

ID	Requirement Text	Contract Award Status	Description of contracted solution
TRS-CET-46	Where trains are required to split in a worksite, automatic couplings shall be provided to prevent the need for staff members to climb between the vehicles.	<b>Fully Compliant</b>	<p>Scharfenberg couplings will be provided for the intermediate vehicles to enable trains to be split. Vehicle fronts shall be provided with standard UIC couplers to enable compatibility with standard rolling stock.</p> <p>Electrical connections must be made manually, but this will not require staff to climb between because buffers will not be installed.</p>
TRS-CET-47	Vehicles shall be capable of rescuing other Crossrail engineering trains.	<b>Fully Compliant</b>	<p>Vehicles are capable of rescuing other Crossrail engineering trains. Please see traction power diagram.</p> <p>Document:            ROBEL_6.2_Traction Power Diagram            ROBEL_6.2_Scharfenberg coupling</p> <p>UIC couplers will be provided on the front and rear of the engineering trains. An additional adaptor coupling will be required to rescue the class 345.</p>
TRS-CET-29	4.17.7 Ventilation		

ID	Requirement Text	Contract Award Status	Description of contracted solution
TRS-CET-50	Vehicle emissions shall not cause the COSHH 8 hour workplace exposure limits to be exceeded either in running mode at speed or working mode at rest.	<b>Fully Compliant</b>	<p>Vehicle emissions do not cause the COSHH 8 hour workplace exposure limits to be exceeded either in running mode at speed or working mode at rest. Please see DEUTZ calculation.</p> <p>Document: ROBEL_6.2_DEUTZ COSHH calculation TRS-CET-050_Question TfL_Engin_Data_Sheet</p>
TRS-CET-51	Engine emissions shall, as a minimum meet the European category 3b limits for rail traction engines.	<b>Fully Compliant</b>	<p>a category EU 3B engine (TCD 16.0 V8) and EU 4 engine (TCD 7.8 L6) is proposed (in total 2 engines). Please see additional data sheet of the Engine.</p> <p>Document: ROBEL_6.2_Data Sheet Engine</p>
TRS-CET-31	<b>4.18 Safety</b>		
TRS-CET-93	The supplier shall support Rail for London in developing a safe system of work.	<b>Fully Compliant</b>	the supplier does support Rail for London in developing a safe system of work.
TRS-CET-64	4.18.1 Fire Safety		

ID	Requirement Text	Contract Award Status	Description of contracted solution
TRS-CET-66	Fire suppression systems shall not use the following methods for active fire suppression: White Powder CO2	<b>Fully Compliant</b>	fire suppression systems do not use the following methods for active fire suppression:  White Powder  CO2  We use a water based fire suppression system.  Please see also Document Fire Alarm & Extinguish System we have realized on an other project.  Document:  ROBEL_6.2_Fire Alarm and Extinguish System_Example
TRS-CET-72	Fire detection systems shall provide an input into the signalling system.	<b>Fully Compliant</b>	Fire detection systems is providing an input into the signalling system.
TRS-CET-152	Systems to restrict the volume of fuel carried by the machine shall be provided where practicable.	<b>Fully Compliant</b>	confirmed the Gauge provided at delivery point to allow maintenance staff to dispense optimal volume of fuel. Please see additional document Fuel tank indicator.  ROBEL_6.2_Fuel tank indicator
TRS-CET-160	Fire suppression systems shall be installed in enclosed spaces on the vehicle.	<b>Fully Compliant</b>	fire sensors will be installed on all enclosed spaces on the vehicle, an extinguish system installed in the engine rooms.

