12 outbound without Unit washing, 8 in either direction with Unit washing, Unit movements in any one hour period. If train washing machines are fitted with nose end washing capability, the depot facilities are still required to support the specified patterns of arrivals and departures (without prejudice to the SP's obligations to meet the WASH times given in schedule D2 (Diagrams), Train Plan Parameters and the Performance Regime) for Unit movements in any one hour period. This operational capacity shall be provided on the basis of the ability to use any or all of the three primary tracks which interface with the national rail infrastructure. (CRL-DTS-1005).
- c) A segregated track shall be provided with a tandem wheel lathe to permit the turning and re-profiling of rolling stock wheels. This track shall permit all wheels to be turned on a 245m train without fouling adjacent lines. An adjacent area with a

minimum of 50m of suitably calibrated track shall be provided for car floor height re-setting. The wheel lathe must be appropriately electrically isolated (CRL-DTS-1108).

- d) The OOC Depot infrastructure, including the train washing facilities capacity, shall be sufficient to allow the Fleet to be washed at least once every 48 hours. Two single-pass automatic train wash plants shall be provided and shall be located on the depot throat tracks designated as Depot Lines 1 and 2, to the west of Mitre Bridge near to the depot entrance/exit tracks. The Bidder shall demonstrate to the reasonable satisfaction of CRL, by modelling at the design stage of their intended practices for operation of the depot, the need to have one or both train washing machines capable of washing Units when passing through the plant in either direction, in order to fulfil the requirements for external cleaning of the Fleet. The Bidder shall clearly state in which direction(s) (west to east, east to west or both) each machine will be capable of washing. The Bidder shall comply with the WASH timings given in schedule D2 (Diagrams), which allow for Unit washing only on entry to the OOC Depot when driven by CTOC drivers. The train washing facilities design shall ensure that any overspray shall not cause damage to adjacent infrastructure owned by Canal & River Trust and Network Rail (CRL-DTS-1008, 1126 & CRL-DTS-1128).
- e) Accommodation shall be provided for the following groups of CTOC and RfL staff in the CTOC Area (CRL-DTS-1802):
  - (i) train crew (drivers);
  - (ii) train crew supervisory and management staff;
  - (iii) CTOC rolling stock manager; and
  - (iv) RfL staff.
- f) To promote safe and secure depot operation and to deter and detect unauthorised access to stabled Units, the Site and stabling sidings shall be protected as a minimum by a combination of fencing, planting, access control, CCTV and movement detection alarms as appropriate. A Threat & Vulnerability Risk Assessment shall be completed in accordance with CRL1-XRL-O6-STD-CR001-00023 (which is provided in the Data Room) and the details of the security arrangements implemented shall be based on the outcome of the assessment (CRL-DTS-1170).
- g) The OOC Depot shall be designed to accommodate Units of 205m length. The Depot Works shall allow the possibility of future alterations to the sidings and technical facilities to accommodate the maintenance and stabling of 245m long Units. It shall be demonstrated that the alteration works could be undertaken without impairing the capability of the depot to support a full weekday train service. (CRL-DTS-1002).
- h) The SP Depot Proposal shall comply with Existing Consents.

## 1.4 Fleet size

The Fleet shall comprise a minimum of 60 FLUs.

## 2. Technical and deliverability criteria

### 2.1 General

The technical and deliverability criteria comprise:

#### a) Technical criteria

- (i) Train Works
- (ii) Depot Works

#### b) Deliverability criteria

- (i) Train Works
- (ii) Depot Works
- (iii) Services
- (vi) Health and Safety
- (vii) Environment
- (viii) Responsible Procurement
- (ix) Assurance and Quality

The sections below describe these criteria in more detail and these should be read in conjunction with the scoring guidelines set out in Appendix C.

Details of the components of each sub-criterion and the associated scoring system are provided in Appendix C.

Bidders are required to pass the thresholds stated below for each criterion, sub-criterion and (where applicable) each component of a sub-criterion.

CRL reserves the right to make an Evaluation Cost Adjustment to Proposals which achieve the pass mark in the following areas but which otherwise fall short of full compliance with the relevant criterion. The process for such adjustments is described in Part C3.6

## 2.2 Technical criteria

### 2.2.1 Train Works

Bidders' Proposals for Train Works will be evaluated based on their compliance with relevant requirements of the RSPA as evidenced by their submissions in Part

B of the Proposal. These submissions will be read in conjunction with any applicable comments, assumptions, Qualifications or clarification responses submitted.

The score allocated for Train Works will be the aggregate of the score achieved in each of the sub-criteria described below.

<b>Sub-criteria</b>	<b>Weighting</b>
Physical Construction	5%
Performance	10%
Energy and Weight	8%
Physical Behaviour	10%
Fire	5%
Power Systems	7%
Brakes	7%
Door Systems	10%
Signalling, Control & Cab	12%
Passenger Environment	6%
Reliability	12%
Industrial Design	6%
Other requirements	2%
<b>Total</b>	<b>100%</b>

Bidders may be excluded from further consideration if:

- a) their score for any of the components set out in Appendix C Part 1.1 is less than 35%;
- b) their score for any sub-criterion is less than 55%; and / or
- c) their overall score for Train Works is less than 70%.

### **2.2.2 Depot Works**

Bidders' proposals for Depot Works will be evaluated based on their compliance with relevant requirements of the RSPA as evidenced by their submissions in Part C of the Proposal. These submissions will be read in conjunction with any applicable comments, assumptions, Qualifications or clarification responses submitted.

The score allocated for Depot Works will be the aggregate of the score achieved in each of the sub-criteria described below.

<b>Sub-criteria</b>	<b>Weighting</b>
Railway Infrastructure	45%

Buildings and Plant	35%
Site Works and sundries	20%
<b>Total</b>	<b>100%</b>

Bidders may be excluded from further consideration if:

- d) their score for any of the components set out in Appendix C Part 1.2 is less than 35%;
- e) their score for any sub-criterion is less than 55%; and / or
- f) their overall score for Depot Works is less than 70%.

## 2.3 Deliverability criteria

Bidders' ability to deliver the Project will be evaluated against each of the following deliverability criteria.

### 2.3.1 Train Works

CRL requires that Bidders' Proposals for delivering the Train Works provide confidence that the requirements of the RSPA will be met on time, to the required quality and will (without limitation) provide:

- a) the design, manufacture, testing, delivery and commissioning of intrinsically reliable, maintainable and durable Units and Equipment in accordance with the Provisional Acceptance Criteria, the Project Programme and all other relevant RSPA obligations;
- b) progressive assurance throughout the design, manufacturing and testing stages that technology and design risk is being robustly controlled and the Units are thoroughly and correctly integrated with the other Crossrail railway systems, and are capable of being safely and reliably operated on Crossrail services;
- c) achievement of the Final and Fleet Acceptance reliability criteria, in accordance with the Project Programme; and
- d) achievable, low risk, rigorously managed and integrated programmes for all work-streams associated with the Train Works.

Bidders' proposals for delivering the Train Works will be evaluated based on their submissions in Part E of the Proposal which will be read in conjunction with any applicable comments, assumptions, Qualifications or clarification responses submitted.

The score allocated for Train Works deliverability will be the aggregate of the score achieved in each of the sub-criteria described below.

<b>Sub-criteria</b>	<b>Weighting</b>
Project Management	7½%

Engineering and Design	10%
Technical Assurance	7½%
Supplier Selection and management	7½%
Manufacturing	10%
Testing	10%
Relevant Approvals	7½%
Unit and Equipment Delivery, Commissioning and Acceptance	7½%
Manuals, Equipment and Training	5%
Final and Fleet Acceptance Programmes	20%
<b>Total</b>	<b>100%</b>

Bidders may be excluded from further consideration if:

- a) their score for any of the components set out in Appendix C Part 2.1 is less than 35%;
- b) their score for any sub-criterion is less than 55%; and / or
- c) their overall score for Train Works deliverability is less than 65%.

### 2.3.2 Depot Works

CRL requires that Bidders' Proposals for delivering the Depot Works provide confidence that the requirements of the RSPA will be met on time, to the required quality, and will (without limitation) provide:

- a) design, construction, testing and commissioning of a depot at Old Oak Common which is compliant with the Depot Technical Requirements, fully integrated with the Crossrail Infrastructure and which permits the Bidder to efficiently and reliably deliver the Services;
- b) delivery of the Depot Works in accordance with the requirements of the RSPA, including Relevant Approvals and Undertakings; and
- c) a rigorously managed, low risk and properly integrated programme of works that meets the requirements of the Project Programme.

Bidders' proposals for delivering the Depot Works will be evaluated based on their submissions in Part E of the Proposal which will be read in conjunction with any applicable comments, assumptions, Qualifications or clarification responses submitted.

The score allocated for Depot Works deliverability will be the aggregate of the score achieved in each of the sub-criteria described below.

<b>Sub-criteria</b>	<b>Weighting</b>
Project management and subcontracting	17½%
Project planning and construction programme	27½%
Planning Relevant Approvals and Undertakings	17½%
Design and Assurance	17½%
Commissioning, Integration and Assimilation	20%
<b>Total</b>	<b>100%</b>

Bidders may be excluded from further consideration if:

- a) their score for any of the components set out in Appendix C Part 2.2 is less than 35%;
- b) their score for any sub-criterion is less than 55%; and / or
- c) their overall score for Depot Works deliverability is less than 65%.

### 2.3.3 Services

CRL requires that Bidders' Proposals for delivering the Services provide confidence that the technical, performance and other requirements of the RSPA will be met and (without limitation) demonstrate the Bidder's ability to:

- a) provide Units to operate the Train Plan;
- b) provide the other Standard Services and Additional Services;
- c) operate the OOC Depot; and
- d) manage the condition of the Units, Equipment and the OOC Depot

in each case fully in accordance with the RSPA including the required levels of quality, reliability, security and service resilience.

Bidders' Proposals for delivering the Services will be evaluated based on their submissions in Part D of the Proposal which will be read in conjunction with any applicable comments, assumptions, Qualifications or clarification responses submitted.

The score allocated for Services deliverability will be the aggregate of the score achieved in each of the sub-criteria described below.

<b>Sub-criteria</b>	<b>Weighting</b>
Contract and Project Management	15%
Availability to meet the Train Plan	25%
Service Reliability	25%

Asset Condition Management	15%
Depot operations	20%
<b>Total</b>	<b>100%</b>

Bidders may be excluded from further consideration if:

- a) their score for any of the components set out in Appendix C Part 2.3 is less than 35%;
- b) their score for any sub-criterion is less than 55%; and / or
- c) their overall score for Services deliverability is less than 65%.

#### 2.3.4 Health and safety

CRL requires Bidders to demonstrate a good approach to managing the health and safety requirements of the RSPA.

Bidders' proposals for managing health and safety will be evaluated based on Part E of the Proposal, which will be read in conjunction with any applicable comments, assumptions, Qualifications or clarification responses submitted.

The score allocated for health and safety will be the aggregate of the score achieved in each of the sub-criteria described below with associated weightings.

<b>Sub-criteria</b>	<b>Weighting</b>
Health and Safety (Train Works)	20%
Health and Safety (Depot Works)	45%
Health and Safety (Services)	35%
<b>Total</b>	<b>100%</b>

Bidders may be excluded from further consideration if:

- a) their score for any of the components set out in Appendix C Part 2.4 or for any sub-criterion is less than 55% and / or
- b) their overall score for health and safety is less than 65%.

#### 2.3.5 Environment

CRL requires Bidders to demonstrate a good approach to managing the environmental requirements of the RSPA.

Bidders' Proposals for managing environmental matters will be evaluated based on Part E of the Proposal, which will be read in conjunction with any applicable comments, assumptions, Qualifications or clarification responses submitted.



The score allocated for environment related matters will be the aggregate of the score achieved in each of the sub-criteria described below with associated weightings.

<b>Sub-criteria</b>	<b>Weighting</b>
Environment (Depot Works)	50%
Environment (Services)	50%
<b>Total</b>	<b>100%</b>

Bidders may be excluded from further consideration if:

- a) their score for any of the components set out in Appendix C Part 2.5 or for any sub-criterion is less than 55% and / or
- b) their overall score for environment is less than 65%.

### **2.3.6 Responsible Procurement**

CRL requires Bidders to comply with the Responsible Procurement requirements of the RSPA.

Bidders' Proposals for managing Responsible Procurement will be evaluated based on Part E of the Proposal, which will be read in conjunction with any applicable comments, assumptions, Qualifications or clarification responses submitted.

The score allocated for Responsible Procurement will be the aggregate of the score achieved in each of the sub-criteria described below with associated weightings.

<b>Sub-criteria</b>	<b>Weighting</b>
Management Requirements	20%
Diversity	35%
Strategic Labour Needs & Training	35%
Ethical sourcing and London Living Wage	10%
<b>Total</b>	<b>100%</b>

Bidders may be excluded from further consideration if:

- a) their score for any of the components set out in Appendix C Part 2.6 or for any sub-criterion is less than 55% and / or
- b) their overall score for Responsible Procurement is less than 65%.

### 2.3.7 Quality and compliance assurance

CRL requires Bidders to demonstrate a good approach to managing the assurance and quality requirements of the RSPA.

Bidders' Proposals for managing assurance and quality will be evaluated based on Part E of the Proposal, which will be read in conjunction with any applicable comments, assumptions, Qualifications or clarification responses submitted.

The score allocated for assurance and quality will be the aggregate of the score achieved in each of the sub-criteria described below with associated weightings.

<b>Sub-criteria</b>	<b>Weighting</b>
Quality and Compliance Assurance (Train Works)	40%
Quality and Compliance Assurance (Depot Works)	30%
Quality and Compliance Assurance (Services)	30%
<b>Total</b>	<b>100%</b>

Bidders may be excluded from further consideration if:

- a) their score for any of the components set out in Appendix C Part 2.7 or for any sub-criterion is less than 55%; and / or
- b) their overall score for quality and compliance assurance is less than 65%.

## 3. Commercial criteria

### 3.1 General

Bidders' commercial Proposals will be evaluated based on their submissions in Part A and Part F of the Proposal. This section describes the evaluation of the NPV Score, Contractual Compliance Score and Total Commercial Score referred to in Part B1.3.5.

### 3.2 NPV

The NPV for each Proposal shall be evaluated as described in Part B1.3.5 (a).

The Proposal achieving the lowest NPV will be awarded 100 points with the other Proposals being awarded an NPV Score according to the following formula:

$$(1 - ((NPV - \text{lowest NPV}) / \text{lowest NPV})) \times 100$$

It should be noted that the application of the above formula may result in a Proposal being awarded a negative NPV Score if the NPV is more than twice the lowest NPV.

Proposals will be awarded a weighted NPV Score by multiplying the NPV Score by 0.65.

**3.3 Contractual Compliance**

CRL requires Proposals which are complete, compliant and without Qualifications. Bidders shall therefore include the price of full compliance with the ITN in the Proposal. The process by which CRL will manage any Qualifications and the way in which they may affect a Bidder’s chances of success are described in Part B. In the event that a Proposal is Qualified, CRL reserves the right to reject the Proposal as part of stage 1 of the procurement process

If Bidder’s Proposals are not rejected at stage 1 or stage 2, and to the extent not expressly evaluated as part of the other criteria described in this Part C, Bidders’ Proposals in respect of the RSPA will be evaluated based on the submissions in Part A4 of the Proposal together with any applicable Qualifications in any other part of the Proposal or in clarification responses submitted. Details of the elements of each sub-criterion and the associated scoring system are provided in Appendix D Part 2.

The Contractual Compliance Score will be the aggregate of the score achieved in each of the sub-criteria described below.

<b>Sub-criteria</b>	<b>Weighting</b>
Third Parties and Undertakings	10%
Depot Works	10%
Manufacture of Units	10%
Operations	10%
Payment Mechanism/Performance	12.5%
Change	12.5%
Insurance, Indemnities and Liability	7.5%
Financial/Security Provisions	10%
Default, Termination and Return	10%
Other risk areas	7.5%
<b>Total</b>	<b>100%</b>

Proposals will be awarded a weighted Contractual Compliance Score by multiplying the total Contractual Compliance Score by 0.35.

**3.4 Total Commercial Score**

CRL will calculate the Total Commercial Score (TCS) by combining the NPV Score and Contractual Compliance Scores using the formula set out below.

The TCS = weighted NPV Score + weighted Contractual Compliance Score

A worked example calculation of Total Commercial Scores is provided in the table below for illustrative purposes only. The NPVs and Contractual Compliance Scores used in the worked example do not reflect any historic or anticipated results.

<b>Worked Example - Calculation of Total Commercial Score</b>						
<b>Bidder</b>	<b>NPV</b>			<b>Contractual Compliance</b>		<b>Total Commercial Score (TCS) &amp; Rank</b>
	<b>£ millions</b>	<b>Score (Part C3.2)</b>	<b>Weighted Score x 0.65</b>	<b>Score (Part C3.3)</b>	<b>Weighted Score x0.35</b>	
A	500	100	65.00	70	24.50	<b>89.50 (1)</b>
B	550	90	58.50	85	29.75	<b>88.25 (2)</b>
C	650	70	45.50	65	22.75	<b>68.25 (4)</b>
D	700	60	39.00	91	31.85	<b>70.75 (3)</b>

### **3.5 Inconsistencies, errors and abnormally low tenders**

#### **3.5.1 Inconsistencies**

CRL will review the entries to the Evaluation Model against statements made elsewhere in the Bidder's Proposal together with any applicable comments, assumptions, Qualifications or clarification responses submitted. If CRL identifies a potential inconsistency between an Evaluation Model entry and the rest of the submission it may advise the relevant Bidder who will be requested to provide clarification concerning the issue and its resolution which may involve the Bidder adjusting its Proposal.

If CRL considers that the Bidder's response to a request for clarification provides a satisfactory and bona fide explanation, then the entry to the Evaluation Model will stand.

If CRL does not consider that the Bidder's response to a request for clarification provides a satisfactory and bona fide explanation, CRL reserves the right to make an Evaluation Cost Adjustment as described in Part C3.6.

#### **3.5.2 Errors**

If CRL identifies a potential error in a Proposal, it may advise the relevant Bidder who will be requested to provide clarification concerning the error and its resolution which may involve the Bidder adjusting its Proposal.

If CRL considers that the Bidder's response to a request for clarification provides a satisfactory and bona fide explanation, any adjustments made by the Bidder in the response to the clarification will be evaluated.

If CRL does not consider that the Bidder's response to a request for clarification provides a satisfactory and bona fide explanation, CRL reserves the right to make an Evaluation Cost Adjustment as described in Part C3.6.

### **3.5.3 Abnormally low tenders**

Bidders' financial submissions in Part F of the Proposal and Appendix 1 to the Form of Tender will be reviewed to consider if their offer appears to be abnormally low. This may be based on a comparative analysis of the financial submissions received from all Bidders or, at CRL's discretion, further analysis of the Bidder's Proposal. If CRL remains concerned that a price is abnormally low then a written explanation will be requested from the Bidder.

CRL will take into account the written explanation received from the Bidder and, if, after this has been provided, CRL is still of the opinion that an abnormally low offer has been submitted, CRL will confirm this to the Bidder and will advise either:

- a) that the Proposal is rejected; or
- b) that CRL may for evaluation purposes make an Evaluation Cost Adjustment to the Bidder's offer.

## **3.6 Evaluation Cost Adjustments**

### **3.6.1 Application of Evaluation Cost Adjustments**

CRL reserves the right to make adjustments ("Evaluation Cost Adjustments"), which may be increases or decreases, in respect of the following matters:

- a) in the circumstances described in Part A8.10, to reflect increased risk and / or cost to RfL or CRL associated with Bidders' permanent and / or temporary depot proposals. Without limitation, such risk may include: additional infrastructure; land and property; construction related items (including possessions and stage working); and operational costs (including CTOC costs);
- b) in the circumstances described in Part A8.10, for additional stabling or other costs which RfL or CRL may incur or any increased risk to RfL or CRL arising from the Bidder's proposed fleet size exceeding 63 Units exclusive of any Option Units. Such costs or risk may include: additional infrastructure; land and property; construction related items (including possessions and stage working); and operational costs (including CTOC costs). No equivalent credit will be given for savings arising from smaller fleet sizes;
- c) in the circumstances described in Part C2.1, to reflect increased risk and / or cost to RfL or CRL arising from Proposals which fall short of full compliance with the requirements associated with the technical and deliverability criteria;
- d) adjustments arising from Bidders' inconsistencies, errors or abnormally low tenders as described in Part C3.5;

- e) in the circumstances described in Appendix D paragraph 3.5(a), for inconsistencies or errors in the Bidder's predictions of fleet energy consumption;
- f) any other appropriate adjustments, as determined by CRL necessary to ensure that the Proposals and/or Variant Proposals are compared on a like for like basis. For the avoidance of doubt this may include any matters not covered above and not otherwise dealt with as part of the Contractual Compliance evaluation.

### **3.6.2 Notification of intention to make Evaluation Cost Adjustments**

If CRL intends to make an Evaluation Cost Adjustment, CRL will notify the Bidder and may, at its discretion, seek further clarification from the Bidder regarding any issue giving rise to the Evaluation Cost Adjustment.

### **3.6.3 Basis of Evaluation Cost Adjustments**

Evaluation Cost Adjustments will be based upon an appropriate and reasonable assessment of the potential economic consequences to CRL and / or RfL in relation to the item under consideration. The amount of any Evaluation Cost Adjustments will be at CRL's sole discretion and, for the avoidance of doubt may include an appropriate allowance for risk or uncertainty.

### **3.6.4 Status of Evaluation Cost Adjustments**

The making of an Evaluation Cost Adjustment does not mean that the subject matter is acceptable to CRL or RfL. CRL reserves the right to negotiate on any such matter.

## Part D Technical Scope

### 1. Rolling stock

#### 1.1 General requirements

The Project requires provision of a fleet of new electric multiple units of sufficient size to sustain the provision of 55 Diagrams. The minimum fleet size required by RfL is 60 FLUs.

- a) The key features required of the Units can be summarised as:
  - i) design and construction to meet European Union standards for interoperable main line rolling stock;
  - ii) a design concept that can accommodate large numbers of passengers for metro style operations in the Central Section but which also provides a comfortable environment for longer journeys to and from the outer suburban areas. Further information is provided in Part D1.2;
  - iii) a superior on-board experience for passengers through features such as improved whole journey passenger information, air conditioning and a modern and stylish visual appearance;
  - iv) a vehicle body configuration and an interior layout that allows the rapid movement of passengers on and off the Unit and to support the short dwell times which are key to train service performance through the Central Section;
  - v) open, wide gangways between individual Vehicles to encourage passenger circulation within the Unit to ease congestion;
  - vi) a single unit fixed formation trainset concept which uses best practice in sub-system design, component specification, system architecture and recovery capability to deliver “best in class” levels of reliability and service performance including extremely low levels of service affecting failure;
  - vii) an ergonomically optimised driving cab that permits both manual driving under a range of train protection systems and ATO;
  - viii) traction and braking performance to support at least 24 trains per hour in the Central Section, provide enhanced operational flexibility in the outer areas and allow ATO to be fully exploited; and
  - ix) a weight-efficient design that seeks to minimise the whole life cost to the railway system through optimised train/track interaction and reduced energy demand.
- b) In particular the Units shall:
  - i) operate on a 25kV AC overhead electrified system, with capability to retrofit 750V DC 3rd Rail equipment if desired in the future;

- ii) have capability for regenerative electrical braking, to assist energy efficiency – the 25kV overhead line infrastructure for the Crossrail route is being specified to sustain maximum receptivity for regenerated current;
- iii) be of 205 metres maximum length, but with the capability to configure as a 163 metre maximum length Unit; for initial operation on the surface network, prior to full opening of the Crossrail route;
- iv) have a highly efficient and reliable door system that works with platform edge doors at stations in the Central Section, and also has capability for selective door operation at stations with short platforms at the outer ends of the network;
- v) have at least 450 seats and accommodate at least 1,500 passengers in total, with the standing passengers at a density of no more than four persons per square metre;
- vi) operate and transition between cab signalling systems with an ATO overlay in the Central Section, legacy United Kingdom train protection systems (AWS and TPWS) and ETCS where fitted on surface sections (see Part F2);
- vii) be constructed to stringent fire worthiness standards appropriate to the extensive operation in deep tunnel; and
- viii) achieve a top speed in the open of 145 kilometres per hour and 100 kilometres per hour in the Central Section.
- ix) achieve a reliability target of no less than 45,000 miles MDBSAF. Bidders are free to propose reliability of more than 45,000 miles MDBSAF but if this is in excess of 60,000 miles MDBSAF, Bidders shall follow the Variant Proposal process as described in Appendix B to the IFT.

It is important that the Units are designed taking full account of the passenger, operational and technical environment within which they will work. Background information about these matters can be found in the document CRL1-XRL-R1-GUI-CR001-50002 provided in the Data Room. The SP will be required to cooperate closely with CRL, TfL and Network Rail to deliver an integrated transport system.

The Units will reflect current developments in the rolling stock market and are expected to maximise energy efficiency, increase network capacity and introduce improvements in reliability and general passenger experience.

The successful Bidder will be required to provide a stock of spare parts, any special maintenance tools, driver training Simulator and other operating staff training courses and material.

## 1.2 Interior and exterior industrial designs

The Train Technical Specification includes Appendix P, comprising interior and exterior industrial design requirements and accompanying visualisations. These are intended to show how the requirements for the Units as set out in the Train Technical Specification



might be integrated with an underlying 'look and feel' that identifies the Units as an intrinsic part of the Crossrail brand.