ID	Requirement Text	Contract Award Status	Description of contracted solution
TRS-CET-174	Any outbreak of fire shall be prevented from exceeding 8.8MW output within 30 minutes of detection.	<b>Fully Compliant</b>	<p>Adequate fire detection and suppression systems provided for all staff to evacuate the work site in the event of fire.</p> <p>Please see also Document Fire Alarm &amp; Extinguish System we have realized on an other project.</p> <p>Document: ROBEL_6.2_Fire Alarm and Extinguish System_Example</p>
TRS-CET-175	Adequate protection shall be provided to the fuel tank (and other fluid tanks) in the event of derailment.	<b>Fully Compliant</b>	<p>Adequate protection is provided to the fuel tank (and other fluid tanks) in the event of derailment. Please see drawing.</p> <p>Document: ROBEL_6.2_Fuel Tank Protection</p>
TRS-CET-32	<b>4.19 Human Factors</b>		
TRS-CET-129	Dust and emissions shall be prevented from entering the cab.	<b>Fully Compliant</b>	<p>The Dust and emissions are prevented from entering the cab. Please see Air Flow Measurement Cab.</p> <p>ROBEL_6.2_Air Flow Measurement Cab TRS-CET-129_Question Tfl_Dust</p>
TRS-CET-83	Operating tasks shall be designed in accordance with HF principles, allowing for 5th per cent female to 95th per cent male usage.	<b>Fully Compliant</b>	<p>Operating tasks are be designed in accordance with HF principles, allowing for 5th per cent female to 95th per cent male usage.</p>

ID	Requirement Text	Contract Award Status	Description of contracted solution
TRS-CET-200	All signalling equipment shall be integrated into the cab in accordance with HF principles.	Fully Compliant	all signalling equipment are integrated into the cab in accordance with HF principles.
TRS-CET-84	A driver training position shall be provided in driving cabs, with sufficient visibility and access to emergency stop functions.	Fully Compliant	<p>a driver training position is provided in driving cabs, with sufficient visibility and access to emergency stop functions. The trainer can use the co-driver seat inside the cab. Please see additional document Cab Overview.</p> <p>Document:            ROBEL_6.2_Cab Overview            TRS-CET-84_Question TfL_Diver Training Position</p>
TRS-CET-33	<b>4.20 RAM</b>		
TRS-CET-177	The Engineering Trains shall undertake self test upon start up and report any issues with the vehicle that may prevent successful completion of the task.	Fully Compliant	but no self test for all equipment upon start, but active failures will be displayed on DMI. A functionality test has to be carried out before machine starting. Signalling system has a separate self testing.
TRS-CET-55	No single point of failure shall prevent completion of maintenance tasks that must be completed for handback into passenger service.	Fully Compliant	safety relevant functions are designed acc. EN 13849.
TRS-CET-56	In the event of engine failure, engineering trains shall be capable of self-rescue.	Fully Compliant	in the event of engine failure, engineering trains are capable of self-rescue.

ID	Requirement Text	Contract Award Status	Description of contracted solution
TRS-CET-176	Maximum Active Repair Time for any line replaceable unit (LRU) shall not exceed 13 hours.	<b>Fully Compliant</b>	<p>The following parts/assemblies can be changed in not longer than 13 hours:</p> <ul style="list-style-type: none"> <li>- Wheel sets</li> <li>- Fuel tanks</li> <li>- Power units</li> <li>- Crane/Lifting platform</li> <li>- Buffer &amp; draw gear</li> <li>- Cooling equipment</li> </ul> <p>Following parts can not be changed in 13 working hours:</p> <ul style="list-style-type: none"> <li>- Gearboxes</li> <li>- Engines (main engines)</li> </ul>
TRS-CET-178	Line replaceable units shall be capable of being replaced at the Plumstead maintenance facility.	<b>Fully Compliant</b>	Line replaceable units are capable of being replaced at the Plumstead maintenance facility.