Bidders shall include in Part B1.1 and B1.2 of their Proposal interior and exterior design proposals which comply with the requirements of the Train Technical Specification including Appendix P. Further information about these submission requirements is provided in the Proposal Template.

Bidders will be required to work co-operatively with RfL and its industrial designers to develop their design proposals.

Bidders' attention is drawn to RfL's right to amend, during the design phase, finishes and trim and design detailing under the Permitted Design Change and schedule of finishes provisions of the RSPA.

## **2. Depot**

RSPA requirements for construction of the OOC Depot are summarised below with additional information relating to the Site, the Reference Design and planning consents.

### **2.1 The Site**

TfL has acquired a long lease (to 31 March 2119) on a site of approximately 14 hectares adjacent to the Crossrail route at Old Oak Common in the London Borough of Hammersmith and Fulham. Bidders are required to adopt this as the site of the OOC Depot. The freehold of this land is owned by Network Rail.

TfL has also acquired or is in the process of acquiring additional land interests required for construction of the OOC Depot (on the basis of the Reference Design) as follows:

- a) TfL has entered into an Agreement for Lease and Deed of Variation with Network Rail (a copy of which is provided in the Data Room) in respect of supplementary Network Rail land in the depot throat area to accommodate the proposed Reference Design location of the train washes and associated queuing area. The Supplemental Lease and associated variations to the existing lease come into effect once relevant regulatory approvals (such as for Network Change) have been obtained, and when TfL has confirmed that it requires the land (which is dependent on the successful Bidder's proposed design). Network Rail will remove relevant existing legacy operational equipment from this area but CRL has agreed that Network Rail will install new operational equipment into this area as a part of the On-Network Works as described in the Depot Interface Specification.
- b) TfL has acquired supplementary Network Rail land to the North West of the stabling sidings. A copy of the supplemental lease is provided in the Data Room.
- c) TfL is in the process of acquiring Genesis Housing Group land adjacent to the site access road. A small parcel of 91 square metres of land leased by GHG from Network Rail is required in order to construct the bell mouth junction that is proposed within the Reference Design. CRL and Genesis Housing Group are currently in discussion to agree a surrender of this land and Network Rail has agreed to grant a new supplemental lease for this land once surrendered by

Genesis Housing Group. The related documentation is still under negotiation and final forms will be provided to Bidders once available.

Bidders should assume that all of the land described above will be available to them in the stages described in the RSPA unless otherwise notified by CRL during the procurement process.

Bidders should also note that an area of woodland adjacent to the current depot is currently let under a sub-lease by TfL to London Borough of Hammersmith & Fulham. This lease expires in February 2014 and it is not expected to be renewed, therefore this area will become the SP's responsibility to maintain, as a conservation area, as part of the Site after that date.

All of the supplemental lease areas and woodland area described above are shown on drawing C160-MMD-T2-DDA-CR074-SD004-1-92001 which is provided in the Data Room and together comprise the Site. It is expected that TfL will provide a sub-lease to RfL of the Site for the duration of the Agreement and clause 9 of the RSPA provides a grant of licence to the SP of the Site for the same period.

## 2.2 Handover of the Site

Bidders should note that the Site will be handed to the SP in stages following its prior use by CRL for other activities relating to the Crossrail Project. The timing of handover, requirements for the SP to cooperate with CRL and its contractors in managing site access, vehicle movements and security are described in clause 8 of the RSPA and illustrated in Schedule C3 (Site Area Plans). Bidders should note the following:

- a) Part of the Site will initially be used by CRL's running tunnels - west (C300) contractor for the manufacturing and storage of concrete tunnel segments. The segments will be transported from the Site by road as required by the progress of tunnelling works. The C300 contractor will remove this facility upon completion and prior to release of Site Area 2 to the SP.
- b) Thereafter, part of the Site will be occupied by CRL's systemwide fitting out (C610) contractor as a storage / logistics centre for the installation of track and railway systems in the Central Section. Materials will be delivered to and transported from the Site by road to the Central Section. As the C610 works progress, Site Area 4 will be released to the SP.
- c) On completion of the C610 works, Site Area 6 will be released to the SP.
- d) Network Rail currently uses part of the Site as a maintenance compound. Network Rail will vacate this area prior to release of Site Area 1.
- e) Network Rail will release Site Areas 3 and 5 to the SP as their works in the depot throat progress.

Site Phasing Plans that show how the site will be used over time are included in the RSPA.

## 2.3 Site condition and Advance Works

The RSPA requires the SP to take the Site in its existing state and condition at the relevant handover date. Without prejudice to this, CRL has undertaken a number of surveys and investigations of the Site and these are provided, without responsibility, in the Data Room.

The C300 and C610 contracts require the contractors to remove their plant, equipment, structures and surplus materials and to clear the Site of their temporary works.

Prior to handover of Site Area 2, it is currently CRL's intention to carry out certain advance works as described in document number CRL1-XRL-R1-GUI-CR001-50006 which is provided in the Data Room ("Advance Works"). The document draws attention to advance works items which have been completed and identifies a number of items which were previously identified as advance works but which will now not be undertaken by CRL. Where the completion of these items is necessary for construction of a Bidder's proposed depot it shall:

- a) include the cost of such work in its prices;
- b) adequately describe the scope and timing of such work in its SP Depot Proposal; and
- c) reflect the implications of the advance works items elsewhere in its Proposal as appropriate.

In any event, Bidders shall include a statement explaining how all items of advance works have been treated in Part C2.1 of their Proposal.

Note that the Advance Works are based on implementation of the Reference Design. Bidders should advise CRL as soon as possible if they consider that any element of the Advance Works should not be carried out to suit the Proposal. Bidders shall state any assumptions made in connection with Advance Works in Part A4.9 of their Proposal.

## 2.4 Depot Works

The RSPA requires the SP to construct and operate a rolling stock light maintenance and berthing facility that shall:

- a) provide overnight berthing (parking) for a minimum of 33 trains<sup>3</sup>;
- b) enable all aspects of train cleaning (internal and external) to be undertaken; and
- c) enable all aspects of rolling stock maintenance up to and including overhaul activities such as the exchange of bogies, wheelsets, motors and other principal on-train equipment to be undertaken.

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<sup>3</sup> Berthing space for the balance of the train fleet up to a maximum fleet size of 63 Units will be procured directly by CRL from Network Rail and others and is not currently part of this procurement, except insofar as the SP shall have access to the sites, to allow it to undertake certain parts of the Services.

In particular it is anticipated that to meet the specified requirements the depot will include:

- a) a covered shed with inspection pits, cranes and/or jacks, bogie drop facility, test facilities etc. to accommodate at least seven FLUs simultaneously;
- b) a tandem underfloor wheel lathe on a separate track;
- c) two train washing machines for cleaning of Unit bodies;
- d) a specialist dedicated cleaning area capable of accommodating an FLU for particular tasks such as underframe cleaning, graffiti removal etc.;
- e) office accommodation, staff welfare facilities, driver training simulator suite, etc.;
- f) storage space for engineering spares;
- g) space for cleaning staff accommodation, and necessary materials storage and waste disposal facilities, to support all aspects of train interior cleaning, including the overnight 'light cleaning' of all Units berthed on the depot;
- h) 33 sidings affording safe access to train crew to trains arriving or departing the depot, and to cleaning staff for light cleaning activity;
- i) 25kV overhead traction power supply in the sidings and in the maintenance area together with a traction power sectioning control facility;
- j) full signalling and remote power-operated point operation throughout the facility from a Depot Control Room, minimising the need for shunting staff to operate on the ground; and
- k) new utilities connections to the site, a comprehensive drainage scheme, site landscaping and roadways and safe walking routes.

The office and ancillary accommodation shall include an area to be sub-licensed to the CTOC as a train crew depot, including staff amenities and training facilities.

The OOC Depot is expected to reflect current developments in the construction industry regarding sustainability. In particular, the SP is required to demonstrate that the facility achieves a 'Very Good' rating using the BREEAM approach. The main building is also required to comply with GLA sustainability objectives.

The OOC Depot is to be designed and built to maximise inherent safety, both as regards technical activities, personnel safety and railway operations. The SP will be responsible for all aspects of safety within the OOC Depot.

It is important that the OOC Depot is designed taking full account of the operational and technical environment within which it will be used. The RSPA requires the SP to cooperate closely with CRL, TfL and Network Rail to deliver an effective facility.

## 2.5 Reference Design and interface with Network Rail

To confirm the feasibility of developing and operating the OOC Depot, CRL has commissioned the Reference Design, details of which are provided in the Data Room together with supporting documents, such as operability reports and a detailed explanatory note CRL1-XRL-R1-GUI-CR001-50001. For information only, there are a number of areas where the Reference Design is known not to reflect the Depot Specification and these are listed in document reference CRL1-XRL-R1-GUI-CR001-50005 which is provided in the Data Room. Bidders should note that the Reference Design and associated documents are not warranted by CRL and any use made of them is entirely at their risk.

In developing the Reference Design, CRL has agreed a depot interface specification with Network Rail. Relevant parts of this document comprise the Depot Interface Specification and are provided as part of the Depot Specification in schedule C1 to the RSPA and describes the design, construction, maintenance and operational interfaces between the OOC Depot infrastructure and Network Rail's infrastructure in the following areas:

- a) Track
- b) Track drainage
- c) Signalling
- d) Traction power
- e) Traction power earthing and bonding
- f) Overhead line equipment
- g) Fibre communications network
- h) Operational telephones
- i) Operational radio
- j) Civil engineering

The SP's engineering interface functional obligations with Network Rail have been included in the Depot Specification in the RSPA.

A Depot Interfaces Engineering Access Plan (DIEGAP) has been prepared and is included as Part E of the Depot Interface Specification. Bidders should note that there are a number of shared structures and structures which are the responsibility of either the SP or NR to maintain which are located in land areas not under the responsibility of the maintaining party which will impact on the ability of the other party to carry out activity unconstrained. The constraints include those identified in the DIEGAP tables.

In addition to the engineering interfaces, there are other depot related interfaces with Network Rail; these include:

- a) Testing and commissioning

- b) Railway operations
- c) Service regulation
- d) Emergency response
- e) Property

Further background information about these interfaces is given in explanatory note CRL1-XRL-R1-GUI-50007 which is provided in the Data Room.

Schedule A1 (Project Programme) of the RSPA provides the OOC Depot key Network Rail input dates.

## 2.6 Planning consents

The Act provides powers for the construction and maintenance of Crossrail. The Act effectively provides planning permission for the works authorised by it in schedule 1 (scheduled works) and schedule 2 (ancillary works) subject to conditions set out in schedule 7. Schedule 7 of the Act requires (inter alia) that various matters be approved by the relevant local planning authority. The OMC Building, wheel lathe building and train wash facility are scheduled works listed in schedule 1 to the Act and certain other Depot Works are ancillary works under schedule 2 to the Act.

In order for the works to benefit from the deemed planning permission scheduled works need to be within the relevant horizontal and vertical 'Limits of Deviation' ("LOD"). Ancillary works need to be within Limits of 'Land to be Acquired or Used' and within the scope of the Environmental Statement.

The Reference Design places the OMC Building and train wash facility outside the vertical LOD and as a result planning permission under the Town and County Planning Act 1990 (as amended) was required in order that those buildings may be constructed in the location designated by the Reference Design.

The local planning authority for the Site is the London Borough of Hammersmith and Fulham acting in conjunction with the GLA and CRL has obtained planning permission from these authorities as noted below.

Bidders should note that CRL is concerned to avoid any potential delays to the Project arising from any need to secure additional consents. CRL therefore requires Bidders to submit an SP Depot Proposal that complies with Existing Consents.

### 2.6.1 Schedule 7 approvals

Approvals pursuant to schedule 7 of the Act associated with the Reference Design have been granted as set out in part 2 of Schedule A5 (Consents) of the RSPA.

### 2.6.2 Current status of applications

Bidders should base the Proposal on the assumption that all planning approvals relating to the Reference Design which are listed in part 2 of schedule A5 (Consents) as "Approved" or "Likely to be progressed in 2013" will be obtained by

CRL prior to the Commencement Date. Bidders shall allow for discharging all conditions which are or may be attached to these consents. Details of the relevant applications and decisions are provided in the Data Room.

### **2.6.3 Building control and other Relevant Approvals**

The RSPA makes the SP responsible for obtaining building control approval and all other Relevant Approvals required for the Depot Works. Bidders shall demonstrate in the Depot Consents Management Plan that all other Relevant Approvals can be obtained without risk to the programme.

## **2.7 Relationship with Network Rail**

### **2.7.1 Asset protection**

CRL has agreed with Network Rail in principle the basic form of Outside Party Asset Protection Agreement that the SP will be required to enter into with Network Rail. The form of this agreement is included in Schedule C9 (Network Rail) of the RSPA and Bidders are required to agree the final version with Network Rail.

### **2.7.2 Possession planning**

The RSPA requires the SP to secure and pay for all Possessions required to carry out the Project. Bidders shall assess their requirements and the likely availability of these with reference to Network Rail's rules of the route and possession planning processes and bearing in mind the significant volume of other works likely to be taking place on the Great Western route during the Depot Works (see Part D8).

Bidders should contact [REDACTED] (Network Rail Lead Access Planner) by email at [REDACTED]@networkrail.co.uk for information about Network Rail's possession planning and booking process.

Bidders shall provide details of their planned Possessions in Part E of the Proposal.

### **2.7.3 Network Rail works in the depot throat**

The Depot Interface Specification includes details of assets that Network Rail will deliver. Bidders are required to comply with the Depot Interface Specification and to undertake all activities necessary to assimilate and accept the NR provided assets within the OOC Depot as specified in the Depot Interface Specification.

Bidder's attention is drawn to clause CRL-DTS-1028 which requires the SP's Depot Asset Management Plan to be comprehensive and include all assets needed to deliver the Services including those provided by the SP as part of the Depot Works, existing assets and NR provided assets.

### **3. Services**

#### **3.1 Generally**

During the term of the Agreement, the SP is required to provide the Services so as to make available the Units and the Simulator and to maintain and operate the OOC Depot. The Services are defined in the RSPA and, in summary, comprise:

- a) Standard Services;
- b) Additional Services; and
- c) general matters associated with the Services and use of the Units and Simulator

each of which is summarised below.

#### **3.2 Standard Services**

The SP is responsible for making Available sufficient Units in the specified place and condition to service the Train Plan. From commencement of Stage 5, the RSPA requires that this is done from a fleet of at least 60 Units.

After use by RfL, the SP is responsible for taking the Units back from RfL at either the OOC Depot or specified Stabling Sites. This process is governed by a Preparation, Presentation and Hand-Back Procedure to be developed by the SP, in which the CTOC driver will not be required to undertake any train preparation duties at the start of service, and will have limited time available to shut trains down at the end of service

When the Units are in the SP's possession, it is responsible for undertaking maintenance, repairs and work arising to specified standards and for maintaining the condition of the Units. This includes periodic refurbishments over the duration of the Concession.

In the event of a Unit failure in service, the SP is required to provide an immediate technical response, investigation and assistance service. This may subsequently be deemed to be Additional Services where the failure is caused by a matter for which RfL is responsible (i.e. an RfL Fault). In addition, the SP is required to provide a technician in the Crossrail route control centre during operational hours to provide immediate support to operational staff in the event of operating problems with the Units. There is a corresponding obligation on RfL to support the SP in responding to these matters.

The Crossrail route control centre will be part of a new Network Rail Route Operations Centre in Romford, Essex. This will be opened in late 2018. Until then, the CTOC will have an interim route control centre located within the greater London area, and the SP shall provide a technician at this interim location, performing the operations support to the CTOC described above.

As part of the Standard Services, the SP is required to provide RfL with reports and other information including notifications of faults, loss or damage, safety critical matters and progress reports.

Other Standard Services include:



- a) general engineering support and advice;
- b) undertaking technical investigations;
- c) developing the Maintenance Plan and Manuals;
- d) monitoring Changes in Law which may affect the Services or the Units;
- e) providing technical services in connection with Modifications;
- f) providing RfL with access to train management and fault data;
- g) moving Units in the depots;
- h) monitoring of cleanliness and state of repair;
- i) exterior cleaning (which includes exterior washing at frequencies of no more than 48 hours supplemented by periodic heavy cleaning); and
- j) interior cleaning (which includes a daily clean and periodic heavy cleaning).

In addition, the SP is responsible for making the Simulator available to RfL in the specified condition and for specified hours and for providing a response service in the event of failures.

With respect to i) above (exterior cleaning) the Depot Specification includes requirements for automated train washing machines. Bidders are given the option of whether or not to include automated nose-end washing functionality. Bidders are also given the option to propose single direction or bi-directional machine capability. RSPA Schedule D1 requires the SP to externally wash trains at periods not exceeding 48 hours, and it is anticipated that the SP will normally externally wash the trains using the trainwashing machines during the arrival back at the depot of trains operating Diagrams, or at other times during the day and night for Units not operating Diagrams. If scheduled for being washed during a Diagram the CTOC driver will take the train through the train washing machine. If not operating a Diagram the SP will be wholly responsible for moving the Unit for cleaning.

In schedule D2 and the Data Room, RfL has provided sets of Diagrams some of which allow 10½ minutes on arrival at OOC Depot for the Unit to travel from the OOC Depot boundary ("OLDOXRB"), be washed in the train washing machines ("OLDOXRW") and stable in the OOC Depot sidings ("OLDOXRD"). The allowance in the 10½ minutes for train washing is nominally 3 minutes taking into account the time needed to travel between the boundary and the train washer, and the train washer and the stabling siding. In some cases more than one such train washing opportunity is incorporated into a Unit diagram. Subject to later case-by-case agreement with RfL during the Services period it may be possible to include a train washing opportunity for selected Diagrams on departure from the depot, after the Entry Time, but this cannot be guaranteed, and Bidders shall not assume it in their Proposals.

In all circumstances the Train Plan must be complied with, and CTOC driver shifts will not be extended to accommodate longer times in the train washing machines. This means it is highly unlikely there will be sufficient time to wash the cab ends of Units during the OOC Depot arrival and departure legs of Diagrams using any automated cab end washing

facilities provided by the train washing machines. Bidders shall take this into account in devising its exterior train washing plans, and consider whether additional facilities for cleaning cab ends should be provided in the stabling sidings at OOC Depot.

### 3.3 Additional Services

The SP is obliged to undertake any Additional Services arising from RfL Faults but, subject to the arrangements described in the RSPA, is entitled to extra payments for these.

Additional Services include the following, where these are caused by RfL Faults:

- a) removing graffiti;
- b) replacing deliberately damaged glass;
- c) replacing broken fixtures and fittings;
- d) repairs arising from in-service incidents; and
- e) Simulator repairs.

The RSPA includes prior approval requirements for Additional Services but there are arrangements to permit low value works to be progressed without prior approval under defined conditions. Provisions are also included for resolution of disputes relating to the classification of Additional Services and their costs.

### 3.4 General matters

The RSPA contains additional obligations relating performance of the Services which include:

- a) compliance with manuals, maintenance strategies and similar requirements developed as part of the Train Works;
- b) supporting the SP and CTOC's Safety Certificates;
- c) work necessary to comply with the Performance Regime;
- d) ensuring that the Units and related Equipment are maintained in the Return Condition;
- e) uniformity of use (in the case of Units so that the accumulated mileage of any one Unit does not deviate more than a specified maximum from that of the overall fleet);
- f) security and prevention of damage;
- g) control of noise and other environmental issues;
- h) payment for depot power requirements (including traction power);
- i) provision of Spares and Special Tools;

- j) provision of training;
- k) defects and warranties;
- l) the SP's role in supporting development and updating of the Train Plan;
- m) management of the OOC Depot (including the safety management system) and use of Stabling Sites; and
- n) contract management, records and associated matters.

### **3.5 Arrangements prior to acceptance of the OOC Depot**

The Stage 4 Crossrail Services commencement date is the earliest point in time from which the CTOC will have an obligation to deliver those Units operating to the east of the Central Section to the OOC Depot for scheduled maintenance in accordance with the agreed Train Plan Parameters and agreed Maintenance Plan.

Up to the Stage 4 Crossrail Services commencement date the CTOC will have an obligation to deliver those Units operating to the east of the Central Section to the Exit Points at Ilford Depot in accordance with the agreed Train Plan Parameters and agreed Maintenance Plan. The SP will have an obligation to make Units available for service at corresponding points.

The SP is responsible for providing all temporary facilities required for provision of the Services prior to full availability of the OOC Depot. Further information about limited access to the Ilford Depot during this period is provided in Part F6.

### **3.6 Ilford Depot**

CRL will be undertaking works at Ilford Depot to increase stabling capacity. The new and existing stabling at Ilford Depot will accommodate up to twelve Class 345 Units. This stabling will start to become available to FLUs and RLUs from February 2017, but there are various restrictions on how many Units can initially be stabled there. Details are provided in RSPA Schedule C5.

### **3.7 Additional stabling at Plumstead**

A new, additional stabling site will be provided by CRL at Plumstead, near Abbey Wood station. This will become available from the start of Stage 4 Crossrail Services and will be used for overnight stabling of up to seven Units. The Diagrams provided in RSPA Schedule D2 include the Plumstead sidings. Fewer trains will be stabled at OOC Depot overnight, and together with other train planning efficiencies, stabling Units at Plumstead has reduced the total number of passenger service diagrams from 57 to 55 (including two Operational Spare Units). Further details are provided in Part D5. Bidders should however note that the addition of the stabling at Plumstead has not reduced the number or stabling roads at OOC Depot specified in the Depot Specification.

### **3.8 Operational Concepts**

The Operational Concepts are a suite of documents which, taken together, describe the expected operations for Crossrail as a complete railway system. The purpose of the

Operational Concepts is to outline what the system is, what the system needs to do, how it will do it and who will perform operational and maintenance activities. The Operational Concepts have been based on existing good practice in demonstrable current use by UK operators, who are required to control safety risks to tolerable and “As Low As Reasonably Practicable”. The suite of documents comprises:

- a) Chapter 0 Introduction;
- b) Chapter 1 Line Operations;
- c) Chapter 2 Route Control Centre;
- d) Chapter 3 Sub-surface stations;
- e) Chapter 3a Separation within LU Stations;
- f) Chapter 4 Surface stations;
- g) Chapter 5 Old Oak Common Depot and Sidings;
- h) Chapter 5a Ilford Depot;
- i) Chapter 5b Stabling and Sidings;
- j) Chapter 5c Plumstead Sidings
- k) Chapter 6 Train Operations;
- l) Chapter 6a Tunnels Detrainment;
- m) Chapter 6b Tunnel Evacuation and Intervention;
- n) Chapter 6c Multiple train detrainment;
- o) Chapter 6d Tunnel Incidents;
- p) Chapter 7 Maintenance;
- q) Chapter 7a Maintenance Trains;
- r) Chapter 7b Maintenance Planning;
- s) Chapter 8 Customer Information;
- t) Chapter 9 CCTV;
- u) Chapter 10 Alarms;
- v) Chapter 11 Heathrow;
- w) Chapter 12 L&E;
- x) Chapter 13 CTOC concession;

- y) Chapter 14 Resilience plan; and
- z) Chapter 15 Performance.

Bidders should note that these documents are still under development and copies will be placed in the Data Room when available. The Operational Concepts in the Data Room are provided for information only and will not necessarily be updated.

The Operational Concepts documents will not form part of the Agreement and do not alter the requirements set out in the Train Technical Specification, the Depot Specification or elsewhere.

#### **4. Works and Services management plans**

The RSPA references a wide range of 'management plans' which are required in connection with the management and assurance of the Project. For the convenience of Bidders, the anticipated hierarchy of these plans is illustrated in the following documents in the Data Room:

- a) Depot Works Management Plan Structure;
- b) Train Works Management Plan Structure; and
- c) Services Management Plan Structure.

#### **5. Phased Introduction of passenger services**

The Units will be introduced to passenger services in five distinct Stages and shall also be used for driver training and for testing of the Central Section infrastructure as set out in the Project Programme and summarised below. References below to May or December implementations should be assumed to occur on the timetable change date occurring in those months.

Indicative figures for timetabled Unit mileage for Stages 1 to 5 are given at the end of each section of text. The figures are expressed as an average total weekly distance run in Unit miles (including Saturdays and Sundays). The totals include the empty running between depots and sidings and the points at which the Units start and finish passenger service.

These approximate figures shall be used by Bidders in assessing maintenance requirements and reliability growth opportunities during Stages 1 to 5.

Exact planned mileages for Stages 1a to 5 may be determined from the Diagrams provided in RSPA Schedule D2 and the Data Room.

##### **5.1 Stage 1 and Stage 1a Crossrail Services**

The first two Units in RLU formation, are required to be available and fit for passenger service in April 2017. It is anticipated that CTOC will use at least one of these daily for driver training on the eastern part of the Crossrail Routes prior to passenger service commencing. It is anticipated that CTOC will introduce RLUs into passenger service from May 2017, operating Crossrail Diagrams between Liverpool Street high level station and

Shenfield, and progressively replacing 4-car Class 315 units on a one-for-two basis (Stage 1). The RSPA requires provision of sufficient RLUs to service up to 11 daily passenger train Diagrams by September 2017 (Stage 1a).

It is anticipated that following the initial introduction of the first Units in passenger service in May 2017, the next two RLUs Accepted will be required to be provided to the CTOC on a daily basis for up to 14 weeks prior to the Stage 1a Crossrail Services date to complete the initial programme of driver training on the eastern part of the Crossrail Routes.

From September 2017 to the start of Trial Operations two RLUs, additional to those made available for the 11 daily Stage 1a passenger train Diagrams, shall be made available daily for driver training on the eastern part of the Crossrail route. Bidders should note that one of the driver training trains is used for one Diagram Leg in passenger service (and this is reflected in the passenger service Diagrams for Stage 1a included in the Data Room).

From the Trial Operations date to the start of Stage 4 Crossrail Services one RLU and one FLU shall be made available daily for driver training. This FLU driver training Unit will be based at Ilford Depot, but for scheduled maintenance the CTOC will make arrangements for transfer to OOC Depot. Ilford Depot will not be available to maintain this FLU.

Once all diagrams envisaged in Stage 1a are operating, the total distance run each week by RLUs on Liverpool Street high level station to Shenfield services is estimated to be 23,193 miles. The build-up in weekly distance run, from introduction of the first Unit to September 2017 (Stage 1), shall be assumed to be linear.

The distance run by each Unit engaged in driver training during this phase, and to the end of Stage 3, may be assumed to be, on average, the same as for a Unit in passenger service on a Stage 1a Diagram.

## **5.2 Stage 2 Crossrail Services and pre-Stage 3 testing**

In May 2018 Crossrail passenger services using Units in FLU formation will be introduced on the route between Paddington high level station and Heathrow Airport. The RSPA requires provision of sufficient FLUs to service up to six daily passenger train Diagrams (in addition to those RLUs for the Stage 1a Crossrail Services). Unlike the Units for Stage 1a Crossrail Services, the Units for Stage 2 Crossrail Services will not be phased in over a period of time. These Stage 2 FLUs will enter service in one batch on the same day displacing the Class 360 trains currently operating Heathrow Connect services.

There is a requirement to provide two Units in FLU formation for a period of 15 weeks prior to the commencement of the Stage 2 passenger services to provide for driver training on the western part of the Crossrail Routes. There will be an on-going need to provide these two Units in FLU formation for continuation of driver training on the western section of the route until full implementation of Stage 5. Each such Unit may be assumed to accrue 200 miles each day, six days a week. For the avoidance of doubt these driver training Units are in addition to those driver training Units introduced on the eastern part of the route in Stage 1a.

During Stage 2 the total distance run each week by the fleet of FLUs for the Paddington High Level station to Heathrow services is estimated to be 18,330 miles.

In addition to those Units operating Stage 2 Crossrail Services and those already provided for driver training, between early April and early July 2018 up to four FLUs are required to be made available daily to assist in the initial testing of Central Section infrastructure and systems. From early July 2018 to early December 2018 up to 19 FLUs are required to be made available daily to complete Central Section infrastructure testing, provide additional driver training and undertake a period of non-passenger trial operations in preparation for the start of the Stage 3 Crossrail Services. The average daily distances accrued by such Units may be assumed to be as follows.

- a) Units engaged solely on Testing and Trial Running – 170 miles each day
- b) Units engaged in Trial Operations (from September 2018) and Driver Training – 209 miles each day

### **5.3 Stage 3 Crossrail Services**

In December 2018 Crossrail Services using Units in FLU formation will be introduced on the Central Section between Paddington low level (Crossrail) station and Abbey Wood. The RSPA requires provision of sufficient FLUs to service up to 19 daily passenger train Diagrams, in addition to the 17 RLUs still servicing the Stage 1 and Stage 2 daily passenger train Diagrams. These FLUs will enter service in one batch on the same day.

In addition to the Units required for the operation of the Stage 3 passenger Diagrams, four Units are required to be made available daily to CTOC to continue the programme of driver training on all parts of the Crossrail Routes, comprising the two driver training Units introduced at Stage 1a (originally both RLUs then changed to one RLU and one FLU at the Trial Operation date – see 5.1 above) plus the two introduced at Stage 2 (both FLUs). Each such driver training Unit may be assumed to accrue 200 miles each day, six days a week during this Stage.

During Stage 3 the total distance run each week by the fleet of FLUs on Paddington low level (Crossrail) station to Abbey Wood services is estimated to be 56,946 miles.

### **5.4 Stage 4 Crossrail Services**

In May 2019 Crossrail Services using Units in FLU formation will be extended east from the Central Section to Shenfield. These services will start from Paddington low level (Crossrail) station, will supplement the Stage 3 Crossrail Services operating from Paddington low level (Crossrail) station to Abbey Wood, and will replace the 11 Stage 1a RLUs operating Crossrail Services into and out of Liverpool Street high level station (at this stage Crossrail Services into and out of Liverpool Street high level station will cease, except during perturbation).

The RSPA requires provision of sufficient FLUs to service up to 45 daily passenger train Diagrams between Paddington low level (Crossrail) station and Shenfield and Abbey Wood, in addition to the Units still operating Stage 2 Crossrail Services between Heathrow Airport terminals and Paddington high level station. The FLUs additional to those operating Stage 3 Crossrail Services will enter service in one batch on the same day. At this transition from Stage 3 to Stage 4 it is permissible for RLUs (from Stage 1a Crossrail Services) to temporarily replace FLUs operating Stage 2 Crossrail Services such that the latter can be used in the FLU fleet now required to operate between Paddington low level

(Crossrail) station and Shenfield and Abbey Wood. All RLUs transferred to Stage 2 Crossrail Services must be converted to FLUs no later than 8 weeks after the start of Stage 4 Crossrail Services.

In addition to the Units required for the operation of the Stage 4 passenger Diagrams, two Units are required to be made available daily to the CTOC to continue the programme of driver training on the western part of the Crossrail route. These are the driver training Units introduced at Stage 2 (both FLUs). Each such driver training Unit may be assumed to accrue 200 miles each day, six days a week during this Stage.

During Stage 4 the total distance run each week by the fleet of FLUs on Paddington low level (Crossrail) station to Abbey Wood/Shenfield services is estimated to be 94,180 miles.

## **5.5 Stage 5 Crossrail Services**

In December 2019 Crossrail Services using Units in FLU formation will be extended west from the Central Section to Maidenhead and Stage 2 Crossrail Services to and from Heathrow Airport will be permanently diverted into the Central Section (Crossrail Services ceasing to operate into and out of Paddington high level station at this time except at the start and finish of each days passenger service and during perturbation). Crossrail Services will now be operating from Maidenhead and Heathrow Airport in the west, to Shenfield and Abbey Wood in the east, via the Central Section.

The RSPA requires provision of sixty FLUs to service up to 55 daily passenger train Diagrams. The FLUs additional to those operating Stage 4 Crossrail Services will enter service in one batch on the same day.

Two of the 55 Diagrams are notionally nil-mileage Diagrams whereby the SP will be required to make two Operational Spare Units available (at the locations set out in the Diagrams) for use by the CTOC at any time of the operating day to manage any perturbation to passenger services, from whatever cause.

From the start of Stage 5 the total distance run each week by the train fleet is estimated to be 134,328 miles.

## **6. Testing and Commissioning**

### **6.1 Central Section testing and Trial Operations**

From August 2018, and up to the start of Stage 3 Crossrail Services, FLUs will be used in non-passenger operation to support testing of, and trial operations on, the Central Section as described in the RSPA. It is anticipated that up to 22 FLUs will be required, in addition to Units operating Stage 1 and Stage 2 Crossrail Services. The cost of drivers and traction power relating to Central Section Testing will be met by RfL, except for any train-specific tests that the SP itself needs to conduct for assurance purposes.

Bidders shall note the requirement for pre-delivery testing to be completed using Proxy Test Facilities.



## **6.2 Testing arrangements for Network Rail infrastructure**

The SP is responsible for procurement of all technical approvals for operation over relevant parts of Network Rail infrastructure including the demonstration of compatibility with legacy infrastructure.

It is therefore the SP's responsibility to arrange, pay for and manage all testing over Network Rail infrastructure required to achieve such approvals and proofs of compatibility. The SP may (at its own risk) enter into an arrangement with a licensed operator to assist in conducting such tests and in moving Units to the relevant test sites including procuring the necessary track access on behalf of the SP. It is also the SP's responsibility to establish and operate a suitable base for the conduct of testing and the maintenance of Units used for testing.

The SP may choose to demonstrate the required ETCS capability of the rolling stock by using the proposed Network Rail test facility at Hertford North, but this is entirely at the discretion and risk of the SP.

It is also the SP's responsibility to arrange the operation, and to procure and pay all costs associated with the accumulation of Fault Free miles necessary to satisfy assurance and acceptance requirements.

Where the SP is arranging track access it is also responsible for paying traction energy charges.

## **6.3 Testing arrangements for the Heathrow Spur**

The SP is responsible for procuring all technical approvals for operation over the Heathrow Spur. It is therefore the SP's responsibility to arrange, pay for and manage all type testing over the Heathrow Spur (including transit to and from the Heathrow Spur) that is required to achieve such approvals and proofs of compatibility. This shall include entering into an agreement with LHR, or a relevant affiliate or subsidiary, for suitable track access. Guidance on the practical arrangements which are envisaged for such testing is contained in the document CRL1-XRL-R1-RGN-CR001\_1-50001 (Testing of Rolling Stock on the Heathrow Spur) which is provided in the Data Room.

Where the SP is arranging track access it is also responsible for paying traction energy charges.

# **7. Relationship with Crossrail Train Operating Company (CTOC)**

## **7.1 Crossrail train operating company - overview**

The CTOC will enter into an OCA with RfL to deliver the Crossrail Services. The first OCA is expected to commence no later than April 2015 and terminate no later than April 2025.

Further details of the OCA are included in Part F1.

The CTOC will be licensed as a train operator by the Regulator and will hold the safety certificate for the operation of the Crossrail Services.

RfL will be responsible for the specification and acceptance of the Fleet (through the Agreement) and the CTOC will be responsible for the safe provision of the day to day train operation for the Crossrail Services.

## 7.2 Relationship between the CTOC and the SP

The CTOC will plan the Unit Diagrams and driver diagrams to support accurate delivery of the timetable. The timetable will comply with the Train Plan Parameters set out in the Agreement, and the CTOC will be required by the OCA to collect Units from, and deliver them back to, the SP in accordance with those parameters.

RfL expects the CTOC to develop a day to day operational relationship with the SP to deliver excellent levels of safety, operational performance and passenger service. To facilitate this the RSPA provides for RfL to delegate certain defined rights to the CTOC ("Delegated Rights"). The Delegated Rights will enable the CTOC to manage the SP's provision of those activities that are necessary for CTOC to provide the railway services specified within the OCA although, for the purposes of the RSPA, RfL remains responsible to the SP for the actions of the CTOC. The CTOC will not have the right to vary the terms of the Agreement.

Bidders should note that the CTOC will have a duty under UK law for the safety of train operations, and a duty in the OCA to RfL for the general condition of Units used for Crossrail Services. The Delegated Rights will (inter alia) provide for the CTOC to manage the SP's provision of Services necessary to discharge these duties including (without limitation):

- a) ensuring that the SP complies with the aesthetic condition requirements in the Agreement. Under the Delegated Rights, CTOC will make decisions on the fitness for service of Units made available by the SP using the criteria and protocols set out in the Agreement;
- b) managing the Performance Regime. It is intended that the Performance Regime will be aligned with the OCA performance regime and CTOC will therefore have a vested interest in the equitable attribution of responsibility for failures. The SP will deal day to day with the CTOC in such allocation. The Delegated Rights will not enable CTOC to enforce provisions within the Agreement and any disputes arising that cannot be resolved via the processes put in place at working level between the SP and CTOC will be raised to RfL for resolution. RfL will, however, require the SP and CTOC to behave reasonably and expeditiously in agreeing an equitable allocation of responsibility. Further details of the principles of the performance delay attribution process to be applied between the CTOC, SP and other relevant parties are described in the document entitled 'RSD Performance Regime – Delay Attribution Process' in the Data Room;
- c) allocation of Units. To optimise the delivery of the timetable and maintenance of Units, the SP will be responsible for allocating Units to be made available at OOC Depot to specific Diagrams. CTOC will generally be expected to be able to allocate any Unit made available at other locations. CTOC will be required by the OCA to reasonably co-operate with the SP in the cascade of Units back to the OOC Depot for scheduled maintenance, and the transfer of faulty Units to the OOC Depot for unscheduled maintenance. It is intended that the alignment of performance regimes referred to above will incentivise the CTOC in this regard and there will be also be

provision for the co-location of operational managers from the CTOC and the SP in the Crossrail route control centre;

- d) continuous improvement. The performance regime in the OCA is intended to incentivise the CTOC to work with the SP to assist in the improvement of day to day operational delivery. The CTOC will be required to report Unit defects and issues relating to the aesthetic condition of Units and to take cost and reasonable availability risk on the matters covered by Additional Services. The CTOC will be responsible for delivering turn-round litter cleaning and spillage clearance whilst Units are in passenger service; and
- e) safe operation. As required by UK law the CTOC will be required to satisfy itself that the Units can be operated safely. The CTOC will be required to subscribe to common safety methods as referenced in ROGS for assessing risk, whereby compliance by the SP with Applicable Laws and Standards forms the principle safety assurance, supplemented by an assurance of compatibility with the UK-specific infrastructure characteristics. The SP will act as the “contracting entity” under the Interoperability Regulations, and pursuant to achieving Safety Authority authorisation shall involve the CTOC as required in such compatibility assessments.

Neither RfL nor the CTOC will have any obligation for procuring drivers or track access for any Unit on the UK rail network or elsewhere, for any purpose, prior to Provisional Acceptance of the relevant Unit. RfL will not, however, prevent the SP from reaching separate agreement with the CTOC over the provision of such assistance subject to such arrangements not being prejudicial to the CTOC’s obligations to RfL. The SP will train CTOC staff in Unit operation on a ‘train the trainers’ basis as set out in the RSPA, and will make the Simulator available to the CTOC for driver training.

As noted elsewhere, RfL will procure access to the Ilford Depot prior to the opening of the OOC Depot, and via the CTOC to stabling locations outside the OOC Depot, but may empower the CTOC on its behalf in enforcing such access rights with the facility and infrastructure owners.

## 8. Relationship with other projects

### 8.1 High Speed 2

Bidders may be aware of the Secretary of State for Transport’s proposals for a new high speed rail link known as High Speed 2 (HS2), the first phase of which is intended to run from London to Birmingham. These proposals include an interchange station at Old Oak Common to allow HS2 passengers to transfer to Crossrail, intercity and (potentially) other local services. Details of the HS2 proposal can be found at <http://assets.dft.gov.uk/publications/hs2-maps-20120110/hs2arp00drrw05301issue3.pdf>.

- HS2 is at an early stage of its development and its sponsors have now committed to securing the relevant powers and funding to construct the scheme. The current timetable for HS2 is understood to be:
- Hybrid Bill introduced - Late 2013;
- Royal Assent - Early 2015;

- Start of construction – 2017; and
- HS2 becomes operational - around 2025.

CRL's position with regard to HS2 works at Old Oak Common was set out in its response to the HS2 consultation, a copy of which is included in the Data Room. With regards to the OOC Depot, this position is that the Crossrail programme does not include provision of any station facilities at Old Oak Common. Any required change to the Crossrail scope would need to be instructed to CRL by the Sponsors. The funding of any change would also be a matter for the Sponsors.

In October 2012, the Department for Transport issued draft safeguarding directions for Phase One of HS2, which included proposals relating to Old Oak Common. In response to the associated consultation exercise CRL commented on the draft proposals on 29 January 2013.

The following documents are provided in the Data Room:

- A copy of the Mayor's response to the consultation. This is supportive of the construction of an HS2 station at Old Oak Common.
- A letter from the Secretary of State for Transport to CRL concerning the design and construction of HS2.
- A copy of CRL's response to the Department for Transport consultation: High Speed Two: Safeguarding for London – West Midlands.

Bidders should note that the Mayor of London and TfL have also identified a number of other potential transport interchange opportunities associated with an HS2 station at Old Oak Common. These include realignment and / or new stations on the North London Line, West London Line, Central Line and a possible future link to the West Coast Main Line.

If any changes are required to the OOC Depot as a result of these opportunities it is anticipated that this will require either agreement with, or use of statutory powers against, TfL and/or RfL (as parties with a property of interest in the Site) and in such instance RfL will implement a Major Depot Change, or in the event of more minor changes being required, an RfL Change, in accordance with the RSPA the purpose of which is to keep the SP whole where such a Change is required.

However, Bidders should note that any costs and risk associated with the exercise of safeguarding powers by HS2 in relation to Relevant Approvals, and the day-to-day management of the interface with HS2 not involving physical changes to the OOC Depot (for example, where HS2 requires access for surveys) will be a matter for the SP and Bidders should make provision for such costs and risk in their Proposals.

## 8.2 Park Royal City International

LBHF are promoting a comprehensive redevelopment of the Old Oak Common area based around the proposed new Crossrail / HS2 interchange station. This scheme is known as Park Royal City International and LBHF has commissioned Terry Farrell and Partners to develop its future vision of the area with the support of Arup, Cyril Sweet &

Partners and CB Richard Ellis. Current details of LBHF's vision are provided in the Data Room.

Bidders shall assume that no work associated with this development is required to be incorporated in the design of the OOC Depot unless otherwise instructed by CRL.

Any future implementation of the Park Royal City scheme would require its promoters to secure funding, planning permission and access to the necessary land by agreement with TfL and/or RfL. If this happens during the term of the Agreement, the Major Depot Change provisions of the RSPA would apply.

Bidders should note that the Mayor adopted the Park Royal Opportunity Area Planning Framework on 25 January 2011.

### **8.3 Intercity Express Programme (IEP)**

DfT has agreed a contract with Agility Trains for the Intercity Express Programme (IEP). Agility Trains plan to use North Pole Depot as a maintenance facility for the IEP fleet and Network Rail is making infrastructure changes in the Old Oak Common area to accommodate both the Crossrail Project and IEP. These works are subject to Network Rail's Network Change process and their timing and staging are not confirmed at this stage. The infrastructure works associated with IEP in the Old Oak Common area have been combined by Network Rail with the works being carried out for Crossrail and together these are known as the Old Oak Common and Paddington Approaches (OOCPA) works. Preliminary staging plans have been produced and these will be firmed up after the appointment of the OOCPA works contractor, planned for June 2013.

### **8.4 Network Rail projects**

Bidders should be aware that, in addition to the Crossrail Project and IEP, Network Rail has a number of other major projects taking place on the Great Western route. These projects may affect the availability of possessions, train paths or other matters associated with the Agreement.

### **8.5 National Grid Tunnel**

TfL is currently in the process of agreeing a Deed of Easement in relation to National Grid's tunnel that has recently been constructed under Old Oak Common. The latest version of this Deed of Easement, which is not yet agreed, is included in the data room. Drawings showing the route of the tunnels are also included in the data room. Bidders should note National Grid's particular requirements for a Tunnel Protection Zone.

## **9. Transfer of Undertakings (Protection of Employment) Regulations**

Bidders shall satisfy themselves about any obligations, rights and liabilities which may arise under the Transfer of Undertakings (Protection of Employment) Regulations (TUPE) as a result of entering into the Agreement and carrying out its obligations under the Agreement. Bidders shall include the price and any other consequences arising from TUPE in their Proposal.

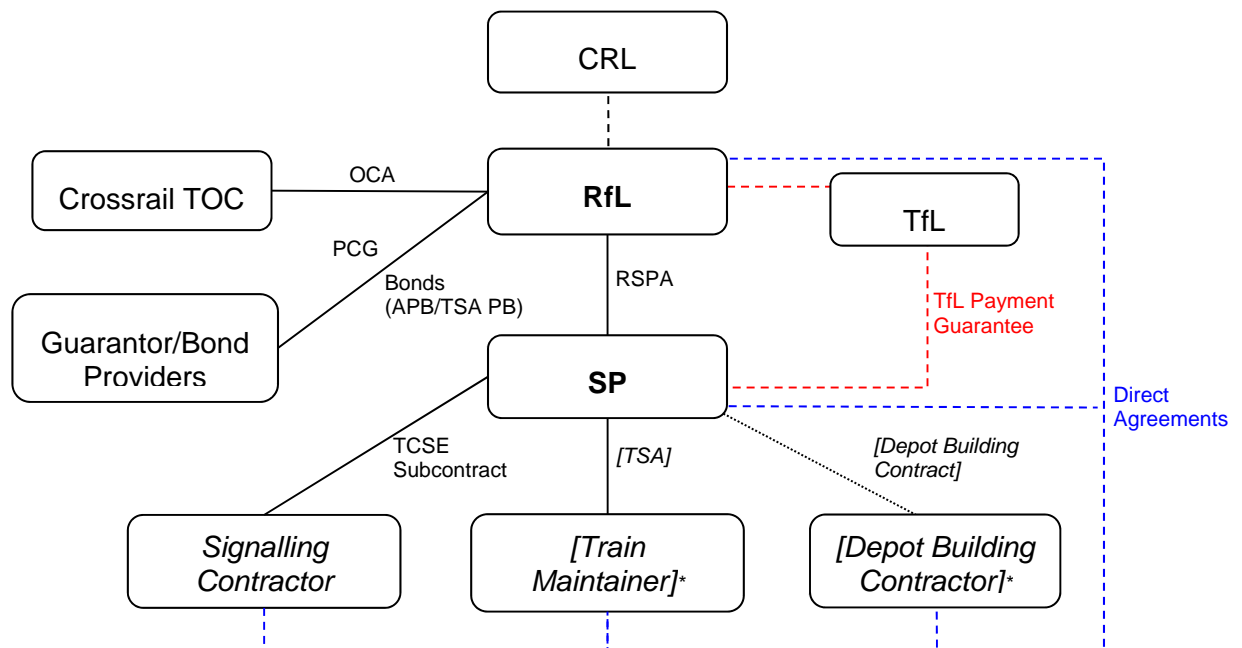
## Part E Description of the RSPA

This section provides a high level summary only and Bidders should read the complete RSPA for the purposes of a full risk analysis.

### 1. Contractual structure

The Agreement will be entered into between RfL<sup>4</sup> and the SP for a concession period of 32 years from the Commencement Date (with an option for RfL to extend this by up to a further 8 years) during which time the SP shall design, manufacture, supply, sell, test and commission, maintain and make available the Units and design, build, test, commission and maintain the OOC Depot. Together these deliverables are defined as the Project.

The contractual structure shown in the diagram below sets out the key parties and contracts which will be entered into in addition to the Agreement itself.



\* These key subcontractors are indicative only; the SP may make its own contractual arrangements (if any) to best discharge its obligations under the Agreement.

<sup>4</sup> As stated in the Contract Notice, the contracting entity may be TfL and/or any of its subsidiaries and nominees. The RSPA has been drafted based on the working assumption that TfL will nominate RfL as the contracting entity.

## **2. Trains**

*(Part IV and Schedule B of the RSPA)*

### **2.1 Manufacture**

Under the Agreement, the SP will be responsible for designing, manufacturing, supplying, selling, testing and commissioning the Units, Simulator and all related spares, tools and equipment in accordance with the Train Technical Specification, the technical and quality assurance and testing regimes and the timescales agreed in the Train Works Programme. The Train Technical Specification is drafted on an output basis but requires the provision of a minimum of 60 units.

### **2.2 Design, assurance and consents**

The SP will be responsible for managing the process for obtaining all relevant consents and approvals to enable the Units to operate in passenger revenue earning service on the Crossrail Infrastructure and liaising with and satisfying all relevant parties in relation to technical compatibility with the infrastructure and existing rolling stock on the network. This process will apply to all of the Crossrail Infrastructure comprising the surface level Network Sections, the Central Section and the Heathrow Spur. The SP will also be required to provide technical assurance to RfL throughout the design and manufacture process to demonstrate compliance with the requirements of the Agreement and delivery of Units in accordance with the Train Works Programme.

### **2.3 Infrastructure parameters**

The SP has an obligation to notify RfL of any discrepancies which exist between the infrastructure parameters included in the Train Technical Specification and information in or which comes into the SP's possession (however received) relating to the Crossrail Infrastructure existing at the date of the Agreement and thereafter during the Concession Period. If any discrepancies come to light, the SP shall cooperate with RfL to mitigate the impact of such discrepancies on the Project.

### **2.4 Training**

Prior to operations, the SP shall be responsible for providing training using the Simulator and other training materials as relevant to trainers and also to the CTOC who will be operating the Crossrail rolling stock.

### **2.5 Testing**

The SP shall carry out as much testing and test running as possible off the Crossrail Infrastructure and shall therefore use "proxy" infrastructure representative of/replicating the Crossrail Infrastructure and systems on which to test the technical interfaces and systems. When testing the Units in the Central Section, the SP will need to co-operate with CRL and its Central Section infrastructure contractors in order to combine testing of the tunnel and the Units.

## 2.6 Acceptance

Acceptance of the Units shall take place in stages once all the relevant Acceptance Criteria have been satisfied by the SP for each stage.

## 2.7 Milestone Payments

The SP will be paid against a Schedule of Milestones. Schedule E11 (Milestones and Security) contains descriptions of the Milestones. Bidders will be required to specify which Milestones will attract a payment and to specify a profile for the capital payments subject to RfL's capital payment restrictions specified in Appendix D.3. A Milestone cannot be achieved until all previous Milestones have been achieved. Bidders shall note that the Provisional Acceptance criteria include reliability thresholds, and RfL will not be obliged to Accept further Units if and for as long as fleet reliability is below the thresholds. There are further stages of Fleet and Final Acceptance where snagging items (if any) and Unit reliability will be tested.

## 2.8 Late delivery

The SP will be required to pay liquidated damages accruing at a daily rate for late delivery of a Unit subject to an aggregate cap of 20% of the Total Contract Price. The daily rate will vary depending on whether the delayed Unit is an RLU or an FLU and according to the stage of the programme.