ID	Requirement Text	Contract Award Status	Description of contracted solution
TRS-CET-179	Engineering trains shall have a shift completion rate of 98%.	<b>FullyCompliant</b>	<p>Yes fulfilled, an availability threshold in the form of a Shift Completion Rate (SCR) of 98% is fulfilled at the end of the warranty period.</p> <p>Please see also document Preliminary RAM Prediction</p> <p>Documents:</p> <p>ROBEL_6.1_Preliminary RAM Prediction_V2</p> <p>In the case, that a vehicle does not fulfil the reliability / availability criterion after the first 12 months after final takeover, the warranty period of that vehicle will be elongated for one further month as long as the acceptance is given.</p> <p>Beginning with the 13th month of operation of an Engineering Train, the confirmation of the reliability / availability criterion will be calculated by an average over the last six (6) consecutive monthly dials.</p> <p>To categorize the extent of a failure, several failure categories will be defined:</p> <ul style="list-style-type: none"> <li>• FC A: Significant Fault. Vehicle / train has to be towed respectively recovered.</li> <li>• FC B: Major Fault. Vehicle / train cannot finish the shift but leave the track with own power or can finish the shift with time delay.</li> <li>• FC C: Minor Fault. Vehicle / train can finish the work within the maximum shift time and without time delay.</li> <li>• FC D: Minor Fault, only relevant for LCC.</li> </ul> <p>For reliability / availability calculation only fault categories A and B have relevance.</p>

ID	Requirement Text	Contract Award Status	Description of contracted solution
TRS-CET-91	Engineering trains shall have a mean time between service affecting failures (MTBSAF) of 2400 hours.	<b>Fully Compliant</b>	A reliability threshold in the form of a Mean Time Between Service Affecting Failure (MTBSAF) of 2400 hours of operation is fulfilled at the end of the warranty period.  Please see also document Preliminary RAM Prediction Documents:  ROBEL_6.1_Preliminary RAM Prediction_V2
TRS-CET-92	All modules and vehicles shall have a minimum availability of 280 operating shifts per year.	<b>Fully Compliant</b>	please see Availability Calculation.  Documents:  ROBEL_6.1_Preliminary RAM Prediction
TRS-CET-211	Vehicle maintenance plans shall not require off site overhaul more frequently than every eight years and for no more than four consecutive weeks.	<b>Fully Compliant</b>	the maintenance does not require off site overhaul more frequently than every eight years and for no more than four consecutive weeks.
TRS-CET-119	Regular Maintenance regimes shall not prevent a vehicle being available for more than 4 consecutive days.	<b>Fully Compliant</b>	Regular Maintenance regimes does not prevent a vehicle being available for more than 4 consecutive days. With keeping the right spare parts on time, it is achievable to do a regular maintenance in not longer 4 days.

ID	Requirement Text	Contract Award Status	Description of contracted solution
TRS-CET-180	The supplier shall provide an obsolescence management service and document this in a Post-manufacture support plan.	<b>Fully Compliant</b>	ROBEL is providing an obsolescence management service and document this in a Post-manufacture support plan. Please see documents Post Manufacture Support Plan and Obsolescence Management Plan.  ROBEL_6.2_RAMs Post Manufacture Support Plan ROBEL_6.2_RAMs Obsolescence Management Plan
TRS-CET-95	The supplier shall minimise the need for special tools and equipment, and shall provide any necessary for maintenance or operation.	<b>Fully Compliant</b>	No special equipment & tools required
TRS-CET-98	Spare parts shall be made available for a minimum of 15 years following delivery.	<b>Partially-Compliant</b>	We don't get confirmation of all suppliers for spare parts availability for 15 year. Most components can be replaced by "fit in form and function".  A detailed spares package has to be prepared together with Crossrail ( [REDACTED] )
TRS-CET-181	All vehicles shall have a minimum design life of 25 years.	<b>Fully Compliant</b>	all vehicles shall have a minimum design life of 25 years.
TRS-CET-110	Vehicle and infrastructure monitoring systems shall be capable of being uploaded via wifi.	<b>Fully Compliant</b>	Vehicle and infrastructure monitoring systems is capable of being uploaded via wifi.
TRS-CET-111	Secondary means of removing data from the vehicle shall be provided through physical connection/removable disc.	<b>Fully Compliant</b>	Remnant machine data can be stored on an SD-card before replacing the PLC, this Card is secured by being sealed.