## 2.9 Unit mass

Unit mass will have a bearing on the operating cost of the Units in respect of, inter alia, track maintenance and energy consumption.

CRL will be assessing the economic impact of Bidders' train proposals on operating costs using the Unit design mass declared by Bidders. The declared Design Mass will become the Contracted Design Mass.

RfL has the right to not Accept Units where the Actual Mass of the Unit exceeds the Design Mass by any amount. However, RfL may in its absolute discretion apply liquidated damages in return for Accepting FLUs that exceed the Contracted Design Mass.

If the first FLU presented for Provisional Acceptance exceeds the Contracted Design Mass, and RfL elects to Accept it, then liquidated damages will apply. If RfL elects to Accept the first FLU, it will be consistent in not withholding Acceptance of subsequent FLUs on the grounds of excess mass provided that subsequent FLUs only exceed the Design Mass by the same amount as the first FLU (within normal manufacturing tolerances). Liquidated damages for excess mass will become due for all FLUs at the time the first Unit is Accepted, with the amount of liquidated damages calculated using the average excess mass of the first five FLUs.

## 2.10 Ownership of the rolling stock

Title in the Units shall vest in RfL on issue of QPAC/PAC.



## 2.11 Warranties

The SP shall provide various warranties to RfL in respect of the design life and certain key components of the Units, as well as a run off warranty for maintenance work carried out and a recurrent defects warranty for a period of 10 years. The SP must remedy defects during the relevant warranty periods. These warranties are "switched off" whilst the SP is making the Units available and the Performance Regime is functioning under the Agreement. In circumstances where the SP is no longer responsible for maintenance of a Unit and/or the Performance Regime no longer applies (e.g. where there has been a TSSSA Change or a termination), the SP must pay liquidated damages on a daily basis for the loss of availability of each Unit whilst defects covered by the warranties are remedied. The SP shall procure for the benefit of RfL new warranties (to the extent available in the market) in respect of any Key Component that is refurbished/replaced in accordance with the scheduled refurbishment requirements in the RSPA.

## 3. Depot

*(Part III and Schedule C of the RSPA)*

### 3.1 Planning and consents

The SP shall be wholly responsible for obtaining the necessary consents to the extent not already obtained by CRL and for complying with any relevant existing consents obtained by CRL. Certain consents under the Crossrail Act are required to be obtained in the name of CRL as nominated undertaker and the form and conditions attached to other consents are in many cases subject to Crossrail Project-wide policy and/or agreements made with local authorities. All such consents are required to be reviewed and approved by CRL prior to submission. The SP will be wholly responsible for discharging any conditions associated with any consents.

### 3.2 Construction

Under the Agreement, the SP is responsible for the design, construction, commissioning, testing, integration and assimilation of the OOC Depot and for maintaining and operating the depot as a fully functional light maintenance depot (the OOC Depot is unregulated).<sup>5</sup> The Depot Specification in the RSPA is provided on an output basis allowing Bidders to achieve optimum value for money. The SP is responsible for the design, construction, commissioning, testing, integration and assimilation of the OOC Depot for the interfaces and connection to the national railway network generally in accordance with the Depot Interface Specification. Bidders should note that no protection is provided to the SP in the event that Network Rail does not comply with the Network Rail obligations noted in the Depot Interface Specification.

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<sup>5</sup> The depot is exempt from regulation for access and licensing under the Railways Act 1993 pursuant to the Railways (Class and Miscellaneous Exemptions) Order 1994 but still remains subject to the Railways Infrastructure (Access and Management) Regulations 2005 under which third party applicants may apply for services at the depot.

### **3.3 Licence**

TfL will grant a lease to RfL and RfL will grant a licence of the Site to the SP under the Agreement. The SP is obliged not to put TfL in breach of the lease covenants or those in the Connection Agreement. RfL shall hand over to the SP access to the Site in six tranches as the Site Areas are progressively vacated by third party users. The SP shall take the Site in its then condition and the SP shall be responsible for dealing with any hazardous substances or waste to the extent it excavates or releases the same as part of the Works at the depot. The CTOC will have a designated area at the OOC Depot.

### **3.4 Design and assurance**

The SP will be fully responsible for design of the OOC Depot. The SP will also be required to provide technical assurance to RfL throughout the design and construction process to demonstrate compliance with the requirements of the Agreement and delivery of the OOC Depot in accordance with the Depot Works Programme.

### **3.5 Interfaces**

The SP will be responsible for managing all interfaces at the OOC Depot, including with systems and third parties, principally Network Rail (both as landlord and infrastructure manager of the operational railway). The Depot Interface Specification includes an abridged form of the CRL agreement with Network Rail, in RSPA schedule C1 (Depot Specification), which is provided to assist Bidders in understanding the extent of their responsibilities for the interfaces. Bidders should note that no protection is provided to the SP in the event that network rail does not comply with the Network Rail obligations noted in the Depot Interface specification. Bidders will note that the SP will need to interface with other third parties including the Great Western Franchise Operator (user of adjacent depot); Canal & River Trust; London Borough of Hammersmith and Fulham; London Borough of Ealing; Jascots Wine Merchants Ltd; Genesis Housing Group; utilities providers; and other third parties who will be using the Site prior to and concurrently with the SP. The SP shall be obliged to co-operate with these third parties and obtain consents for its works and activities on the Site where necessary (including by complying with the Depot Interface Specification which is appended to the Depot Specification).

There is also a significant interface with the CTOC and the SP's non-exclusive licence to the Site under the Agreement permits the CTOC staff to access their work and training areas at the OOC Depot and the CTOC drivers to access the Units. The SP must also observe and comply with all undertakings and commitments given by CRL or the Secretary of State to stakeholders which are applicable to the Site and associated works.

### **3.6 Depot Completion/ Milestone Payments**

There shall be a three-staged sectional completion of the OOC Depot, the first of which shall consist of the main depot building including the office area to be used by the CTOC and RfL. Completion is envisaged to involve inspections by RfL to certify physical completion and a series of tests to commission the OOC Depot and to demonstrate to RfL integration and assimilation with systems and signalling of the depot and the mainline network. Payments will be made to the SP in relation to the Depot Works on completion of each Depot Works-related Milestone set out in Schedule E11 (Milestones and Security). Bidders should note the pre-completion payment restrictions specified in

Appendix D.3. Satisfaction of depot acceptance requirements on time are conditions to Acceptance of the Units.

## **4. Stabling Sites**

*(Clause 30 and Schedule C5 of the RSPA)*

For the period prior to the opening of the OOC Depot and / or access becoming available via the Crossrail Infrastructure, the SP is responsible for providing such temporary stabling and / or depot facilities as it may require for the storage and servicing of Units delivered and / or in service. RfL will arrange an option to provide temporary access to limited depot facilities at Ilford and details of these arrangements are provided in Parts D3.5, D3.6 and F6. The SP may take up this option but does so entirely at its own risk and cost.

Stabling facilities will be available for the SP at Gidea Park, Ilford Depot, Maidenhead, Plumstead and Shenfield. The SP shall satisfy itself with regards to access and other relevant matters and undertake such activities as may be necessary at the stabling facilities (for example, interior inspection, fault finding, Unit preparation for service and interior cleaning of Units). Activities which are not necessary to undertake at the stabling facilities shall be undertaken at the OOC Depot or other facilities provided by the SP and agreed with RfL.

## **5. Operations**

*(Part V and Schedule D of the RSPA)*

During the operations phase, the SP is to make the Units available for RfL to provide on to the CTOC to operate the Crossrail Services. To do this, the SP shall carry out maintenance and cleaning (interior and exterior) of the Units and make them available to the CTOC, fit for service, in accordance with the timetable/diagram requirements. Any failure to provide a Unit on time to the CTOC or any service defects found on the Units (unless, and to the extent, they are considered to be the responsibility of RfL) will result in deductions to the Service Payment pursuant to the Performance Regime (see below). The SP shall also carry out maintenance of the Simulator such that it is available and fit for purpose for the prescribed hours of use and shall maintain the Spares, Special Tools and the OOC Depot to the required condition throughout the Concession.

RfL shall have the right to inspect the OOC Depot at any time following Depot Completion (subject to certain restrictions) and the SP shall be required to implement a remedial plan if the OOC Depot is not in the condition required by the Agreement.

## **6. Interfaces with third parties and stakeholders**

*(Clause 6 and Schedule A7 of the RSPA)*

### **6.1 Undertakings and assurances**

During the passage of the Crossrail Bill through Parliament, a large number of undertakings and assurances were given to third parties affected by the Crossrail Project. To the extent that these commitments interface with the Project, the SP must comply with

them in carrying out its obligations under the Agreement and not put CRL or the Secretary of State in breach. The text of relevant commitments is set out in the RSPA and the source documents are provided in the Data Room.

## **6.2 Network Rail**

There are several interfaces with Network Rail in its capacity as both landlord and infrastructure manager and the SP will need to manage these interfaces which will include the process of obtaining compatibility statements in respect of the Units or arranging any paths required for Unit testing as well as those interfaces at the OOC Depot which are delineated in part in the Depot Specification (including the Depot Interface Specification appended thereto).

## **7. Financial matters**

### **7.1 Milestone Payments for Units, Equipment and Depot Works**

As referred to above, the SP shall receive Milestone Payments in accordance with the Schedule of Milestones for the capital cost of providing the Units, Equipment and OOC Depot.

### **7.2 Payment Mechanism for the Services**

*(Schedule E2 of the RSPA)*

After the Operating Date, the SP shall receive Service Payments from RfL each Railway Period. These include a Base Period Charge which will be based on the number of Units provisionally accepted and depot availability. Payments will be made as additional Units are provisionally accepted and once all three Depot Sections are completed. Once all Units have been provisionally accepted and the OOC Depot fully completed, the payment mechanism enters steady state for the remainder of the Concession Period. The amount paid each Railway Period will be subject to adjustments incurred pursuant to the Performance Regime (see below) and for other defined matters.

### **7.3 Performance Regime**

*(Schedule E3 of the RSPA)*

This regime is detailed in its design and aims to incentivise a high standard of performance by way of the following measures: availability, cancellations, delay, headway, capacity, major incident, service defects, cleaning and aesthetic condition and Simulator provision, which are weighted individually according to various criteria including the relevant part of the Crossrail Infrastructure and the time of day of performance. The effect of the regime is enhanced by aligning the incentives for the SP and the CTOC in their respective performance regimes (CTOC under its OCA) with the effect of encouraging mitigation by the CTOC of the impact of underperformance by the SP. The SP will not suffer deductions to the extent that failures are deemed to be the fault of RfL (including some actions of the CTOC) and are "Allowable Failures".

## 7.4 Indemnities and limitation on liability

*(Clause 45 of the RSPA)*

The SP shall indemnify RfL, CRL, TfL, the CTOC and the Secretary of State (in certain instances) for losses incurred by such parties as a result of negligence or default, omission or wilful conduct of or breach of the Agreement by the SP or its subcontractors, subject to certain restrictions.

The SP's liability is limited by various caps subject to certain exceptions:

- a) liabilities that relate to the Works Element are capped at █ % of the Total Contract Price;
- b) liabilities that relate to the Services Element are capped at £ █ (Indexed) with this cap being refreshed each Contract Year;
- c) there is a separate cap on certain third party liabilities at £ █ (Indexed); and
- d) there is a separate cap on compensation payable on termination after Acceptance of all of the Units (i) prior to and including 1 June 2026 this is £ █ (Indexed) and (ii) after 1 June 2026 it falls to £ █ (Indexed).

## 7.5 Insurance

*(Clause 46 and Schedule E9 of the RSPA)*

The SP (or its subcontractors as applicable) shall take out and maintain the insurances required by the Agreement which include, during the construction phase: contractor's all risks and third party public and products liability; and, on a progressive basis following Acceptance of each Unit and completion of each Depot Section during the operations phase: all risks insurance for the OOC Depot (including Units whilst at the OOC Depot) and third party public and products liability. RfL shall be a named insured on the policies and the CTOC shall be an insured on the SP's policies during the operations phase.

## 7.6 Change and compensation events

*(Part VI and Schedule A8 of the RSPA)*

### 7.6.1 Change Procedure

The Change Procedure allows for the parties to propose changes to the Agreement. RfL cannot propose changes in certain circumstances. The SP will be reimbursed for the cost of RfL Changes by lump sum payments, a change to the Service Payments or against a schedule of rates. SP proposed changes shall be at the SP's cost.

The Change Procedure also contains a specific regime for: (i) TSSSA Changes where there is a change in the maintenance regime; and (ii) GW Services Changes where the GW Services Change Requirements are to be implemented.

### **7.6.2 Change in Law**

The SP shall generally be responsible for funding changes required by a change in law subject to exceptions for certain qualifying or discriminatory changes in law and a sharing mechanism for capital expenditure incurred after the operating date.

### **7.6.3 Compensation Events**

The RSPA provides for the SP to be compensated and to obtain relief in specified circumstances throughout the concession period. These include:

- a) RfL failing to provide the Site Areas on the required dates;
- b) RfL's failure to undertake certain "operator" requirements; and
- c) Certain other breaches/failures to act.

## **7.7 Options**

*(Clause 16.7 and Schedule E11, Part 3 of the RSPA)*

RfL has an option to buy up to 23 additional Units as well as related Equipment. RfL will include any Units (and Equipment) purchased under the option into the Concession via the Change Procedure as an Option Unit Change. RfL also has an option to extend the Concession Period by up to 8 years. RfL has also requested the price for up to five extra Units which may be procured at the Commencement Date. If it is decided to procure these extra Units then any consequential changes to the RSPA will be made prior to signature of the RSPA.

## **8. Termination**

*(Part VII of the RSPA)*

### **8.1 General Termination**

Termination of the Agreement may occur for reasons of SP default (including for insolvency events, material breach, delays to longstop dates, invalidity and failure to replace the Parent Company Guarantee, Advance Payment Bond or TSA Performance Bond, exceeding the cap on liquidated damages for late delivery etc.), RfL default, RfL voluntary right to terminate, failure to agree a Major Depot Change, force majeure, ineffectiveness and corrupt gifts.

### **8.2 RfL voluntary termination**

RfL's general right to voluntarily terminate the Concession only applies on any date falling on or after 1 June 2026 or at any time on failure to agree a Major Depot Change.

## **9. Return**

*(Part IX and Schedule A14 of the RSPA)*

In all cases of expiry or termination of the Agreement except termination prior to achievement of Minimum Fleet, the Units and Equipment, the Free Issue Materials, the OOC Depot (save for the SP Moveable Assets) and the Depot Works shall be returned to RfL. In the event of early termination for SP Default, RfL shall have the right to require that part-built Units or Equipment are returned to RfL and that the SP shall build out/satisfy preconditions on such work in progress and/or QPAC Units.

The SP shall ensure that the Return Assets which are being handed over to RfL and/or a nominee of RfL on expiry or termination shall be in the Return Condition and, to the extent possible, the Parties shall agree certain procedures to put the relevant assets in such condition. In certain circumstances RfL is entitled to retain funds following condition surveys in order to put the assets in the prescribed condition.

## 10. Termination payments

*(Clause 52 and Schedule E6 of the RSPA)*

The following table shows the termination payments that will be made by RfL to the SP in certain situations.

Type of default	Time when default occurs	Compensation payable
<b>SP Default/Corrupt Gifts termination</b>	Prior to Minimum Fleet being accepted	SP reimburses amounts paid.  Units returned to SP.  SP provides general indemnity for costs associated with termination, up to a capped amount.
	After the Minimum Fleet has been accepted	RfL can choose to:  (i) procure completion and charge the costs to SP; or  (ii) be reimbursed for amounts paid in relation to unfinished Units.  SP provides general indemnity for costs associated with termination, up to a capped amount.
	After the Operating Date when the Services are being provided by the SP	SP provides general indemnity for costs associated with termination, up to a capped amount.  (If not all of the Units have been accepted at the date of termination, RfL can, in addition, choose to: (i) procure completion and charge the costs to SP; or (ii) be reimbursed for amounts paid in relation to unfinished Units.)
<b>Voluntary termination by</b>	Prior to acceptance of	RfL to pay:

Type of default	Time when default occurs	Compensation payable
<b>RfL /RfL Default</b>	all of the Units	(i) fair value of "Acquired WIP"; and  (iii) other reasonable costs.
	After the Operating Date when the Services are being provided by the SP	RfL to pay:  (i) amounts due;  (ii) costs for labour and materials committed to;  (iii) Demobilisation Costs; <sup>6</sup> and  (iv) in the event of a Major Depot Change termination, projected net profit as in the Base Case Maintenance Model for the following 36 months.  (If not all of the Units have been accepted at the date of termination, RfL can, in addition, choose to: (i) procure completion and charge the costs to SP; or (ii) be reimbursed for amounts paid in relation to unfinished Units.)
<b>Force Majeure</b>	Prior to acceptance of all of the Units	RfL to pay fair value of "Acquired WIP"
	After the Operating Date when the Services are being provided by the SP	RfL to pay:  (i) amounts due;  (ii) costs for labour and materials committed to; and  (iii) Demobilisation Costs. <sup>7</sup>  (If not all of the Units have been accepted at the date of termination, RfL can, in addition, choose to: (i) procure completion and charge the costs to SP; or (ii) be reimbursed for amounts paid in relation to unfinished Units.)

<sup>6</sup> Demobilisation Costs are amounts divided into five yearly intervals to be bid by Bidders; see Proposal Template.

<sup>7</sup> Demobilisation Costs are amounts divided into five yearly intervals to be bid by Bidders; see Proposal Template.



Type of default	Time when default occurs	Compensation payable
<b>Ineffectiveness/ Uninsurability</b>	Any time during Concession Period	RfL to pay:  (i) amounts due;  (ii) costs for labour and materials committed to; and  (iii) redundancy payments incurred by the SP.

## 11. TfL guarantee /change of control /refinancing

*(Clause 44 and Schedule E5 of the RSPA)*

### 11.1 Guarantee

TfL will guarantee RfL's compensation on termination payment obligations. Under the TfL guarantee, in the event of a termination of the Agreement where termination payments are due to the SP in accordance with the terms of the Agreement and RfL is unable to make such termination payments (for whatever reason), TfL guarantees to make such payments to the SP on RfL's behalf.

Bidders shall note that under section 160(1)(a) of the Greater London Authority Act 1999, such guarantees are limited to discharging financial obligations of a subsidiary of TfL. The terms of this guarantee are, therefore, statutorily limited to financial matters and Bidders shall not seek to extend the terms of the guarantee from those set out in the RSPA.

### 11.2 Change of Control

The SP is given extra protection in the event of a "change of control" of RfL or circumstances where the obligations under the TfL guarantee cease to be obligations of TfL or central Government.

### 11.3 Novation

RfL has the right to novate the RSPA to the Secretary of State, any member of the TfL Group or to a Suitable Lessor as a consequence of a re-financing. The SP must co-operate with RfL to complete the novation process. The protection afforded by the change of control provisions referred to in the preceding paragraph would still apply post such a novation.

### 11.4 Refinancing

RfL is entitled to assign, novate, charge etc. its rights without needing the consent of the SP to the Secretary of State, any member of the TfL Group, a Suitable Lessor or to a third

party (that is neither a Suitable Lessor or a Competitor) provided that in this latter case RfL will ensure the performance of such third party.

RfL may assign, novate, charge etc. its rights to any party with SP's consent.

## **12. Key Subcontractors direct agreements**

*(Part 2 of Schedule E7 of the RSPA)*

Each of the SP's Key Subcontractors will enter into a direct agreement with RfL and the SP which will give RfL certain direct rights against the Key Subcontractors particularly in circumstances where the Agreement is terminated.

## **13. Parent Company Guarantee and Bonding**

*(Clauses 2 and 41; Schedules E8 and E11 of the RSPA)*

The SP is required to provide a Parent Company Guarantee in the form set out in Schedule E8 (Parent Company Guarantee).

The SP is additionally required to put certain Bonds in place as follows:

- a) An Advance Payment Bond issued by a suitable institution in the form set out in Schedule E11 (Milestones and Security) which complies with the requirements in that schedule.
- b) A TSA Performance Bond issued by a suitable institution in the form set out in Schedule E11 (Milestones and Security) which complies with the requirements in that schedule.

## Part F Associated documents and agreements

### 1. CTOC franchise

As stated in Part D7.1, RfL will enter into an OCA with the CTOC to deliver the Crossrail Services. The OCA is expected to be a gross cost contract where RfL determines and specifies the train services and sets the required delivery standards in exchange for a periodic payment from RfL. To achieve the requirements of the OCA, the CTOC will enter into access contracts with the Infrastructure Manager(s) and provide the resources necessary to operate the timetable and station services. RfL retains revenue risk, sets fares and markets the services.

It is envisaged that the CTOC will be established as a special purpose company to enter into the OCA. It will be licensed as a train operator by the Regulator and will hold the safety certificate for the operation of the Crossrail Services.

The OCA will (inter alia) require the CTOC to:

- a) obtain a licence from the Regulator to operate passenger trains and stations;
- b) at commencement of the OCA, take over and operate certain train services using existing trains (until replaced by the new Units) operated by the Greater Anglia Franchise Operator and which will be subsumed into Crossrail Services;
- c) bid for and obtain the train paths that allow the operation of a timetable that is consistent with the service level commitments required by RfL;
- d) enforce their rights in Track Access Agreements to ensure consistent delivery of the service level commitments during the OCA and ensure the delivery of RfL's rights and certain of RfL's obligations under the Crossrail track access option;
- e) agree a Train Plan with the Infrastructure Manager(s) and operate Units in accordance with the Train Plan;
- f) enter into station leases and, where necessary, access agreements for stations served by Crossrail;
- g) manage the regulated depot access agreement to ensure the provision of stabling and train maintenance by the Greater Anglia Franchise Operator within the Ilford Depot as described elsewhere;
- h) support testing and commissioning activities and undertake Trial Operations;
- i) recruit and provide training for sufficient train crew and station staff to meet the requirements of the Crossrail opening strategy;
- j) provide train crew and supporting management necessary to operate the services;
- k) provide station staff and supporting management for the provision of customer service;
- l) liaise with the British Transport Police and other relevant authorities to ensure the personal security of customers;

- m) provide and operate customer information systems on stations;
- n) provide ticket retailing facilities and manage revenue protection;
- o) provide the cleaning of stations and turn-around cleaning of trains;
- p) provide operations staff in the Crossrail route control centre and liaise with the SP, Infrastructure Manager(s) and other operators (including LUL) to effectively deliver the train services and minimise delays and perturbation to services;
- q) be the first line of call for all day to day operational matters;
- r) monitor and report operational performance;
- s) provide for alternative services and rail replacement services when the normal timetable cannot be operated; and
- t) occupy the CTOC Area at OOC Depot after the CTOC Access Date for the purposes of train crew management and dispatch.

## **2. Train Carried Signalling Equipment Subcontract**

### **2.1 Background**

In order to meet Sponsors' requirements for capacity and other operational aspects of the Central Section, CRL has appointed a contractor (the Signalling Contractor) to install signalling based on a proprietary CBTC system. The specification for this system is provided for background information only in the Data Room (C620-XRL-R2-RSP-CRG03-Z050001).

CBTC systems operate using a combination of lineside infrastructure and train carried control equipment with the latter being integrated with the Units' own sensors and control systems. The nature of these interfaces dictates a close working relationship between the SP, its Train Maintainer (if the SP chooses to have one) and the Signalling Contractor during the design, manufacturing and operational phases of the Agreement. CRL requires this relationship to be governed by a direct contract between the SP (or its Subcontractors) and the Signalling Contractor (the TCSE Subcontract) to cover the supply, commissioning, modification (as may be required from time to time) and maintenance of train carried signalling equipment.

Bidders are required to negotiate the TCSE Subcontract heads of terms with the Signalling Contractor and base their final proposals on the agreed terms. Bidders shall note and comply with the following:

#### **2.1.1 Regulatory approvals**

CRL has obtained a derogation from the technical specification for interoperability relating to the control-command and signalling subsystem of the trans-European conventional rail system to permit the use of a non ETCS based CBTC ATO system on the Central Section. This is necessary because the Central Section is subject to the Interoperability Regulations. Pursuant to the conditions of the derogation CRL will require the Signalling Contractor to produce a plan to enable it to migrate from the installed CBTC system to an ERTMS Level 3 system. The SP will be required to contribute to the development of this migration plan but any

eventual implementation of the strategy will be instructed at the time as a Change. Bidders' attention is, however, drawn to the 'future-proofing' requirements of the Train Technical Specification.

### **2.1.2 Condition Precedent**

The TCSE Subcontract is a Key Subcontract under the RSPA and therefore entry into it is a condition precedent to the RSPA coming into full force and effect.

For similar reasons, a failure to enter into the TCSE Subcontract is a ground for termination of the C620 Contract by CRL.

As a result of this, CRL requires Bidders to carefully consider the risks associated with the TCSE Subcontract and adopt a strategy based on pricing these risks into the Proposal wherever possible. This approach should be taken in preference to seeking to qualify or otherwise introduce onerous terms into the TCSE Subcontract.

### **2.1.3 Subcontract Negotiations**

Bidders shall request and organise bilateral meetings with the Signalling Contractor on technical and commercial matters and ensure that CRL is kept fully informed about all matters connected with the negotiation and agreement of the TCSE Subcontract. In particular:

- Commercial discussions may be private but CRL shall be given advice that they are proceeding.
- Technical discussions shall be recorded by the Signalling Contractor, agreed by the Bidder and minutes made available to CRL.
- As required by the C620 Contract the Signalling Contractor shall invite CRL to attend the technical discussions as an observer (these discussions shall take place in UK unless otherwise agreed by CRL).

Bidders shall comply with the additional requirements set out in the document "Protocol for the Advanced Issue of Signalling and Control System Sub-contract Interface Documentation", which was originally issued via the Crossrail e-Sourcing Portal on 28 March 2013.

## **2.2 Train Carried Signalling Equipment Subcontract**

CRL requires the TCSE Subcontract heads of terms to be developed and agreed between each Bidder and the Signalling Contractor based on the principles set out in the Train Carried Signalling Equipment Subcontract pack which can be found in the Data Room. The pack comprises:

### **2.2.1 Train Carried Signalling Equipment Subcontract Heads of Terms**

This document describes the overall scope and commercial principles for the TCSE Subcontract. The document was originally prepared by CRL and provided to tenderers for the C620 Contract. The Signalling Contractor's comments on this document which were received during the tendering process are included in the pack and Bidders should note that the Signalling Contractor is not permitted under

the C620 Contract to request further amendments to the TCSE Subcontract heads of terms save as a direct consequence of amendments or additional terms requested by the Bidder (unless otherwise agreed by the Bidder). CRL has also subsequently updated this document to reflect the current drafting of the RSPA and those changes are shown on a marked-up version of the heads of terms included in the pack. The detailed subcontract heads of terms shall be developed by Bidders during the Rolling Stock & Depot tender process and agreed by each Bidder with the Signalling Contractor. Bidders will be deemed to have identified any essential additional scope or commercial terms which may be required in addition to those described by the CRL prepared heads of terms and to have included the price and any other effects of these in their Proposals (as further described below).

### **2.2.2 Train, ETCS and S&CS Interface Specification Part 1**

Compliance with the Train, ETCS and S&CS Interface Specification (TESIS) is mandated by the Train Technical Specification and the TESIS will also form part of the TCSE Subcontract so that complementary requirements flow down through the TCSE Subcontract. Part 1 of the TESIS specifies the requirements for the interfaces between the Units and the CBTC system for the Central Section and sets out responsibilities for the SP and for the subcontractor. Part 1 of the TESIS will be supplemented by a number of more detailed technical interface documents and these are described in more detail in Part 2 of the TESIS.

### **2.2.3 Train, ETCS and S&CS Interface Specification Part 2**

This document describes requirements for the preparation of the technical interface documents which will complete the specification of the interaction between the Units and the CBTC signalling system. Bidders shall include in the Proposal the cost and timescales associated with:

- (a) preparing and / or reviewing and agreeing the technical interface documents; and
- (b) ensuring that the Train Works comply with the technical interface documents.

Bidders shall note that design development undertaken by the Signalling Contractor to date has been based on the technical interface documents submitted with their Proposals on 28 October 2012. Bidder specific technical interface documents prepared by the Signalling Contractor were issued via the Crossrail e-sourcing Portal on 28 March 2013 and these form part of this ITN. Copies have not been placed in the Data Room to protect confidential aspects of Bidders' Proposals.

### **2.2.4 Abstract of RSPA conditions**

This document was provided to C620 Contract tenderers to explain the context of references to the RSPA in the TCSE Subcontract. It has not been updated to reflect the current version of the RSPA. However, CRL expects that all relevant updated terms will be consolidated into the TCSE Subcontract heads of terms during negotiations between the Bidders and Signalling Contractor to the extent necessary so that the TCSE Subcontract can be viewed as a standalone document from the RSPA.

### **2.2.5 Activity Schedule and clause 12 and schedule 3 to the TCSE Subcontract Heads of Terms**

These documents have been populated by the Signalling Contractor and form part of the provisional TCSE Subcontract heads of terms which were agreed by CRL with the Signalling Contractor under the C620 Contract. Bidders may agree alternative pricing arrangements with the Signalling Contractor, which should be reflected in the Bidder's financial submission (see below). Bidders should note that the Signalling Contractor is required by the C620 Contract not to charge the SP any higher amount(s) than those set out in these documents except in respect of works and services specifically required by the SP which are additional to and not contemplated by those works and services required under the TESIS.

### **2.2.6 Extract from C620 instructions to tenderers**

This document is now historical but is provided for information to Bidders to give more details on the basis on which the Signalling Contractor was asked to bid for the TCSE Subcontract.

## **2.3 Tender requirements**

### **2.3.1 RSD Bidders**

Bidders shall note and comply with the following:

#### **a) SP Train Proposal**

Technical solutions required to comply with the TESIS shall be described in relevant sub-sections of the SP Train Proposal (part B1.1 of the Proposal Template).

#### **b) Interface with Central Section signalling & control system**

In Part B3 of the Proposal Bidders shall provide the following:

- i) the Bidder's proposed TCSE Subcontract heads of terms, together with evidence of the Signalling Contractor's agreement to those heads of terms. The heads of terms shall be at no less a level of detail than that provided in the TCSE Subcontract heads of terms provided as part of the ITN;
- ii) a statement of compliance with Parts 1 and 2 of the TESIS;
- iii) a summary of the Bidder's technical response to the TESIS; and
- iv) the technical interface documents described in part B3.4 of the Proposal Template.

#### **c) Financial submission**

Bidders will be required to submit a fully compliant Proposal based on the agreement reached with the Signalling Contractor for the TCSE Subcontract Heads of Terms.

Bidders shall include in the Proposal allowances for all costs and risks associated with the TCSE Subcontract including (without limitation) the train carried works element; the train carried services element; any additional scope or terms & conditions required and costs associated with development of the technical interface documents referred to in the TESIS. These allowances together with any relevant assumptions and a description of how costs associated with the TCSE Subcontract have been included in the Base Case Maintenance Model shall be included in Part F of the Proposal.

### **3. Tier 1 Subcontracts**

Bidders shall provide the information requested in part E6.1 of the Proposal Template.

### **4. Connection Agreement**

The Tenth Schedule to the existing lease for Old Oak Common (see Part D2.1) also contains a form of connection agreement which provides for a connection to be maintained between the depot railhead and Network Rail's network, and sets out TfL's and Network Rail's respective responsibilities in relation to that connection. As works for the Crossrail Project at Old Oak Common and the Depot Works progress, it is expected that the location of the connection point will change once the Supplementary Lease is granted and the connection agreement will be amended accordingly, but otherwise will remain on the same terms. However, it is TfL's intention to enter into a new connection agreement on or prior to completion of the Depot Works which will reflect the final connection point and the fact that the depot will then be used for passenger services rather than freight. The new connection agreement will be provided to Bidders when available (for information only) but is expected to be entered into between TfL and Network Rail on a basis similar to that used for the connection agreements for the IEP depots (such as North Pole and Stoke Gifford, which are available on the Regulator's website). Bidders should note that the RSPA requires the SP to comply with all relevant covenants in the connection agreement (existing and in the form to be entered into) and should therefore make appropriate assumptions in the Proposal based on this information.

### **5. Power supply**

With respect to the provision of traction power at the OOC Depot, RfL intends to enter into a traction power supply agreement with the power supplier. RfL will pay for traction power at OOC Depot from the Depot Completion Date. The Service Payment will be adjusted in accordance with the Depot Power Consumption Adjustment as described in the Payment Mechanism. Details of the traction power supplier will be provided once this has been identified. For the avoidance of doubt, the SP will be responsible for domestic power at all times and for paying for any traction power required prior to the Depot Completion Date.

### **6. Ilford Depot access agreement**

In addition to stabling, RfL proposes to procure access to the Ilford Depot for limited Unit maintenance, in accordance with clause 30.8 of the RSPA and if required by the SP. This facility will be available up to the Stage 4 Crossrail Services commencement date and RfL will not be obliged to procure this access beyond that date, nor to make any other Unit maintenance facilities available to Bidders at any time.

RfL intends to procure general access to Ilford Depot through a Depot Access Agreement with the Greater Anglia Franchise Operator and regulated by the Regulator. A separate,



unregulated agreement with the Greater Anglia Franchise Operator will deal with the limited access to Ilford Depot facilities for maintenance of relevant Units up to the start of Stage 4 Crossrail Services by the SP, as summarised below. Clause 30.8 of the RSPA has been drafted on the assumption that the SP will wish to make use of this facility but Bidders are free to include alternative (or additional) facilities in the Proposal at their risk and cost.

Notwithstanding the drafting of clause 30.8, Bidders who wish to make use of the Ilford Depot facility shall include in their Proposal the charges to be paid to Greater Anglia for use of the facilities (summarised below) based on the rates set out in the unregulated agreement.

Bidders shall allow for all other costs associated with the use of these facilities and / or for the cost of additional facilities. In particular, if a Bidder proposes alternative or additional interim maintenance facilities, it shall not assume that RfL will procure train paths or drivers between the Entry and Exit Points and that facility and so must include all costs and risks for such in the Proposal.

The regulated Depot Access Agreement and the separate unregulated agreement covering train maintenance access are provided in the Data Room. Bidders should note that the regulated agreement has not yet been ratified by the Regulator.

The limited access granted for the SP is summarised below:

- a) Access by rail (only) for the delivery by the SP of complete RLUs for Provisional Acceptance, subject to the total length of trains (including any locomotives and translator/barrier vehicles) not exceeding 240m;
- b) Access to a pit-road within the maintenance building for an RLU for 12 consecutive hours in each 24 hour period for routine maintenance work arising. This will be subject to a maintenance access plan being submitted 4 weeks in advance by the SP;
- c) there is no dedicated jacking road but, subject to notice, shared access will be granted to the road (Road 16) which has a bogie drop facility. Bidders shall note that the position of the bogie drop facility may not be suitable for all bogies on an RLU;
- d) shared access to a heavy cleaning facility;
- e) a small secure store provision, sufficient for the storage of routine maintenance consumables for one scheduled maintenance exam. Some limited technical and Additional Services spares may be made available subject to local agreement with the Greater Anglia Franchise Operator, but Bidders shall provide portable storage sufficient for their own needs subject to site constraints;
- f) reasonable use of common services (e.g. power supplies, heating and lighting)., Bidders shall note the provisions of paragraph 2.13(g) in Part 1 of RSPA Schedule D1 whereby the SP is responsible for providing shunting resource for the movement of trains in and around Ilford Depot; and
- g) reasonable use of messing and welfare facilities (excluding lockers), and reasonable use of the waste and recycling facilities.

Except where specifically stated, labour and materials are excluded from the above facilities.

Bidders should note that they will not be responsible for undertaking the '48 hourly' exterior train wash, nor the periodic exterior heavy clean on the Units that are maintained at Ilford Depot prior to Stage 4 (when routine access to OOC Depot becomes available via the Central Section).

Bidders should also note that any Unit delivered by the SP to Ilford Depot must, in accordance with the RSPA requirements for Pre-Provisional Acceptance, be in a state such that it can achieve Provisional Acceptance. It is a condition of the unregulated agreement for access to Ilford Depot that any Unit being delivered, if not being driven in under its own power, is capable of being driven under its own power (initially to a stabling siding, or into the maintenance building) as soon as it is uncoupled from the delivering freight train so as not to cause congestion at the Depot.

## **Part G Form and content of Proposals**

### **1. General requirements**

#### **1.1 Use of Proposal Template**

Bidders are required to prepare the Proposal following the format of the Proposal Template document provided in the Data Room. Proposals shall provide all of the information required by both the IFT and the Proposal Template. Further information is provided in Part G3.

#### **1.2 Communications during the procurement process**

All communications between Bidders and CRL (including the submission of Proposals) shall be conducted using the Crossrail eSourcing Portal.

#### **1.3 Clarification Questions**

Bidders shall submit requests for clarification ("Clarification Questions") to CRL via the Crossrail eSourcing Portal. The communication header shall clearly state that the message is a query and shall include a sequential 4-digit serial number prefixed by the first letter of the Bidder's name and the letter "N" (e.g. ZN0001, ZN0002, etc.).

Bidders shall not approach or attempt to communicate with any other employee, representative, agent, consultant or advisor of TfL, CRL, RfL, DfT or the Secretary of State in connection with this ITN.

Failure to satisfy CRL of the value of the information sought may result in the request not being accorded priority attention and/or it being viewed as an unreasonable request for information.

All Clarification Questions received will be reviewed (unless deemed an unreasonable request for information by CRL), and subject as set out below all responses will be circulated to all Bidders. A Bidder may request that CRL treat a Clarification Question and its response as "commercially sensitive". Any such requests must be made at the time of submission of the Clarification Question. If CRL considers, in its discretion, that it is unable to answer the Clarification Question on a confidential basis, then it will notify the Bidder of its decision and the Bidder will have the opportunity either to withdraw the Clarification Question, or accept that the Clarification Question and response will be circulated to all Bidders. No liability will accrue to CRL from the disclosure of Information.

CRL aims to respond to Clarification Questions within 10 working days depending on complexity. However, Bidders should note that this is not guaranteed. Clarification Questions will not be accepted within 15 working days of the Submission Date. Subject to the preceding paragraphs relating to commercially sensitive information, CRL will transmit to other Bidders the questions asked by, and the answers provided to, any Bidder. This will be done by means of the Crossrail e-Sourcing Portal messaging facility.

Any response provided by CRL to a question or request for clarification will not be incorporated in the Agreement unless the response expressly states so.

## 1.4 Foreign exchange rate assumptions

In Part F5.2 of their Proposal, Bidders shall detail the manner in which they will address the risk of future movements in exchange rates.

RfL and CRL will accept full foreign exchange currency risk up to contract signature although Bidders shall note CRL reserves the right to request a re-submission of Proposals based on revised rates where any forward rates provided to Bidders move materially from the date the rates were taken. After contract signature these matters will be SP risks. The exception to this is for Option Units where the Option is exercised after contract signature. In this case CRL and RFL will take the exchange rate risk up until the exercise date of the relevant Option.

Foreign exchange rate assumptions shall be based on the rates taken by CRL and provided in the Data Room. If Bidders expect to have exposure to additional currencies beyond those listed above, forward rates for these currencies are to be requested from CRL through a Clarification Question. The following rates are provided in the Data Room:

Forward rates for:

- i. Euro
- ii. Japanese Yen
- iii. US dollar
- iv. Swedish krona

Bidders shall complete Financial Proformas 2 and 3. These shall include full transparency and detail of:

- a) all expenditure on any components denominated in a foreign currency; and
- b) how the exchange rate curves provided have been applied to convert these cost lines into GBP denominated cost lines.

Bidders shall note that while CRL and RfL will take exchange rate risk up until contract signature, this will only be the risk of movements in the published rates referenced above. Any change to a Bidder's methodology for applying these exchange rate curves or a change in costs or supply arrangements that alters a Bidder's underlying exposure will be at that Bidder's risk.

For Option Units, CRL and RFL will take the exchange rate risk up until the exercise date of the relevant Option although this will only be the risk of movements in the published rates referenced above. Any change to a Bidder's or SP's methodology for applying these exchange rate curves or a change in costs or supply arrangements that alters a Bidder's underlying exposure shall be at that Bidder's/ SP's risk.

The relevant schedules to the RSPA along with the Base Case Maintenance Model and Proformas 1, 2 and 3, will be adjusted at contract signature by updating the relevant exchange rates.

CRL and RfL reserve the right to utilise TfL's hedging powers in the event greater value for money can be achieved.

## 2. Instructions for responding using the Crossrail eSourcing Portal

If Bidders have any problems using the Crossrail eSourcing Portal then they should contact the Crossrail eSourcing Portal helpline on help@bravosolution.co.uk, or 0800 368 4850 / +44 203 349 6607.

### 2.1 Step 1: Download the files and set up additional users

If Bidders require additional people to have access to the ITN then they should make use of the "User Management link" on the main page to add additional users to the ITN.

All communications sent during the period for responding to this ITN will be notified by email to the main contact who expressed an interest in the ITN on behalf of the Bidder. If Bidders want the notifications to go to other users then this can be achieved by accessing the "User Rights area" in the system and enabling the other users to receive messages.

Before Bidders consider responding to this ITN, they should ensure that they have downloaded and read all the files which comprise the ITN. All files are important and contain information which may have a considerable bearing on the success of their response.

To download the documents relating to the ITN:

- a) Begin by clicking onto the bold ITN title. This will open up an overview of the ITN detailing the closing date and an ITN description.
- b) Click onto Attachments on the left hand side. The number in brackets refers to the number of documents that need to be downloaded.
- c) To download an attachment, click onto the bold and underlined filename.

Bidders will be given the option to Open, Save or Cancel. As certain documents may have to be filled in and returned to CRL, Bidders should select Save and choose a suitable location on their network to store the file. Bidders can repeat this process for each of the files to download them individually but it is easier to use the 'mass download' facility as described below. If there are more than 10 documents to be downloaded, Bidders will need to scroll through the pages by clicking onto the next page icon (>>).

To carry out the mass download Bidders will need to have *Java Virtual Machine (JVM)* software installed. This is available (at Bidders own risk) as a free download from the internet. To mass download click on the Mass Download option in the attachments screen. When Bidders have confirmed the list of files to download, they will be asked to choose where to save the files on their network.

Bidders upload their finished Proposals using a similar method.

### 2.2 Step 2: Bidders to confirm intention to respond

CRL wishes to engage contractors of all sizes, regardless of type and ownership and strives to meet the highest standards.

It is in nobody's interest for Bidders to respond to ITNs that are inappropriate to their business. For this reason, Bidders should read the ITN carefully. This will help them to confirm that this opportunity is suitable.

If a Bidder decides not to submit a Proposal for the Project then it should select "Decline to Respond" from the left hand menu. This will alert CRL that a Bidder is proposing not to respond to this ITN and has withdrawn from the competition.

If Bidders want to clarify any point, they must do so by raising a Clarification Question as described above.

### **2.3 Step 3: Read the submission requirements carefully**

CRL will only take account of information which is specifically requested within the ITN. Responses must be correctly referenced in accordance with the Proposal Template. CRL will not evaluate information which has not been included by a Bidder in its response to this ITN and may not evaluate information which has been incorrectly referenced.

Bidders must return a signed hard copy of Parts A1 and A2 of the Proposal to CRL before the Submission Date in order for their electronic response to the ITN to be considered. Refer to Part G3.4.2 for further information about this requirement.

### **2.4 Step 4: Preparing submissions**

The ITN is in an electronic form which can be accessed via a web browser on the Crossrail eSourcing Portal. It may be possible to respond to some parts of the ITN simply by answering questions on screen but, in most cases, Bidders will need to prepare additional material to support their response, which can be uploaded separately but in any event before the Submission Date. In all cases, Bidders should follow the instructions given in the ITN or via the Crossrail eSourcing Portal.

When completing some aspects of the Proposal on the Crossrail eSourcing Portal, Bidders may be required to enter information directly into a questionnaire's screen. It is important that where Bidders are inputting information directly into the questions, they "Save" their input regularly.

Please note that the Crossrail eSourcing Portal has a 'timeout' facility. If a user is inactive for more than 15 minutes they are liable to be logged off and as such may lose information already input and not saved.

When completing the questions, Bidders should use the 'legend' to understand icons.

Bidders are required to submit the Proposal broken down into a number of discrete portable document format ("pdf") files as indicated in Appendix E and the Crossrail eSourcing Portal makes submission of each of these mandatory. Many parts of the Proposal require supplementary documents to be attached to support the response. Bidders should note that the system will only allow a single file to be attached and, where multiple attachments are necessary, these shall be combined in a single 'zip' file. Bidders shall only submit supplementary documents when they are necessary and requested by CRL, shall comply with the file naming convention described below and shall ensure that all attachments are scheduled in Part G of the Proposal.

Most file types can be used to support Bidders' responses but Bidders shall use portable document ("pdf") format unless other formats are required by the relevant section of the

Proposal Template. If Bidders have any doubts about the format or software they intend to use for their response, they should raise a Clarification Question.

Bidders should note that files uploaded onto the Crossrail eSourcing Portal cannot be amended by CRL and that original files uploaded by Bidders will be maintained in an unaltered state on the system throughout the procurement process.

Bidders are advised to check with the Crossrail eSourcing Portal helpline before submitting responses in uncommon file formats.

All the files Bidders submit in general attachments will be displayed in alphabetical order. Bidders shall comply with the following file naming convention:

[ID][Proposal ref][-subref].[extension] where

ID is B for Bombardier, C for CAF, H for Hitachi and S for Siemens

Proposal ref is the clause reference from the Proposal Template contents pages relevant to the first part of the file contents (e.g. Part B1.1 for the SP Train Proposal).

Subref is only used for any attachments containing other documents (e.g. drawings). Unless specifically instructed otherwise, Bidders shall create their own subrefs to clearly identify the file in the context of their submission (e.g. 'Unit formation drawings').

Extension is the file extension set by the software used to create the file. File extensions should be maintained as per the relevant application's default e.g. Microsoft Word documents should have a file extension of .doc.

For example "ZPartB1.1.pdf" would be the name given to theoretical Bidder Z's SP Train Proposal.

"ZPartB1.1-1Unit Formation Dwgs.zip" would be the name given to a zip file submitted by Bidder Z containing the unit formation drawings required to support section 1 of the SP Train Proposal.

"ZPartB2.1-7Vampire.dat" would be the name given to the Vampire<sup>®</sup> file submitted by Bidder Z required as part of the Gauging, Routes and Stepping Distance supporting information.

Bidders should, as a general principle, aim to minimise file sizes and avoid unnecessary inclusion of high resolution pictures and the like. The Crossrail eSourcing Portal may operate slowly with file sizes in excess of 4Mb. Bidders are recommended not to load files in excess of 50Mb. The Crossrail eSourcing Portal will accept files greater than 50Mb in size, however the portal has a 'timeout' facility. If the upload of a file exceeds 15 minutes then the Crossrail eSourcing Portal security system will timeout the upload and the file will be rejected. Bidders should consider the overall size of the Proposal, note that uploading speeds may be restricted either by limitations on their own infrastructure or by congestion on the portal and ensure that they allow adequate time to complete uploading before the Submission Date.

CRL provides no guarantees over the time required to upload very large files as this will depend on factors outside its control (including the bandwidth of Bidders' networks and

internet connections). Bidders remain responsible for ensuring that all elements of their Proposals are uploaded and published by the Submission Date. CRL recommends that Bidders investigate uploading speeds and ensure that material, and in particular any very large files, is uploaded well in advance of the deadline.

The Crossrail eSourcing Portal provides Bidders with access to a “general attachment area”. If a Bidder is unable to load a single file into the Crossrail eSourcing submission structure, as its response to a “question” due to size or loading time constraints then they shall:

- a) upload a file note as a place holder, stating that the detailed response has been placed in the general attachment area and stating the name(s) of the files which comprise that response; and
- b) split the response into manageable files and load them into the general attachment area. These files shall comply with the file naming convention set out in Part G2.4 and the ‘Subref’ shall be used to provide a serial number for each file so that a sort of the file names will result in the files appearing in the right order.

Bidders shall not use the general attachment area for any other purpose.

File names should be restricted to 100 characters as a maximum. A file size of less than 60 characters will be visible for its entire length when displayed on most computer monitors.

## **2.5 Step 5: Ensure the response is complete**

Only the Proposal files submitted by Bidders will be made visible to the evaluators, so before publishing the formal response, Bidders should check the entire submission to ensure all files have been uploaded.

During the evaluation, CRL reserves the right to mark down or deselect Bidders whose Proposals are not relevant or are only partially complete or where they fail to pass any of the tests set out in the ITN.

## **2.6 Step 6: Upload the response**

Completed Proposals must be submitted via the Crossrail eSourcing Portal by the Submission Date. Proposals received after the Submission Date may not be considered. Please note that the Submission Date is a precise time.

CRL will not consider responses uploaded or submitted by any other means than via the Crossrail eSourcing Portal unless otherwise stated to the contrary in the ITN.

Bidders shall follow the guidance found in the Crossrail eSourcing Portal.

Some questions may be marked with a red asterisk, these are designated as mandatory questions and Bidders will not be able to publish the Proposal until these have been answered. This is no indication of the question's weight or importance and all questions should be answered regardless of the mandatory marker.



## **2.7 Step 7: Publish the submission**

After Bidders submit their responses (including any saved uploads), the Proposal must be published in order to be made available to CRL.

Once Bidders have published the Proposal they will receive a confirmation email. If this is not received within an hour the response may not have been successfully submitted and Bidders are strongly advised to contact the Crossrail eSourcing Portal helpdesk immediately.

The Crossrail eSourcing Portal will inform Bidders of any late clarifications issued by CRL after publication has taken place. In these cases Bidders will need to republish to signify that they have read and understood the clarifications. Bidders should therefore continue to monitor their messages between publishing the Proposal and the Submission Date.

## **3. Preparation of Proposals**

### **3.1 Structure of Proposals**

Bidders' Proposals shall comprise the completed Proposal Template together with all supporting documents scheduled in Part F thereof.

When completing the Proposal, Bidders shall:

- a) include all information required by the IFT;
- b) provide the level of detail and any additional information specified in the Proposal Template and
- c) exclude the text in square brackets in the Proposal Template. This is for the guidance of Bidders only and shall not be included in submitted Proposals.

Bidders shall not:

- a) cross reference their answers from any one question to another question, unless instructed to do so by CRL;
- b) embed documents inside supplementary documents (CRL will not review the content of embedded documents); or
- c) provide any financial information other than in Appendix 1 to the Form of Tender or in Part F of the Proposal. In particular, Bidders shall not include any details of their financial offer in Part A4 of the Proposal.

### **3.2 Content of Proposals**

Bidders shall ensure that the Proposal fully describe the basis of their offer and they are responsible for any errors or omissions. The Proposal Template provides details of CRL's minimum requirements for the content of each section of Bidders' Proposals and any supporting documents and CRL reserves the right to reject any Proposal which does not meet these requirements.

### 3.3 Page limits and font sizes

Bidders shall comply with any page limits specified in the Proposal Template unless otherwise agreed with CRL. Where no limits are specified, Bidders shall ensure that the material provided is concise and relevant to the subject. CRL do not require Bidders to submit general marketing material or to re-submit any element of their pre-qualification submission unless this is specifically requested by the ITN.

Specified page limits for 'Bidder drafted contract documents' are recommended limits and not mandatory requirements. Specified page limits for 'supporting information' are mandatory requirements and the following will apply:

- a) One (1) page equates to two sides of A4 paper;
- b) Single line spacing;
- c) Cover sheets, index sheets and title sheets should not be necessary if Bidders follow the Proposal Template, but if submitted, will form part of the page count; and
- d) Any pages in excess of the specified page limit, will not form part of the evaluation, counting from the first page of the proposal.

Font size shall generally be Arial 11 point unless otherwise indicated in the Proposal Template. Tables may be presented in smaller fonts sizes where necessary for efficient formatting provided that the information is legible when read on a standard sized computer screen.

### 3.4 Submission requirements

#### 3.4.1 Crossrail eSourcing Portal

As described in Part G2.4, Bidders shall submit the Proposal as a number of separate files as detailed in the Crossrail eSourcing Portal entry screen.

In addition, Bidders shall submit a complete version of the Proposal (excluding the supporting documents) as a single portable document format (pdf) file.

#### 3.4.2 Hard copy

Bidders must return a signed hard copy of Parts A1 and A2 of the Proposal (i.e. the Form of Tender (including appendices 1 and 2) together with the certificates relating to Process Agreements, bona fide Proposals and Prohibited Acts) to CRL before the Submission Date in order for their electronic response to the ITN to be considered. These documents shall be sent in a plain sealed envelope (or package), which does not identify the Bidder, to the address shown below, to be received before the Submission Date. If these documents are not received before the Submission Date then the electronic response to the ITN may not be considered, even if that submission is received before the Submission Date.

Bidders should hand deliver the hard copy documents by the Submission Date.

On arrival at 25 Canada Square the courier should contact the Project team on 020 322 99978. A representative will meet the courier, collect the hard copy documents and provide a delivery receipt.

If Bidders intend to deliver the hard copy documents prior to the morning of the Submission Date they should first notify Crossrail via the Crossrail eSourcing Portal.

The envelope or package should be marked as follows:

Confidential Tender Documentation – Do Not Open

COMMERCIAL: ROLLING STOCK & DEPOT SERVICES X2234

Official name: Crossrail Ltd

For the attention of: [REDACTED]  
Procurement Manager, Rolling Stock & Depot

Address: Crossrail Ltd  
28/Y2/11  
25 Canada Square  
Canary Wharf  
London  
E14 5LQ  
United Kingdom

## 4. Variant Proposals

If any Bidder wishes to submit a Variant Proposal then it shall comply with the requirements of Appendix B.

## 5. Detailed submission requirements

### 5.1 Signed Form of Tender and certificates

The Form of Tender must be submitted in the form contained in part A1 of the Proposal Template, signed by two duly authorised signatories on behalf of the Bidder and accompanied by signed certificates in the form contained in part A2 of the Proposal Template. All signatories must be authorised to execute agreements and bind the Bidder to legal obligations similar to those contained in the RSPA.

The original signed documents shall be included in the hard copy submission and a scanned signed copy shall be included in the electronic version of the Proposal returned via the Crossrail eSourcing Portal.

### 5.2 Qualifications

CRL requires Bidders to base the Proposal on compliance with the terms and conditions of the RSPA. Bidders are strongly discouraged from qualifying the Proposal and / or from seeking to modify the RSPA and should, wherever possible, include the cost of full compliance in their pricing.

Unless Bidders indicate any non-compliance with the RSPA in Part A4 of the Proposal they shall be deemed to have agreed with the relevant provisions of the RSPA. Further instructions are provided in part A3 of the Proposal Template.

## **5.3 Assumptions made by Bidders**

### **5.3.1 General Assumptions**

Bidders are responsible for investigating and checking the information and assumptions on which they base the Proposal. If Bidders consider it necessary to explain the basis of any assumptions made in preparing the Proposal, these should be clearly stated in part A3 of the Proposal Template unless otherwise instructed.

All assumptions shall be deemed to be at the Bidder's risk unless the Proposal clearly indicates otherwise. In these circumstances, the assumptions shall be treated as additional Qualifications.

### **5.3.2 Ilford Depot**

Bidders shall clearly set out their assumptions about the use and cost of Ilford Depot (or any other temporary facilities) in accordance with Part D3.5 in Section 8 of their Services Delivery Strategy (see part E4.1 of the Proposal Template).

## **5.4 Specific requirements for responses**

### **5.4.1 Train interior and exterior styling requirements**

Bidders are required to offer design proposals that fully take account of RfL's design aspirations as set out in Appendix P to the Train Technical Specification.

Bidders' design proposals and associated specification notes shall be included in the SP Train Proposal which forms Part B1.1 of the Proposal.

### **5.4.2 Bidder submitted Contract Documents**

A number of sections of the Proposal Template are described as providing 'Bidder Drafted Contract Documents'. It is intended that these sections will, following review and any clarification or negotiation which CRL consider to be necessary, form part of any Agreement between RfL and the successful Bidder.

Bidders shall take particular care to ensure that such sections are drafted clearly and in full compliance with the requirements set out in the Proposal Template or elsewhere in the ITN.

### **5.4.3 Responsible Procurement**

Bidders are required to submit the Proposal relating to Schedule A12 (Responsible Procurement) by providing a draft Responsible Procurement Plan (refer to part E5.3 of the Proposal Template). This shall include an SLNT Plan in a form suitable for inclusion in the Agreement as Appendix F to Schedule A12

Bidders shall note that a detailed procurement schedule based on anticipated Subcontracting proposals must be included with the draft Responsible Procurement Plan.

#### **5.4.4 Signalling subcontract**

Bidders shall provide their response to CRL's required arrangements for the TCSE Subcontract in part B3 of the Proposal Template.

Bidders shall include the subcontract prices (including appropriate non-adjustable contingency sums) as described in Part F in their Proposals.

#### **5.4.5 Key Posts**

Where the Proposal Template indicates that details of holders of Key Posts are required then CRL's preference is that the person who will occupy the post is identified and a full curriculum vitae (CV) provided. In such a case, the Bidder will only be permitted to change the nominated person during the procurement process with CRL's written approval.

If the Proposal Template indicates that submission of a CV is mandatory then the Bidder shall identify a named post holder for the relevant position and the above will apply.

In other cases, if the Bidder is unable to name a Key Post holder it shall provide a description of the attributes (including experience, education and qualifications) required for that role (a "Role Specification"), sufficient to give CRL confidence that a person with the appropriate qualities will be employed. Bidders who proceed through the procurement process shall identify actual post holders and demonstrate that they meet the Role Specification prior to award of the Agreement.

## Appendix A Data Room Structure

Bidders shall note that the Data Room structure and content may evolve throughout the procurement process. Changes will be notified by reissuing the Data Room index document in the Crossrail eSourcing Portal.

<b>Level</b>	<b>Data Room Index</b>
L1	<b>1. Invitation to Negotiate</b>
L2	1. Instructions for Tenderers
L2	2. Rolling Stock and Depot Service Provision Agreement
L2	3. Proposal Template
L2	4. Data Room Index
L2	5. Changes in Circumstances
L1	<b>2. RSPA References</b>
L2	1. General
L3	1. Crossrail Information Papers
L3	2. Responsible Procurement
L3	3. Undertakings
L3	4. Engineering Safety Management
L2	2. Depot Works
L3	1. Planning Application
L3	2. Crossrail Standards
L3	3. Network Rail
L3	4. Regulatory Status
L3	5. Environment
L3	6. Works Information
L3	7. Property Agreements and Leases
L2	3. Train Works
L3	1. Crossrail Procedures
L3	2. Performance Data
L3	3. Signalling
L3	4. Virtual Test Track
L3	5. Legion Modelling

L3	6. DOO CCTV
L3	7. Design and Styling Guidance
L3	8. Ilford
L1	<b>3. Other References</b>
L2	1. General
L3	1. High Speed 2
L3	2. Park Royal City
L3	3. Responsible Procurement
L3	4. Management Plans
L3	5. Performance Regime
L2	2. Depot Works
L3	1. Reference Design Overview
L3	2. Reference Design
L3	2a. Reference Design (drawings.pdf)
L3	3. Operability
L3	4. Reports
L3	5. Surveys
L3	6. Advance Works
L3	7. Interfaces: Network Rail
L3	8. Old Oak Common Site: Additional Land
L2	3. Train Works
L3	1. Technical Overviews
L3	2. Crossrail Procedures
L3	3. Operations Concepts
L3	4. Heathrow Branch Data
L3	5. Overhead Line Data
L3	6. Network Rail Performance Data
L3	7. Signalling Material
L3	8. Technical Studies
L1	<b>4. Proformas</b>
L2	1. Crossrail Process Agreement

L2	2. Proposal Template
L2	3. Non-compliances and Assumptions
L2	4. Financial Proforma
L2	5. Train Proforma
L2	6. VTAC Proforma
L1	<b>5. Change Guides</b>
L2	1. Invitation to Negotiate
L2	2. RSPA References
L2	3. Other References



## Appendix B Variant Proposals

If any Bidder wishes to submit a Variant Proposal (“VP”) then it shall request a meeting with CRL to discuss the likely acceptability of the VP. Any such discussions shall be on a confidential basis. CRL reserves the right to reject any VP.

If CRL agrees in writing to consider a VP then (subject to the Bidder complying with any conditions attached to such agreement) CRL will evaluate the VP subject to the following minimum requirements:

- a) The Bidder has also submitted a base Proposal which is compliant with the ITN.
- b) The VP does not require such a level of derogation from relevant Standards or change to the Train Technical Specification, Depot Specification, existing statutory approvals or commitments, programming or scope of other parts of the Crossrail Project as would in CRL’s opinion (which shall be final and conclusive) render the VP impractical.

Subject to the above, CRL will evaluate submitted VPs for acceptability. This may include clarifications and / or negotiations with the Bidder. CRL does not bind itself to accept any VP and the decision regarding acceptability will be at the sole discretion of CRL. Following the acceptability evaluation, the VPs will be categorised and treated as shown in Table 1 below.

Bidders should note that it may not be possible to determine the acceptability of complex VPs during the tender evaluation period. For example where a VP involves significant design changes that would require detailed consideration by CRL and other stakeholders, such VPs would be classified as Type 2 and treated as shown in Table 1 below.

**Table 1**

VP Evaluation and Treatment		
Reference	Description	Treatment
Type 1	Acceptable to CRL	Accepted and evaluated
Type 2	Potentially acceptable to CRL, but CRL is unable to reach a sufficient level of confidence in the acceptability of the VP in the relevant tender evaluation stage	Not accepted and not evaluated – may be noted for further exploration with the Bidder before the Commencement Date
Type 3	Not acceptable to CRL	Rejected and not evaluated

If the VP is judged to be acceptable (Type 1) then the impact of the VP on the criteria set out in Part C will be evaluated taking into account any additional benefits and / or costs and / or risks including any whole life cost impacts arising from the VP.

If a VP meets the mandatory, technical and deliverability score thresholds (as described in Part C2) then the VP will be included in the economic evaluation described in Part C3. If the NPV of the VP is lower than the Bidder’s base Proposal, then the VP will be considered in the evaluation process in place of the Bidder’s base Proposal. This approach will ensure that only the most economically advantageous Proposal from each Bidder is considered.

## Appendix C Technical and deliverability criteria scoring guidelines

### Part 1 – Technical Works criteria

#### 1. Train Works

Further to Part C2.2.1, scoring for the technical evaluation of Bidders' proposals for Train Works will be based on the following principles:

Sub-criteria	Relevant requirements, components and weightings (Clause references relate to the Train Technical Specification and are deemed to include other requirements cross referenced in the relevant clauses)			
Physical Construction (5%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>	
	3.1	Unit Lengths & Formations	20%	
	3.12	Aerodynamics	10%	
	3.18	Unit Construction	50%	
	3.28	External Features	4%	
	3.24	Couplers, Inter-Vehicle Gangways and Gangway Doors	6%	
Performance (10%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>	
	3.2	Performance/Journey Times	60%	
	3.3	Configuration Times	20%	
	3.6	Env. Operating Conditions	20%	
	Energy and Weight (8%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>
		3.4	Energy Consumption	60%
3.5		Unit weight targets	40%	
Physical Behaviour (10%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>	
	3.7	Gauging, Routes and Stepping Distance	25%	
	3.8	Track Wear and T-Gamma	35%	
	3.9	Ride & Stability	10%	
	3.10	Noise and Vibration	20%	
Fire (5%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>	
	3.23	Lubrication	10%	

Sub-criteria	Relevant requirements, components and weightings (Clause references relate to the Train Technical Specification and are deemed to include other requirements cross referenced in the relevant clauses)		
	3.11	Fire Performance	100%
Power Systems (7%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>
	3.13	Traction Supply	20%
	3.14	Traction System	40%
	3.15	Pantographs	10%
	3.16	DC Operation	10%
	3.17	Auxiliary Systems	20%
Brakes (7%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>
	3.20	Braking System	60%
	3.21	WSP	25%
	3.22	Sanding	15%
Door Systems (10%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>
	3.29.1	Passenger Door Systems General Requirements	50%
	3.29.2 to 3.29.10 inclusive	Passenger Door Control	50%
Signalling, Control & Cab (12%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>
	3.30	Train Control and Protection (including signalling & control system interface requirements)	40%
	3.31	Radio Systems	8%
	3.32	OTMR	3%
	3.39	DOO	3%
	3.40	Driving Cab	8%
	3.41	TMS	15%
	3.42	Data Communications	8%
	3.45	EMC	15%
Passenger Environment (6%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>
	3.33	CCTV	15%

Sub-criteria	Relevant requirements, components and weightings (Clause references relate to the Train Technical Specification and are deemed to include other requirements cross referenced in the relevant clauses)		
	3.35	Passenger Demand Monitoring	10%
	3.36	Lighting	15%
	3.37	HVAC	30%
	3.38	Passenger Information	30%
Reliability (12%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>
	3.25	Rescue Functionality	10%
	3.43	Reliability and Resilience (including relevant data from other sections)	90%
Industrial Design (6%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>
	3.19	Exterior Appearance and Livery	40%
	3.34	Passenger Environment	60%
Other Requirements (2%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>
	3.44	Human Factors	30%
	3.46	Standards	30%
	3.48	Infrastructure Monitoring etc.	20%
	4.5	Mock-ups	20%

Subject to any Qualifications or clarifications provided by Bidders, scoring of the Train Works Technical Criterion will be carried out by reference to Part B of the Bidder's Proposal. The Proposal Template requires this to be structured so that the Train Technical Specification clause references in the above table correspond with the structure of Parts B1.1 and B2.1 of the Proposal. For example:

- the Unit Lengths & Formations component of the Physical Construction sub-criterion is based on Clause 3.1 of the Train Technical Specification and information related to this requirement is expected to be provided by Bidders in Part B1.1 (1) and Part B 2.1 (1) of the Proposal; and
- the Braking System component of the Brakes sub-criterion is based on Clause 3.20 of the Train Technical Specification and information related to this requirement is expected to be provided by Bidders in Part B1.1 (20) and Part B 2.1 (20) of the Proposal.

The two variations to this principle are:

- the Train Control and Protection component of the Signalling, Control & Cab sub-criterion which will additionally take account of the technical elements of Part B3 of the Proposal; and
- the Reliability component which will additionally take account of reliability-related information supplied against individual technical elements (e.g. Item 29 Passenger Bodyside Door Systems).

### **Scoring of components**

CRL will base its score for each of the components listed above on Bidders' compliance with the relevant requirements using the following guidelines:

<b>Score</b>	<b>Characteristics</b>
0%	Proposal and supporting information does not demonstrate that the required functionality will be provided
35%	SP Train Proposal and supporting information do not demonstrate that the required functionality will be provided however, Bidder has provided assurances that the specified functionality will be delivered at the Bidder's risk
55%	Specified functionality is provided by the SP Train Proposal but either: <ul style="list-style-type: none"> <li>(a) with non-compliances with the Train Technical Specification; and / or</li> <li>(b) a need for derogations from relevant Standards (at the Bidder's risk); and / or</li> <li>(c) supporting information does not fully demonstrate how compliance will be achieved.</li> </ul>
75%	Specified functionality is provided. Full compliance with relevant Standards but some non-compliances with the Train Technical Specification and/or minor omissions from the supporting demonstration of compliance
100%	Fully compliant

## 2 Depot Works

Further to Part C2.2.2, scoring for the technical evaluation of Bidders' proposals for Depot Works will be based on the following principles:

Sub-criteria	Relevant requirements, components and weightings (Clause references relate to the Depot Specification (as further described in the footnotes) and are deemed to include other requirements cross referenced in the relevant clauses)		
Railway Infrastructure (45%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>
	See Note 1	Trackwork (including switches & crossings)	25%
	See Note 2	Traction Power Systems	20%
	See Note 3	Signalling & Train Movement Control	20%
	See Note 4	Train/Track Interface Testing	15%
See Note 5	Communications equipment	20%	
Buildings & Plant (35%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>
	See Note 6	Train washing facilities	25%
	See Note 7	Train maintenance and ancillary buildings including wheel lathe and heavy clean area	30%
	See Note 8	CTOC accommodation (including simulator facilities)	15%
See Note 9	Train maintenance equipment	30%	
Site Works & sundries (20%)	<u>Clause</u>	<u>Component</u>	<u>% of score</u>
	Schedule A15	Site remediation	45%
	See Note 10	Roads, footways & landscaping	10%
	See Note 11	Canal-side conservation area and woodland	10%
	See Note 12	Security	20%
See Note 13	Sundries	15%	

<b>Notes</b>	<b>Depot Specification clauses relating to the components</b> (all prefixed CRL-DTS- except for clause numbers beginning with '9' which are prefixed CRL-DIS-)
1	1004, 1020, 1021, 1043, 1044, 1045, 1046, 3010, 1047, 9010, 9020, 9030, 9050, 9060, 9070, 9080, 1048, 1033, 1057, 9100, 9110, 9120, 9125, 1111, 1117, 1121
2	1183, 9380, 9390, 9400, 9410, 9420, 9421, 1184, 1187, 1188, 1189, 3004, 1190, 1191, 1192, 3060, 9310, 1193, 1194, 1195, 1196, 1197, 1198, 1199, 1200, 1201, 9530, 9540, 9360, 9370, 9270, 9280, 9290, 9300, 9330, 9340, 1186, 9345, 9320, 9350
3	1022, 1142, 1143, 1144, 1145, 1146, 1148, 1152, 1203, 1205, 1958, 1206, 1208, 1210, 1211, 1212, 1213, 1214, 1215, 1216, 1217, 1218, 1224, 1225, 1226, 1227, 1228, 1229, 1231, 1232, 1233, 9130, 9140, 9145, 9150, 9155, 9160, 9170, 9180, 3080
4	1009, 1023, 1024, 1025, 1151, 1220, 1222
5	1207, 1209, 3070, 9152, 9153, 1234, 1235, 1252, 3003, 1236, 9460, 9470, 9480, 9490, 9500, 1237, 1238, 1239, 1240, 9440, 9450, 9451, 1241, 1242, 1243, 1245, 1246, 1247, 1248, 1249, 1250, 1251, 9430, 9505
6	1008, 1126, 1127, 1128, 1129, 1130, 3007, 1131, 1132, 1133, 1135, 1953, 1136, 1138, 1140, 9560
7	1026, 1027, 1040, 1065, 1066, 1067, 1068, 1069, 1070, 1073, 1074, 1075, 2091, 2092, 1076, 1077, 1078, 1079, 1085, 1087, 1088, 1090, 1091, 1092, 1094, 1095, 1096, 1097, 1098, 1100, 1101, 1102, 1103, 1105, 1106, 1107, 1951, 1155, 1156, 1157, 1158, 1159, 1963, 1161, 1164, 1165, 1167, 1204
8	1010, 1802, 1804, 1820, 3011, 1104, 1160
9	1969, 1071, 1108, 1109, 1110, 1114, 1115, 1168, 1169, 1221, 1223
10	1037, 1959, 1038, 1039, 1049, 1050, 1051, 1052, 1946, 1053, 1054, 1056, 1113, 1118, 1119, 1124, 1147, 1177, 1120
11	1058
12	1949, 1170, 3005, 1171, 1174, 1175, 1176, 1179, 9550
13	1001, 1002, 1003, 1005, 1006, 1011, 1012, 1013, 1015, 1016, 1017, 1018, 1019, 1028, 1029, 3001, 1030, 1031, 1034, 1035, 1036, 3009, 9025, 9520, 1059, 1060, 1061, 1062, 1072, 1150, 3012

Subject to any Qualifications or clarifications provided by Bidders, scoring of the Depot Works Technical Criterion will be carried out by reference to Part C of the Proposal. The Proposal Template requires this to be structured so that the sub-criteria in the above table correspond with the sub-sections (A), (B) and (C) of Parts C1 of the Proposal.

- Part C1 of the Proposal will be read in conjunction with the Supporting Information provided in Part C2 of the Proposal.

### **Scoring of components**

CRL will base its score for each of the components listed above on Bidders' compliance with the relevant requirements using the following guidelines:

<b>Score</b>	<b>Characteristics</b>
0%	Proposal and supporting information does not demonstrate that the required functionality will be provided
35%	SP Depot Proposal and supporting information do not demonstrate that the required functionality will be provided however, Bidder has provided assurances that the specified functionality will be delivered at the Bidder's risk
55%	Specified functionality is provided by the SP Depot Proposal but either: <ul style="list-style-type: none"> <li>(a) with non-compliances with the Depot Specification; and / or</li> <li>(b) a need for derogations from relevant Standards (at the Bidder's risk); and / or</li> <li>(c) supporting information does not fully demonstrate how compliance will be achieved.</li> </ul>
75%	Specified functionality is provided. Full compliance with relevant Standards but some non-compliances with the Depot Specification and/or minor omissions from the supporting demonstration of compliance
100%	Fully compliant



## Part 2 –Deliverability criteria

### 1 Train Works

Further to Part C2.3.1, scoring of the deliverability of Bidders' proposals for Train Works will be based on the following principles:

Sub-criteria	Proposal references, components and weightings		
Project Management (7½%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E2.1	Train Works project management organisation, including identification of Key Post holders, competencies, experience and levels of authority.	40%
	E1.4 E2.1	Project planning; programme and commercial management; risk management; internal governance.	60%
Engineering and Design (10%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E1.9 E2.1 E2.3	Design engineering organisation, principal locations, competencies, familiarity with the product platform, capacity (including forecast workload) and mobilisation plan (including consultants and Major Equipment Subcontractors). Level of design engineering support to manufacturing, testing and commissioning operations. Production engineering organisation, competencies and capacity.	40%
	E2.1 E2.3	Management of principal areas of technological or design development risk, including integration of signalling, DOO CCTV and ATO systems.	40%
	B1.1 B2.1 E2.1 E1.14	Simulator; technical description and design-development plan, including development of route simulation and operational training scenarios.	20%
Technical Assurance (7½%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E2.3	Requirements capture, control and dissemination.	10%
	E2.3	Assurance of the integration between signalling and ATO systems and interfacing train and infrastructure systems.	30%
	E2.3	Assurance of the integration between other on train and track-train systems, including DOO CCTV.	20%

Sub-criteria	Proposal references, components and weightings		
	E1.8 E2.3	Engineering Life Cycle and Verification & Validation strategy in the design, manufacturing and testing phases, including design review methodology, stage gate reviews, compliance-assurance methods, and engineering change control processes.	20%
	E1.8 E2.3	Progressive Assurance strategy, development of Technical Assurance evidence (Technical Cases), and Assurance Acceptance process management.	10%
	E2.1 E2.3	Engineering Safety Management resources (competencies and independence) and System Safety Plan, including Software Safety Plan and hazard identification and management.	10%
Supplier Selection and management (7½%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E1.10 E2.1 E6.1	Supplier selection strategy; subcontracting arrangements; technical expertise, design and manufacturing competence, previous experience and familiarity with the product platform.	25%
	E2.1	Supplier manufacturing capacity, actual and forecast order book and percentage of maximum capacity utilisation.	15%
	E2.1	Security of supply (company stability geographical length of supply chains and business continuity strategy).	15%
	E2.1	Supplier management strategy, including supplies management organisation and competencies, inventory control strategy (e.g. JIT) supplier programme and quality management and supplier performance incentives.	25%
	E2.1	Strategy for successful management of the signalling/ATO subcontract.	20%
Manufacturing (10%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E1.9 E2.1	Principal Unit/Vehicle assembly plants; technical capability, familiarity with product platform and maximum manufacturing capacity. Construction methods and construction programme integration if more than one principal assembly site for Vehicles in a Unit.	20%
	E2.1	Actual and forecast order book for principal Unit assembly plant(s) over the duration of the Project, and percentage of maximum capacity utilisation.	20%
	E2.1	Business continuity/ assembly resilience strategy.	15%

Sub-criteria	Proposal references, components and weightings		
	E2.1	Assembly mobilisation plan and operative training and competency management plan.	20%
	E2.1	Proven assembly and progressive quality assurance processes.	15%
	E2.1	Modification management and Configuration control in the manufacturing phase.	10%
Testing (10%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E1.13	Factory type and routine testing facilities, capacity and availability based on actual and forecast order book.	15%
	E1.13	Dynamic Unit testing facilities (including Proxy Test Facilities) and available capacity based on actual and forecast order book.	30%
	E1.13 E1.14	Test strategy and schedule of type tests, including Proxy Tests, and Factory Acceptance Tests to demonstrate compliance with the Train Technical Specification and Applicable Laws and Standards, and compatibility with the Crossrail Infrastructure.	35%
	E1.13 E2.1	Testing organisation, mobilisation and management plan, including technician training and competency.	20%
Relevant Approvals (7½%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E2.1	NoBo/ DeBo/AsBo/ISA selection process and management.	15%
	E2.1	Regulator authorisation engagement strategy.	20%
	E2.1	IM relevant consents engagement strategy.	25%
	E2.1	CTOC support strategy.	20%
	E2.1	Strategy for obtaining derogations (if any) from Standards.	20%
Unit & Equipment Delivery, Commissioning and Acceptance (7½%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E2.1	Unit delivery logistics between manufacturing, testing and acceptance locations; management and contingency plans.	25%
	E2.1	Post delivery commissioning activities on Units, durations, team mobilisation, capacity and competencies.	15%
	E2.1	Unit Pre-Provisional Acceptance location and process management.	10%
	E2.1	Unit Provisional Acceptance and Equipment Acceptance process management.	10%

Sub-criteria	Proposal references, components and weightings		
	E2.1	RLU to FLU conversion location, process and management.	25%
	E2.1	Post manufacture modification/configuration management prior to Acceptance.	15%
Manuals, Equipment and Training (5%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E1.2 E2.1	Spares and Special Tools delivery programme and acceptance process.	20%
	E1.2 E2.1	Manuals development process and programme.	20%
	E1.2 E2.1	Training strategy and programme.	25%
	E1.13 E1.15 E1.2 E2.1	Simulator: design, development and testing, plan and acceptance programme.	35%
Final and Fleet Acceptance (7½%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E2.1	Final Acceptance management strategy.	20%
	E1.18 E2.1 E2.2	Fleet Acceptance -reliability growth strategy.	80%
Programmes (20%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E1.1 E1.2 E1.15 E1.19	Design, Technical Assurance and Relevant Approvals programmes.	10%
	E1.1 E1.2	Major Equipment Subcontract contracting dates and manufacturing and delivery programmes.	7½%
	E1.1 E1.2 E1.15	Type testing, Proxy Testing and Route compatibility testing programme.	15%
	E1.1 E1.2 E1.15	Unit assembly, testing and Acceptance programme to Stage 1 and Stage 1a Crossrail Services scheduled dates.	10%
	E1.1 E1.2 E1.3 E1.15	Unit assembly, testing and Acceptance programme to Stage 2 Crossrail Services scheduled date, and integration with Depot Works Programme.	10%
	E1.1 E1.2 E1.3 E1.15	Unit assembly, testing and Acceptance programme to start of Central Section Testing and Trial Operations, and integration with Depot Works Programme.	10%
	E1.1 E1.2	Unit assembly, testing and Acceptance, and RLU to FLU conversion programme to Stage 3	10%

Sub-criteria	Proposal references, components and weightings		
	E1.3 E1.15	Crossrail Services scheduled date, and integration with Depot Works Programme.	
	E1.1 E1.2 E1.3 E1.15	Unit assembly, testing and Acceptance, and RLU to FLU conversion programme to Stage 4 Crossrail Services scheduled date, and integration with Depot Works Programme.	10%
	E1.1 E1.2 E1.15	Unit assembly, testing and Acceptance Programme to Stage 5 Crossrail Services scheduled date.	10%
	E1.1 E1.2	Unit Final Acceptance and Fleet Acceptance dates.	7½%

### **Scoring of components**

CRL will base its score for each of the components listed above on Bidders' Proposals using the following guidelines:

Score	Characteristics
0%	Major concerns that the matters covered by the sub-criterion component will not be satisfactorily delivered
10%	Concerns that the matters covered by the sub-criterion component will not be satisfactorily delivered
35%	Minor concerns that the matters covered by the sub-criterion component will not be satisfactorily delivered
55%	Moderate confidence that the matters covered by the sub-criterion component will be satisfactorily delivered
75%	Good confidence that the matters covered by the sub-criterion component will be satisfactorily delivered
90%	Very good confidence that the matters covered by the sub-criterion component will be satisfactorily delivered
100%	Excellent confidence that the matters covered by the sub-criterion component will be satisfactorily delivered

## 2 Depot Works

Further to Part C2.3.2, scoring for the deliverability of Bidders' Proposals for Depot Works will be based on the following principles:

Sub-criteria	Proposal references, components and weightings		
Project management and subcontracting (17½%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E1.5 E3.1	Depot Works project management and site management organisation, including identification of Key Post holders, competencies, experience and levels of authority, and internal project governance processes.	20%
	E3.1	Depot Works mobilisation plan.	20%
	E3.6	Logistics and Traffic Management plan.	10%
	E1.9 E3.1 E6.1	Construction subcontractor selection, subcontracting arrangements and management strategy; expertise, design and construction competence, previous experience and familiarity with UK standards and regulations.	25%
	E3.1	Plant and equipment supplier selection and management strategy.	12½%
	E3.3 E3.4 E3.5	Stakeholder management.	12½%
Project planning and construction programme (27½%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E3.1 E3.7 E3.8	Depot construction planning and risk management strategy.	20%
	E1.3 E1.7 E3.1	Design programme- civil and track works.	10%
	E1.1 E1.3 E3.1	Design programme- systems, mechanical and electrical services.	10%
	E1.1 E1.3 E3.1	Network Rail connection programme.	10%
	E1.1 E1.3 E3.1	Civil and track work construction programme.	10%
	E1.1 E1.3 E1.16 E1.17 E3.1	Systems and mechanical and electrical services procurement, installation and testing programme.	10%

Sub-criteria	Proposal references, components and weightings		
	E1.1 E1.3 E1.16 E1.17 E3.1	Plant and equipment procurement, installation and testing programmes.	10%
	E1.1 E1.3 E3.1	Physical Completion, Commissioning, Integration, Assimilation, Sectional and Depot Completion programme.	20%
Planning and Relevant Approvals and Undertakings (17½%)	Ref	Component	% of score
	E3.10	Depot Consents Management Plan.	50%
	E3.9	Undertakings Compliance Plan.	50%
Design and Assurance (17½%)	Ref	Component	% of score
	E3.1	Design organisation (including consultants and main subcontractors), capacity, competencies, experience and mobilisation plan.	25%
	E3.1	Novel or unproven designs or construction techniques and associated technical and programme risk mitigation.	15%
	E3.1 E3.11	Requirements capture, dissemination and control.	10%
	E3.11	Systems integration strategy.	10%
	E3.11	Engineering Life Cycle, stage gateway and engineering change control processes.	10%
	E3.11	Verification & Validation in the design, construction, equipment and system manufacturing and testing phases, including design review methodology and compliance-assurance methods.	10%
	E1.7 E3.11	Progressive Assurance strategy and development of Technical Assurance evidence (Technical Cases), and Assurance Acceptance process management.	10 %
	E3.11	Depot design stage Engineering Safety Management resources (competencies and independence).	10%
Commissioning, Integration and Assimilation (20%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E1.17 E3.1 E1.16	Depot equipment testing plan.	20%
	E1.17 E3.1	Depot system testing and Integration plan.	25%

Sub-criteria	Proposal references, components and weightings		
	E1.16		
	E1.17	Depot Assimilation and post Completion	25%
	E3.1	engineering support.	
	E1.16		
	E3.2	Depot asset management plan to Completion.	15%
	E3.1	Depot operating and maintenance manuals-development plan	15%

### **Scoring of components**

CRL will base its score for each of the components listed above on Bidders' Proposals using the following guidelines:

Score	Characteristics
0%	Major concerns that the matters covered by the sub-criterion component will not be satisfactorily delivered
10%	Concerns that the matters covered by the sub-criterion component will not be satisfactorily delivered
35%	Minor concerns that the matters covered by the sub-criterion component will not be satisfactorily delivered
55%	Moderate confidence that the matters covered by the sub-criterion component will be satisfactorily delivered
75%	Good confidence that the matters covered by the sub-criterion component will be satisfactorily delivered
90%	Very good confidence that the matters covered by the sub-criterion component will be satisfactorily delivered
100%	Excellent confidence that the matters covered by the sub-criterion component will be satisfactorily delivered



### 3 Services

Further to Part C2.3.3, scoring for the deliverability of Bidders' Proposals for Services will be based on the following principles:

<b>Sub-criteria</b>	<b>Proposal references, components and weightings</b>		
Contract and Project Management (15%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E1.6 E1.9 E4.1 E6.1	Management and sub-contracting structure and Key Posts in the Services period, subcontracting arrangements, experience, competencies and internal governance.	35%
	E4.1	Mobilisation of project management personnel and resources.	25%
	E4.1	CTOC relationship management.	20%
	E4.1	Infrastructure Manager (IM) relationship management.	20%
Availability to meet the Train Plan (25%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	D1.1 D1.2 E4.1 E4.6	Level of integration between the Maintenance Plan, the Train Plan Parameters and the Train Plan such that daily availability requirements will be reliably achieved; degree of flexibility afforded to RfL's Train Plan whilst complying with the Train Plan Parameters (inter alia, Unit maintenance window durations and Unit preparation procedures and timings); the Bidders approach to mitigating against non availability of Units.	45%
	E4.1 E4.6	Preparation, presentation and hand-back procedures, including train preparation resources and competencies.	10%
	D1.1 E4.1 E4.6	Assuring the Fit for Service and Minimum Aesthetic Condition standards for Units, including cleaning management and resources.	15%
	D1.1 E4.1	Unit maintenance strategies (OOC Depot and interim maintenance facilities for GE services), management, mobilisation, resources, training and competencies.	20%
	B1.2 E4.11	Spares holdings and logistics management.	10%
	Service Reliability (25%)	<u>Ref</u>	<u>Component</u>
D1.1 E4.2 E4.5 E4.6		Unit condition monitoring and analysis, fault finding techniques, processes and tools.	25%
D1.1 E4.1		Fault recording, management and repair; technician resources including competencies	25%

Sub-criteria	Proposal references, components and weightings		
	E4.5	and training	
	E4.1 E4.2	Engineering support to Units and Equipment	15%
	E4.1 E4.4	Technical assistance on the Crossrail Infrastructure and in the Crossrail route control centre; response times, resources and competencies	15%
	D1.1 E4.8 E4.10	Special seasonal Unit and OOC Depot preparation proposals and resources	20%
Asset Condition Management (15%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	D1.1	Units, manuals, feedback on experience and updating-	10%
	D1.1 E4.1 E4.6	Units; repair, heavy cleaning, warranty, overhaul, refurbishment, and condition management strategy.	25%
	D1.1 E4.2	Spares and special tools; maintenance and modification.	10%
	E4.1 E4.2	Units; Design authority and general engineering support; nominee and resources.	10%
	D1.1 E4.2	Simulator; repair, updating and maintenance. DOO CCTV: provision of manuals and training for DOO CCTV Station Subsystem maintenance, fault finding and repair.	10%
	E4.3	Depot; maintenance, repair, cleaning, warranty, overhaul, renewals, refurbishment and condition management strategy.	20%
	E4.7	Undertakings; special depot and/or unit maintenance activities (including noise abatement) required to comply with the Undertakings in the Services period	15%
Depot Operations (20%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E4.1 E4.9 E4.10	OOO Depot; operational strategy and depot owner organisation/ management structure and understanding of depot owner responsibilities.	30%
	E4.1	Interim maintenance facilities for GE services; strategy, organisation/management	20%
	E4.1 E4.6 E4.10	Management of Unit preparation, departure and arrivals at OOC Depot to comply with the Train Plan	30%
	E4.8	OOO Depot security and resilience plan	20%

**Scoring of components**

CRL will base its score for each of the components listed above on Bidders' Proposals using the following guidelines:

<b>Score</b>	<b>Characteristics</b>
0%	Major concerns that the matters covered by the sub-criterion component will not be satisfactorily delivered
10%	Concerns that the matters covered by the sub-criterion component will not be satisfactorily delivered
35%	Minor concerns that the matters covered by the sub-criterion component will not be satisfactorily delivered
55%	Moderate confidence that the matters covered by the sub-criterion component will be satisfactorily delivered
75%	Good confidence that the matters covered by the sub-criterion component will be satisfactorily delivered
90%	Very good confidence that the matters covered by the sub-criterion component will be satisfactorily delivered
100%	Excellent confidence that the matters covered by the sub-criterion component will be satisfactorily delivered

#### 4 Health and safety

Further to Part C2.3.4, scoring for the evaluation of Bidders' Proposals for health and safety will be based on the following principles:

Sub-criteria	Proposal references, components and weightings		
Health and Safety (Train Works) (20%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E5.1	Confidence that the proposed approach to the Health & Safety Management System will deliver the RSPA requirements.	100%
Health and Safety (Depot Works) (45%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E5.1	Confidence that the proposed approach to the CDM Client duties will deliver the RSPA requirements.	35%
	E5.1	Confidence in the approach to risk assessment and to the management of the identified key risks for the Depot Works.	25%
	E5.1	Confidence that the proposed health and safety team will deliver the RSPA requirements.	25%
	E5.1	Confidence that the proposed Key Post holders can deliver the RSPA requirements.	5%
	E5.1	Confidence that the proposed Health & Safety Management System will deliver the RSPA requirements.	10%
Health and Safety (Services) (35%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E5.1	Confidence that the proposed approach to the Health & Safety Management System will deliver the RSPA requirements.	100%

### **Scoring of components**

CRL will base its score for each of the components listed above on Bidders' Proposals using the following guidelines:

#### **Health & Safety (Depot Works)**

Score	Characteristics	
	<u>CDM Client's Duties</u>	<u>Health &amp; Safety Risk Assessment</u>
0%	No response	No response or key item missing (e.g. methodology, conclusions, recommendations etc.).
10%	Not Applicable	Not Applicable
35%	The response is not consistent with the guidance given in the Approved Code of Practice for one or more of the duties described in the CDM Regulations	Methodology is not adequate (e.g. no worker involvement, component parts of risk are not identified or adequately defined).
55%	The response is consistent in regards to all duties identified in the CDM Regulations, but an understanding of the full implications described in the Approved Code of Practice (in all areas) has not been demonstrated.	Risk assessment methodology is satisfactory and the response contains all relevant sections.
75%	The response demonstrates an advanced understanding of the duties and management issues that need to be planned for compliance.	The response demonstrates an advanced understanding of the duties and management issues that need to be planned for compliance.
90%	Not Applicable	Not Applicable
100%	The response demonstrates a detailed understanding of the CDM Regulations, the Approved Code of Practice and the activities (including railway interfaces).	The response contains a full action plan for the preliminary works.

Score	Characteristics	
	Health & Safety Team	Health and Safety Key Posts
0%	No Response	Major concerns: The response provides a very poor key person and a very low degree of confidence that they will be successful.
10%	Not Applicable	Evidence exceeds guidance for 'major concerns' but fails to achieve guidance for 'minor concerns'.
35%	Inadequate or incorrect description of qualifications. Range of experience does not cover full scope of question.	Minor concerns: The response provides a poor key person and a low degree of confidence that they will be successful.
55%	Professional qualifications in health and safety and experience covers full legislative requirements. Information is clearly available at all levels,.	Evidence exceeds guidance for 'minor concerns' but fails to achieve guidance for 'good confidence'.
75%	The experience is closely aligned to a major project of a similar scale.	Good confidence: The response provides a good key person and a high degree of confidence that they will be successful.
90%	Not Applicable	Evidence exceeds guidance for 'good confidence' but fails to achieve guidance for 'excellent confidence'.
100%	The advisers have experience at the highest level of a similar UK project and are industry leaders in their field.	Excellent confidence: The response provides an excellent Key Person and a very high degree of confidence that they will be successful.

Score	Characteristics
	Health & Safety Management System
0%	No or substantially incomplete Plan
10%	Not Applicable
35%	Plan does not address all aspects of obtaining certification or a reasonable timescale or certificate exists but does not cover all aspects of the Depot Works.
55%	Plan addresses all aspects of preparing for and obtaining certification or certificate covers all aspects of the Depot Works.
75%	Plan addresses all aspects of preparing for and obtaining certification and can be obtained within the shortest possible timescale or certificate covers all aspects of the Depot Works and operation of the Depot.
90%	Not Applicable
100%	The response contains a full action plan.

#### Health & Safety (Train Works & Services)

Score	Characteristics
0%	Major concerns that the requirements of the RSPA will not be met
10%	Concerns that the requirements of the RSPA will not be met
35%	Minor concerns that the requirements of the RSPA will not be met
55%	Moderate confidence that the requirements of the RSPA will be met
75%	Good confidence that the requirements of the RSPA will be met
90%	Very good Confidence that the requirements of the RSPA will be met
100%	Excellent Confidence that the requirements of the RSPA will be met

## 5 Environment

Further to Part C2.3.5, scoring for the evaluation of Bidders' Proposals for environment related matters will be based on the following principles:

Sub-criteria	Proposal references, components and weightings		
Environment (Depot Works) (50%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E5.2	Confidence that the proposed approach to delivering the Environmental Plan will deliver the RSPA requirements.	30 %
	E5.2	Confidence that the proposed Key Post Holders can deliver the RSPA requirements.	70%
Environment (Services) (50%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E5.2	Confidence that the proposed approach to delivering the Environmental Plan will deliver the RSPA requirements.	100%

### Scoring of Sub-criteria

Score	Characteristics: Environmental Plan (Depot Works & Services)	Characteristics: Environmental Key Posts – Depot Works
0%	Major concerns: The response provides a very poor approach to managing and reporting environmental and sustainability risks and opportunities, and a very low degree of confidence in successful delivery.	Major concerns: The response provides a very poor key person and a very low degree of confidence that they will be successful.
10%	Evidence exceeds guidance for 'major concerns' but fails to achieve guidance for 'minor concerns'.	Evidence exceeds guidance for 'major concerns' but fails to achieve guidance for 'minor concerns'.
35%	Minor concerns: The response provides a poor approach to managing and reporting environmental and sustainability risks and opportunities, and a low degree of confidence in successful delivery.	Minor concerns: The response provides a poor key person and a low degree of confidence that they will be successful.
55%	Evidence exceeds guidance for 'minor concerns' but fails to achieve guidance for 'good confidence'.	Evidence exceeds guidance for 'minor concerns' but fails to achieve guidance for 'good confidence'.



<b>Score</b>	<b>Characteristics: Environmental Plan (Depot Works &amp; Services)</b>	<b>Characteristics: Environmental Key Posts – Depot Works</b>
75%	Good confidence: The response provides a good approach to managing and reporting environmental and sustainability risks and opportunities, and a high degree of confidence in successful delivery.	Good confidence: The response provides a good key person and a high degree of confidence that they will be successful.
90%	Evidence exceeds guidance for 'good confidence' but fails to achieve guidance for 'excellent confidence'.	Evidence exceeds guidance for 'good confidence' but fails to achieve guidance for 'excellent confidence'.
100%	Excellent confidence: The response provides an excellent approach to managing and reporting environmental and sustainability risks and opportunities, and a very high degree of confidence in successful delivery.	Excellent confidence: The response provides an excellent Key Person and a very high degree of confidence that they will be successful.

## 6 Responsible Procurement

Further to 2.3.6, scoring of Bidders' proposals for responsible procurement will be based on the level of confidence that Bidders will achieve compliance with the following aspects of Schedule A12 (Responsible Procurement) of the RSPA:

Sub-criteria	Proposal references, components and weightings		
Management Requirements (20%)	Clause	Component	% of score
	E5.3*	Responsible Procurement Representative	25%
	E5.3*	Responsible Procurement Plan	50%
	E5.3*	Monitoring, Reporting & Management	25%
Diversity (35%)	Clause	Component	% of score
	E5.3*	Compliance with requirements for engagement of SMEs	50%
	E5.3*	Equality & Diversity Strategic Plan	25%
	E5.3*	Proposed use of CompeteFor and 'meet the buyer' events	25%
Strategic Labour Needs & Training (35%)	Clause	Component	% of score
	E5.3*	Delivery of Train Works SLNT targets	30%
	E5.3*	Delivery of Depot Works SLNT targets	20%
	E5.3*	Delivery of Services SLNT targets	40%
	E5.3*	Use of jobs and skills brokerage service	10%
Ethical Sourcing & London Living Wage (10%)	Clause	Component	% of score
	E5.3*	Confidence that the proposed approach will deliver compliance with ethical sourcing requirements	60%
	E5.3*	Confidence that the proposed approach will deliver compliance with London Living Wage requirements	40%

\*Note – Information submitted in response to part E5.3.4 of the Proposal Template will not be used in the evaluation process.

### **Scoring of components**

CRL will base its score for each of the components listed above on Bidders' proposals using the following guidelines:

<b>Score</b>	<b>Characteristics: Responsible Procurement Plan</b>
0%	Major concerns: The response provides a very poor approach to delivering the requirement and/or a very low degree of confidence in successful delivery.
10%	Evidence exceeds guidance for 'major concerns, but fails to achieve guidance for 'minor concerns'.
35%	Minor concerns: The response provides a poor approach to delivering the requirement and/or a low degree of confidence in successful delivery.
55%	Evidence exceeds guidance for 'minor concerns' but fails to achieve guidance for 'good confidence'.
75%	Good confidence: The response provides a good approach to delivering the requirement and a high degree of confidence in successful delivery.
90%	Evidence exceeds guidance for 'good confidence' but fails to achieve guidance for 'excellent confidence'.
100%	Excellent confidence: The response provides an excellent approach to delivering the requirement and a very high degree of confidence in successful delivery.

## 7 Quality and compliance assurance

Further to Part C2.3.7, scoring of Bidders' proposals for assurance and quality will be based on the following principles:

Sub-criteria	Proposal references, components and weightings		
Quality and Compliance Assurance (Train Works) (40%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E1.4	Confidence that the proposed structure for the Train Works Management Plan (and constituent plans) will provide for effective management of the Train Works in accordance with the requirements of the Agreement.	15%
	E5.4		
	E5.4	Confidence that the quality policy statement, proposals for management of Subcontractors, accreditation status (or plan for attaining accreditation) to BS EN ISO 9001 will meet the quality requirements of the Agreement.	10%
	E5.4	Confidence that the approach to selecting, measuring and reporting quality performance indicators to RfL and to an appropriate level in the Bidder's organisation will deliver effective management of the Train Works.	5%
	E5.4	Confidence that processes exist or can be developed to effectively manage Unit and Equipment design and construction quality, to administer the Agreement and to monitor and control Train Works risk(including schedule risk).	20%
	E5.4	Confidence in the approach to undertaking quality management system reviews, planning for continuous improvement in process quality, and auditing for compliance against management systems.	10%
	E5.4	Confidence that the approach to the control of change and non-conforming products will provide effective management of the Train Works.	5%
	E5.4	Confidence that the proposal for a Compliance Assurance Plan will assure the execution of the Train Works in accordance with the requirements of the Agreement.	20%
E5.4	Confidence that the Bidder's quality management organisation and experience will deliver effective quality management.	15%	
Quality and Compliance Assurance (Depot Works) (30%)	<u>Ref</u>	<u>Component</u>	<u>% of score</u>
	E1.5 E5.5	Confidence that the proposed structure for the Depot Works Management Plan (and constituent plans) will provide for effective management of the Depot Works in	15%

Sub-criteria	Proposal references, components and weightings		
		accordance with the requirements of the Agreement.	
	E5.5	Confidence that the quality policy statement, proposals for management of Subcontractors, accreditation status (or plan for attaining accreditation) to BS EN ISO 9001 will meet the quality requirements of the Agreement.	10%
	E5.5	Confidence that the approach to selecting, measuring and reporting quality performance indicators to RfL and to an appropriate level in the Bidder's organisation will deliver effective management of the Depot Works.	5%
	E5.5	Confidence that processes exist or can be developed to effectively manage the OOC Depot design and construction quality , to administer the Agreement and to monitor and control Depot Works risk(including schedule risk).	20%
	E5.5	Confidence in the approach to undertaking quality management system reviews , planning for continuous improvement in process quality, and auditing for compliance against management systems.	10%
	E5.5	Confidence that the approach to the control of change and non-conforming products will promote effective management of the Depot Works.	5%
	E5.5	Confidence that the proposal for a Compliance Assurance Plan will assure the execution of the Depot Works in accordance with the requirements of the Agreement.	20%
	E5.5	Confidence that the Bidder's quality management organisation and experience will facilitate effective quality management.	15%
Quality and Compliance Assurance (Services) (30%)	Ref	Component	% of score
	E1.6 E5.6	Confidence that the proposed structure for the Services Management Plan (and constituent plans) will provide for effective management of the Services in accordance with the requirements of the Agreement.	25%
	E5.6	Confidence that the quality policy statement, proposals for management of Subcontractors, accreditation status (or plan for attaining accreditation) to BS EN ISO 9001 will meet the quality requirements of the Agreement.	10%
	E5.6	Confidence that the approach to selecting, measuring and reporting quality performance indicators to RfL and to an appropriate level in the Bidder's organisation will deliver effective management of the Depot Works.	5%

Sub-criteria	Proposal references, components and weightings	
	E5.6 Confidence that processes exist or can be developed to effectively deliver the Services, to administer the Services in accordance with the Agreement and to monitor and control risk.	25%
	E5.6 Confidence in the approach to undertaking quality management system reviews , planning for continuous improvement in process quality, and auditing for compliance against management systems.	10%
	E5.6 Confidence that the approach to the control of change will promote effective management of the Services.	5%
	E5.6 Confidence that the proposal for a Compliance Assurance Plan will assure the execution of the Services in accordance with the requirements of the Agreement.	20%

### **Scoring of components**

CRL will base its score for each of the components listed above on Bidders' proposals using the following guidelines:

Score	Characteristics
0%	Major concerns: The response provides a very poor approach to quality and assurance management and a very low degree of confidence in successful compliance with the requirements of the Agreement
10%	Evidence exceeds guidance for 'major concerns' but fails to achieve guidance for 'minor concerns'.
35%	Minor concerns: The response provides a poor approach to quality and assurance management and a low degree of confidence in successful compliance with the requirements of the Agreement.
55%	Evidence exceeds guidance for 'minor concerns' but fails to achieve guidance for 'good confidence'.
75%	Good confidence: The response provides a good approach to quality and assurance management and a high degree of confidence in successful compliance with the requirements of the Agreement.
90%	Evidence exceeds guidance for 'good confidence' but fails to achieve guidance for 'excellent confidence'.
100%	Excellent confidence: The response provides an excellent approach to quality and assurance management and a very high degree of confidence in successful compliance with the requirements of the Agreement

## Appendix D Commercial criteria scoring guidelines

### Part 1 – NPV

#### 1. Evaluation Model

Economic evaluation of Bidders' Proposals will be based on the proposed amounts and timing of Milestone Payments and estimated Service Payments plus the other matters described below spread over the life of the Agreement (i.e., 32 years from the Commencement Date). The evaluation will use a standard Evaluation Model which takes account of each of the components of the evaluation and their timing and uses discounted cashflow techniques to calculate the NPV.

Evaluation will be based on the pre-populated Evaluation Model included in the Proposal. CRL reserves the right to adjust the Evaluation Models submitted by Bidders as described in Part C3.5 and Part C3.6.

#### 2. Indexation and discounting

All prices shall be input in either nominal prices or in pre-indexation (Indexation Base Date) prices except where specified differently below. The impact of inflation on those costs entered in pre-indexation prices will be automatically calculated by the Evaluation Model based on the following assumptions:

- i. The annual effective rate for RPIX shall be assumed to be ■■■%;
- ii. The annual effective rate for AWE shall be assumed to be ■■■%;
- iii. The annual effective rate for PPI shall be assumed to be ■■■%;
- iv. Indexation shall be applied annually and calculated as per the RSPA; and
- v. The nominal discount rate for evaluating the NPV shall be ■■■% (based on a 3.5% real discount rate, and a ■■■% assumed inflation rate).

The Evaluation Model shall use the following time based assumptions:

- i. The length of the concession is assumed to be 32 years from the Commencement Date i.e. expiry date would be 31 March 2046 based on a Commencement Date of 1 April 2014; and
- ii. All real costs and revenues shall be based as at the Indexation Base Month.

#### 3. Components of the Evaluation Model

The following sections describe the main components of the Evaluation Model.

Proposals shall comply with all of the instructions, assumptions and constraints described in the IFT and the Proposal Template.

### **3.1 Milestone Payments**

The Milestone payment schedules shall match those that are submitted in Appendix 1 to the Form of Tender and shall comply with the requirements set out below.

#### **3.1.1 Pre-acceptance Payment Restrictions**

##### **Year 1 Payments**

Total cumulative payments from RfL to the SP shall be restricted to 20% of the Total Contract Price between the Commencement Date and 31 March 2015.

##### **Years 1 and 2 Payments**

Total cumulative payments from RfL to the SP shall be restricted to 50% of the Total Contract Price up to 31 March 2016.

##### **Total Pre-acceptance Payments**

In respect of the Train Works, the total cumulative payments from RfL to the SP shall be restricted to 65% of the Total Train Works Price prior to Acceptance of the first Unit.

In respect of the Depot Works, the total cumulative payments from RfL to the SP shall be restricted to 80% of the price for the Depot Works prior to issue of the Depot Completion Certificate.

#### **3.1.2 Use of Pre-Acceptance Payments**

Pre-Acceptance Milestone Payments shall have a neutral effect on the working capital of the SP and shall not include any funding for work which is not directly related the manufacture of the Units and construction of the Depot.

Note that Bidders are required to provide evidence that their working capital requirements to support their pre-Acceptance Milestone Payment proposals, see part F2 of the Proposal Template.

#### **3.1.3 Units and Equipment Milestone Payments**

Bidders shall provide the value and timing of proposed Milestone Payments from RfL to the SP in both the TB Inputs sheet of the Evaluation Model and in the table provided in Appendix 1 to the Form of Tender.

A Bidder may choose to add further Milestones and associated payments, at its discretion, to the Milestone payment table provided in the Proposal Template.

#### **3.1.4 Depot Works Milestone Payments**

Bidders shall provide the value and timing of proposed Depot Works Milestone Payments from RfL in both the TB Inputs sheet of the



Evaluation Model and in the table provided in Appendix 1 to the Form of Tender. A Bidder may choose to add further Milestones and associated payments, at its discretion, to the Milestone payment table provided in the Proposal Template.

### **3.2 Base Period Charge**

The Base Period Charge comprises the following two components:

#### **a) Unit Availability Payments**

*(Bidders shall insert as pre-indexation prices)*

Unit Availability Payments are the price submitted by Bidders for the maintenance of the Units.

Unit Availability Payments are an output of the Base Case Maintenance Model.

Bidders shall insert the profile of pre-indexation Unit Availability Payments into the TB Inputs SA sheet of the Evaluation Model. This profile shall match the pre-indexation profile produced in Proformas 4 and 5 of the Base Case Maintenance Model, as well as the profiles in Proforma 1 and Appendix 1 to the Form of Tender.

#### **b) Depot Availability Payments**

*(Bidders shall insert as pre-indexation prices)*

Depot Availability Payments are the price submitted by Bidders for the maintenance of the OOC Depot.

Depot Availability Payments shall be an output of the Base Case Maintenance Model.

Bidders shall insert the profile of pre-indexation Depot Availability Payments into the TB Inputs SA sheet of the Evaluation Model. This profile should match the pre-indexation profile produced in Proformas 7 and 8 of the Base Case Maintenance Model, as well as the profiles in Proforma 1 and Appendix 1 to the Form of Tender.

#### **c) Indexation**

Bidders shall insert into the NTB Inputs sheet and Appendix 1 to the Form of Tender the proportion by which the Base Period Charge is indexed by each index within the basket available.

The Evaluation Model will calculate the nominal Base Period Charge payments which shall match the sum of the nominal Unit Availability Payments and Depot Availability Payments in the Bidder's Base Case Maintenance Model.

### **3.3 Service Payments**

Adjustments to components of the Service Payments will be made as follows:

**a) Additional Services**

*(Bidders to insert as pre-indexation prices)*

As part of the Proposal, Bidders shall provide in Appendix 1 to the Form of Tender labour and material rates for a range of potential Additional Services which may be required throughout the life of the contract. Bidders shall also provide the labour rate and percentage mark-up on costs for any Additional Services that may be required throughout the contract which are not covered by the pre-priced list of Additional Services in Appendix 1 to the Form of Tender.

For the purposes of evaluation, this list of Additional Services along with the labour and material rates for any works falling outside of the pre-priced list will be multiplied by an assumed annual uptake at operational steady state with the resulting cost applied as an adjustment within the Evaluation Model.

Bidders shall provide the labour and material rates for the pre-priced additional services and the labour rate and percentage mark-up for other additional services within the 'NTB Inputs' sheet. Weightings for the assumed annual uptake of Additional Services are indicated in the Evaluation Model.

**b) Depot power consumption**

Bidders shall submit the projected average operational steady state Depot energy volume per Railway Period in Appendix 1 to the Form of Tender.

This volume used at operational steady state, along with an assumed price for traction energy over the life of the project as provided in the Evaluation Model, will be used to calculate an adjustment within the Evaluation Model.

Bidders shall populate the 'NTB Inputs' sheet with their projected average operational steady state Depot energy volume per Railway Period from Appendix 1 to the Form of Tender.

**c) Mileage Adjustment**

*(Bidders to insert as pre-indexation prices)*

Bidders shall price their Unit Availability Payments based on the assumed mileages provided in Part D5 which corresponds with the base band of the Mileage Tables set out in Appendix 1 to the Form of Tender. As actual mileage may differ from the assumed level, Bidders shall provide adjustments applicable to variations to annual mileage in the Mileage Tables in Appendix 1 to the Form of Tender.

For the purposes of evaluation a 60% weighting will be applied to the base mileage band, a 20% weighting will be applied to the higher mileage band immediately above the base mileage band and a 5% weighting to each of the other mileage bands.

The figures from Appendix 1 to the Form of Tender shall be inserted, by the Bidders, as pre-indexation prices into the NTB Inputs sheet of the Evaluation Model.

### 3.4 RfL options

Adjustments that reflect the potential cost to RfL of exercising options will be made as follows:

#### a) Extra Units

*(Bidders to insert as nominal prices for the continuous production run Scenarios (Scenarios 1 & 2) and pre-indexation prices for the break in production Scenario (Scenario 3)).*

RfL require the ability to purchase up to an additional 23 Units as set out in the Scenarios described in Part B5.1. Bidders shall provide a combination of capital prices and maintenance prices for options as set out in Appendix 1 to the Form of Tender.

The capital price will be taken into account in the Evaluation Model by adding the weighted capital prices for three Combinations as follows:

- i) Combination 1 - RfL exercises the option to procure 10 Option Units through Scenario 2 with FLUs being Accepted immediately following the core fleet at a rate of one Unit per week. This will be weighted at 10%; and
- ii) Combination 2 - RfL procures 5 extra Units at the Commencement Date utilising Scenario 1 and then 18 Option Units utilising Scenario 2 with FLUs being Accepted immediately following the core fleet at a rate of one Unit per week. This will be weighted at 60%; and
- iii) Combination 3 - RfL procures 5 extra Units at the Commencement Date utilising Scenario 1 and then 18 Option Units utilising Scenario 3 with FLUs being Accepted from 1 April 2021 at a rate of one Unit per week. This will be weighted at 20%.

Bidders shall use their Base Case Maintenance Model to provide the incremental cost of servicing 23 additional FLUs assuming a continuation of the production run for the core fleet with the Option Units being accepted into service immediately following the core fleet at a rate of one Unit per week. The additional annual mileage per accepted Option Unit shall be assumed to be 127,000 miles. The evaluation of this maintenance price will use an 80% weighting.

For the purposes of evaluating Combination 1 and Combination 2, Acceptance of extra Units will be assumed to follow the Acceptance of the core fleet which excludes any Units delivered later as a result of any conversion of RLUs to FLUs by the SP.

For Combination 1 and Combination 2 capital prices, the date for Acceptance of the first extra Unit shall be inserted into the NTB Inputs sheet and the capex profile shall be inserted into the TB Inputs M sheet in nominal prices.

For Combination 3 capital prices, the date to be assumed for Acceptance of the first extra Unit shall be 1 April 2021. Bidders shall insert the capex profile for the extra Units based on this date into the TB Inputs M sheet in pre-indexation prices. Additionally, Bidders shall specify in the NTB Inputs sheet how this capex will be indexed based on the basket of indices available. The remobilisation costs for Scenario 3, in Combination 3 shall be included in the Option Unit price by averaging the cost over the 18 Option Units.

Bidders shall profile their costs such that Acceptance of the first extra Unit can occur on the dates specified with the rate of Acceptance for the subsequent extra Units at one per week.

The maintenance profile shall be inserted into the TB Inputs SA sheet in pre-indexation prices and the Bidders shall specify in the NTB Inputs sheet how this maintenance is to be indexed based on the basket of indices available.

The indexation factors within the Evaluation Model shall reconcile with those in Proforma 9.

### **3.5 Non contractual costs**

Factors which influence costs to RfL that are not covered under the RSPA will be taken into account in the Evaluation Model as follows:

#### **a) Energy consumption**

An allowance for the projected annual cost of energy consumed by the fleet (excluding consumption at the depot) at operational steady state will be included in the Evaluation Model based on the Unit energy consumption KWh/Unit mile provided in Appendix 1 to the Form of Tender. Bidders shall populate the NTB Input sheet with this figure.

Bidders shall provide in Part B2.1(4) of the Proposal, details of the calculation of the Unit energy consumption. This shall include:

- i) details of the Unit energy consumption in accordance with the requirements, operational assumptions and processes defined within document number C160-MMD-R1-RGN-CR001-50013 which is provided in the Data Room. This shall describe, in particular, performance as compared with the energy target and reference journey described in Clause 3.4.1.1 of the Train Technical Specification; and
- ii) details of the Unit auxiliary and HVAC power consumption in accordance with the requirements, operational assumptions and processes defined

within document number C160-MMD-R1-RGN-CR001-50012 which is provided in the Data Room.

The simulations described in document number C160-MMD-R1-RGN-CR001-50013 as 'Scenario 2 - 'Energy Efficient' shall form the basis of energy consumption costs. In the Evaluation Model, the Unit energy consumption figure is multiplied by the assumed energy prices and distances run by the fleet to arrive at an assumed energy cost. Energy prices and distances run are provided in the Evaluation Model as standard values.

The Bidder's energy consumption figure will be validated and benchmarked by CRL against the spreadsheet model described in document number C160-MMD-R1-RGN-CR001-50020 provided in the Data Room

## **b) Performance**

*(Bidders to insert as pre-indexation prices)*

The deductions incurred by the SP under the Performance Regime do not reflect the full economic cost to RfL of poor performance. A performance adjustment will therefore be made in the Evaluation Model to act as a proxy for the economic impact of the bid level of performance. A multiple of twice the total performance deductions assumed by Bidders in their Base Case Maintenance Model will be included as an adjustment within the Evaluation Model.

Bidders shall insert the total Performance Regime Adjustments for each period in pre-indexation prices into the TB Inputs sheet. This figure shall reconcile with the figures referenced in Appendix 1 to the Form of Tender and shown in Proformas I-11 and I-12.

Bidders shall submit an explanation along with references to other areas of the Proposal where relevant to act as justification for the assumed level of performance as specified in part F4 of the Proposal Template.

Bidders shall note that the reliability performance level bid miles (MDBSAF) will (after factoring as described in the RSPA) form the contractual basis for Fleet Acceptance.

## **c) Track wear costs**

*(Bidder to insert as pence per Unit mile pre-indexation)*

Bidders shall provide, in Appendix 1 of the Form of Tender the forecast cost of track wear caused by the Units based on the VTAC Track Wear Cost Model.

The VTAC Track Wear Cost Model is described in Part B1.1.8 of the Proposal Template.

The Evaluation Model will index this number from the VTAC model base date of 2009/2010 up to the Indexation Base Date at an assumed annual rate of      %.

The resulting VTAC figure will then be multiplied by the fleet mileage at operational steady state to produce an assessment of the variable track access charges that will be incurred during the operational steady state.

Bidders shall insert the VTAC Charge per unit mile into the NTB inputs sheet.

## Part 2 – Contractual Compliance

### 1 Contractual Compliance

Scoring for the Contractual Compliance evaluation of Bidders' Proposals will be based on the following principles. The Contractual Compliance evaluation is based on a number of sub-criteria and the score will be a weighted average of the scores achieved in each of the sub-criteria based on the considerations below. The Contractual Compliance Score will be the aggregate of the score achieved in each of the sub-criteria described below.

In evaluating each sub-criterion, CRL will assess the sub-criterion as a whole, including, without limitation, the elements set out below. All of these elements will be taken into account, but individual elements will not be weighted. A score will be assigned based on an integrated and 'whole picture' basis for each of the Contractual Compliance sub-criteria.

Sub-criteria	Element
Third Parties and Undertaking (10%)	Including: <ul style="list-style-type: none"> <li>• Undertakings</li> <li>• Network Rail</li> <li>• CTOC</li> <li>• Other Third Parties</li> </ul>
Depot Works (10%)	Including: <ul style="list-style-type: none"> <li>• Site issues including environmental</li> <li>• Planning and property</li> <li>• Design and assurance</li> <li>• Completion</li> <li>• Testing, commissioning integration and assimilation</li> </ul>
Manufacture of Units (10%)	Including: <ul style="list-style-type: none"> <li>• General</li> <li>• Design and assurance</li> <li>• Approvals</li> <li>• Testing</li> </ul>

	<ul style="list-style-type: none"> <li>• Delivery and acceptance (including liquidated damages for late delivery)</li> <li>• Warranties</li> </ul>
Operations (10%)	<p>Including:</p> <ul style="list-style-type: none"> <li>• General</li> <li>• Train plans</li> <li>• Maintenance services</li> <li>• Fault rectification</li> <li>• Spares</li> <li>• Simulator</li> </ul>
Payment Mechanism / Performance (12.5%)	<p>Including:</p> <ul style="list-style-type: none"> <li>• Payment mechanism</li> <li>• Performance regime</li> </ul>
Change (12.5%)	<p>Including:</p> <ul style="list-style-type: none"> <li>• RfL changes</li> <li>• Major depot changes</li> <li>• GW Services Change</li> <li>• Option Unit changes</li> <li>• Change in Law</li> <li>• SP changes</li> <li>• TSSSA changes</li> <li>• Relief events</li> <li>• Compensation events</li> <li>• Force majeure</li> </ul>
Insurance, Indemnities and Liability (7.5%)	<ul style="list-style-type: none"> <li>• Insurance</li> <li>• Indemnities</li> <li>• Limitations on liability</li> </ul>



	<ul style="list-style-type: none"> <li>• Sole remedy provisions</li> </ul>
Financial/Security provisions (10%)	<p>Including:</p> <ul style="list-style-type: none"> <li>• Change of control</li> <li>• Assignment, novation and RfL refinancing</li> <li>• TfL guarantee</li> <li>• Parent company guarantee</li> <li>• Bonds</li> <li>• Milestones</li> <li>• Title and security</li> </ul>
Default, Termination and Return (10%)	<p>Including:</p> <ul style="list-style-type: none"> <li>• Termination provisions</li> <li>• Compensation on termination</li> <li>• Concession extension option</li> <li>• Obligations on termination and expiry</li> <li>• Direct Agreements</li> </ul>
Other risk areas (7.5%)	<p>Including:</p> <ul style="list-style-type: none"> <li>• Intellectual Property</li> <li>• Dispute Resolution</li> <li>• Responsible Procurement</li> <li>• Health and Safety</li> <li>• Contract Management</li> <li>• Assurance</li> <li>• Works Information</li> </ul>

**Scoring of Sub-criteria**

CRL will score each of the Contractual Compliance sub-criteria listed above using the following guidelines.

<b>Score</b>	<b>Characteristics</b>
0%	<p><b>Fundamental material adverse change</b></p> <p>The scale and/or nature of significant Qualifications is such that the proposed risk allocation and/or the adverse impact(s) of the Qualifications for any Indemnified Party(ies) are completely different to that envisaged.</p>
20%	<p><b>Very material adverse change</b></p> <p>The scale and/or nature of significant Qualifications is such that the proposed risk allocation and/or the adverse impact(s) for any Indemnified Party(ies) are very materially different to that envisaged.</p>
40%	<p><b>Material adverse change</b></p> <p>The scale and/or nature of significant Qualifications has materially changed risk allocation and/or caused material adverse impact(s) for any Indemnified Party(ies).</p>
60%	<p><b>Limited material adverse change</b></p> <p>Some significant Qualifications, but Qualifications have only a limited material effect on risk allocation and/or a limited material adverse impact for any Indemnified Party(ies).</p>
80%	<p><b>No material adverse change</b></p> <p>Any Qualifications are minor and do not alter risk allocation or have adverse impacts on any Indemnified Party(ies), other than to a non-material extent.</p>
100%	<p><b>No change</b></p> <p>Fully compliant: no mark-up other than typographical amendments.</p>

## Appendix E Proposal Structure

The table below shows the required contents for Bidders' Proposals based on the Proposal Template. As well as submitting the full Proposal, Bidders shall submit the section(s) indicated in each box as a separate 'pdf file' as described in Part G2.4.

<b>Part A Formal offer</b>	
1.	Form of Tender
2.	Certificates
2.1	Continued compliance with Process Agreement
2.2	Certificate of bona fide Proposal
2.3	Prohibited Acts certificate
2.4	Certificate of freedom to tender
3.	Additional Documents
3.1	Change in Circumstances or competition matters
3.2	Freedom of information declaration
4.	Schedule of Non-compliances and Assumptions
4.1	Introduction
4.2	RSPA Clauses 1 – 64
4.3	Schedule A
4.4	Schedule B
4.5	Schedule C
4.6	Schedule D
4.7	Schedule E
4.8	Instructions for Tenderers
4.9	Bidder Assumptions
<b>Part B Rolling Stock Submission</b>	
1.	Bidder drafted contract documents
1.1	SP Train Proposal (RSPA Schedule B2)

1.2	Spares & Special Tools (RSPA Schedule B3)
2.	Supporting information
2.1	Train Proposal Supporting Information
3.	Interface with Central Section Signalling & Control System
3.1	TCSE Subcontract heads of terms
3.2	Compliance with the Train, ETCS and S&CS Interface Specification
3.3	Summary of technical response to the Train, ETCS and S&CS Interface Specification
3.4	Technical interface documents
<b>Part C Depot Submission</b>	
1.	Bidder drafted contract documents
1.1	SP Depot Proposal (RSPA Schedule C2)
1.2	Assumed energy volume (RSPA Appendix 3 of Schedule E2)
2.	Supporting Information
2.1	Evaluators guide to compliance
2.2	Depot operating philosophy and Fleet maintenance capacity
2.3	Design for sustainability
2.4	Section A day 1 depot opening requirements
2.5	Outline threat and vulnerability risk assessment
<b>Part D Services Submission</b>	
1.	Bidder Drafted Contract Documents
1.1	Maintenance Plan (RSPA Part 3 of Schedule D1)
1.2	Train Plan Parameters (RSPA Part 2 of Schedule D1)
<b>Part E Deliverability Submission</b>	
1.	Bidder drafted Contract Documents
1.1	Project Programme (RSPA Part 1 of Schedule A1)
1.2	Train Works Programme (RSPA Part 2 of Schedule A1)

1.3	Depot Works Programme (RSPA Part 3 of Schedule A1)
1.4	Train Works Management Plan (RSPA Appendix 1 to Part 2 of Schedule A3)
1.5	Depot Works Management Plan (RSPA Appendix 1 to Part 3 of Schedule A3)
1.6	Services Management Plan (RSPA Appendix 1 to Part 4 of Schedule A3)
1.7	Depot Design Work Package Breakdown Structure (Appendix B to Part 3 of Schedule A4)
1.8	Vehicle Design Area Breakdown Structure (RSPA Appendix B to Part 2 of Schedule A4)
1.9	List of Key Subcontracts and Key Subcontractors(RSPA Part 1 of Schedule A6)
1.10	Major Equipment Subcontracts and Major Equipment Subcontractors (RSPA Part 2 of Schedule A6)
1.11	Not used
1.12	SLNT Plan (RSPA Appendix F to Schedule A12)
1.13	Testing (Units) Testing Strategy (RSPA Part 2 of Schedule B4)
1.14	Testing (Units) - Schedule of Tests (RSPA Part 3 of Schedule B4)
1.15	Testing Programme (RSPA Part 4 of Schedule B4)
1.16	Depot Testing Strategy (RSPA Part 2 of Schedule C7)
1.17	Schedule and Programme of Depot Tests (RSPA Part 3 of Schedule C7)
1.18	Fleet Reliability Growth Commitment (RSPA Appendix E to Schedule A4 Part 2)
1.19	Permitted Design Change (RSPA Appendix A to Schedule A4 Part 2)
2.	Supporting Information – Train Works
2.1	Train Works Execution Strategy
2.2	Reliability Growth Plan
2.3	Management of Train Technical Assurance
3.	Supporting Information – Depot Works

3.1	Depot Works Execution Strategy
3.2	Depot Works Asset Management Plan
3.3	Depot Works Community Liaison Plan
3.4	Depot Works labour and industrial relations policy
3.5	Depot Works inclusivity policy
3.6	Depot Works Logistics Plan and Traffic Management Plan
3.7	Depot Works Security Manual
3.8	Depot Works Utilities Plan
3.9	Depot Works Undertakings Compliance Plan
3.10	Depot Consents Management Plan
3.11	Management of Depot Technical Assurance Plan
4.	Supporting Information – Services
4.1	Services Delivery Strategy
4.2	Engineering support in the Services Period
4.3	Services Period depot asset maintenance
4.4	Services Period – In Service Support Procedure
4.5	Services Period – Fault Notification Procedure
4.6	Services Period – Preparation, Presentation and Hand-Back Procedure
4.7	Services Period – Undertakings Compliance Plan and Relevant Approvals Management Plan
4.8	Services Period – security and resilience
4.9	Services Period – Depot Safety Management System
4.10	Services Period – Depot Operations Plan
4.11	Spares and Special Tools – delivery programme & stock management
5.	Supporting Information – HSEQ and Responsible Procurement
5.1	Health and safety

5.2	Environmental Plans
5.3	Responsible Procurement
5.4	Train Works quality and compliance assurance
5.5	Depot Works quality and compliance assurance
5.6	Services Quality Plan
6.	Supporting Information – Subcontracting
6.1	Details of Subcontracts
<b>Part F Commercial Submission</b>	
1.	Base Case Maintenance Model
2	Evaluation Model
3	Financial Proformas
4	Performance Regime Workings
5	Hedging Arrangements
<b>Part G Schedule of Attachments</b>	
<b>Part H Credit Support and Security</b>	
1.	Guarantor
2.	Performance Bonds
3.	Insurance