ID	Requirement Text	Contract Award Status	Description of contracted solution
TRS-CET-153	Systems shall be designed to use commonly available (COTS) parts where practicable.	Fully Compliant	Systems are designed to use commonly available (COTS) parts where practicable.
TRS-CET-96	<b>4.21 EMC</b>		
TRS-CET-97	The vehicles shall be compatible with the electromagnetic environment of the Crossrail Central Operating Section and any other routes over which the machine is expected to run.	Fully Compliant	The vehicles are compatible with the electromagnetic environment of the Crossrail Central Operating Section and any other routes over which the machine is expected to run.
TRS-CET-108	<b>4.22 Environment</b>		
TRS-CET-109	All lubricants and hydraulic oils shall have a minimal environmental impact and where possible shall be biodegradable or have long life properties to minimise disposal of oils and lubricants.	Fully Compliant	all lubricants and hydraulic oils have a minimal environmental impact and where possible shall be biodegradable or have long life properties to minimise disposal of oils and lubricants.
TRS-CET-74	Vehicle noise and fuel consumption shall be minimised when stabling with power on.	Fully Compliant	where battery capacity allows engine to be shut down for up to 2 hours, or small auxiliary engine can maintain electrical systems during stabling. See document Reference Vehicles with additional auxiliary engine for power supply.  Document: ROBEL_6.2_Reference Vehicles with additional auxiliary engine

ID	Requirement Text	Contract Award Status	Description of contracted solution
TRS-CET-182	Means of detecting and preventing leaking fluid shall be provided in the event of a hydraulic failure.	<b>Fully Compliant</b>	Provisional design indicates possible method of meeting requirement.  Please see document: TRS-CET-182_Question TfL_Oil_leakage
TRS-CET-213	Noise levels measured 7.5m from the track centreline during working shall not exceed 75dB.	<b>Fully Compliant</b>	where noise levels measured around similar vehicle or design modelling confirms noise level does not exceed 75dB. Please see Noise Measurements TSI/GMRT.  ROBEL_6.2_Noise Measurements TSI Example ROBEL_6.2_Noise Measurements GMRT Example
TRS-CET-68	<b>4.23 Documentation</b>		
TRS-CET-69	Training shall be provided for operation and maintenance of the vehicle(s) and all modules.	<b>Fully Compliant</b>	Training is provided for operation and maintenance of the vehicle(s) and all modules.
TRS-CET-105	Recovery manual describing the means by which the vehicle can be removed from track in order to clear the route for traffic.	<b>Fully Compliant</b>	Recovery manual is describing the means by which the vehicle can be removed from track in order to clear the route for traffic.
TRS-CET-34	<b>4.24 Standards and Assurance</b>		

ID	Requirement Text	Contract Award Status	Description of contracted solution
TRS-CET-39	Design and build of all vehicles shall comply with relevant TSIs.	<b>Fully Compliant</b>	Compliance with relevant TSIs will be demonstrated by EC-certification of Notified Body. Further compliance with NNTRs will be assessed by Designated Body. Assessment acc. to CSM will be done by AsBo. This will lead to appropriate Engineering Acceptance Certification including entry into rolling stock library.
TRS-CET-162	Design and build of all vehicles shall comply with relevant NNTRs.	<b>Fully Compliant</b>	Compliance with NNTRs will be assessed by Designated Body. Assessment acc. to CSM will be done by AsBo. This will lead to appropriate Engineering Acceptance Certification including entry into rolling stock library.
TRS-CET-163	Design and build of the vehicles shall be compliant with the European Machinery Directive for both operation and maintenance.	<b>Fully Compliant</b>	Design and build of the vehicles is compliant with the European Machinery Directive for both operation and maintenance.
TRS-CET-99	Design and build of the vehicles and equipment shall comply with RIS-1702-PLT.	<b>Fully Compliant</b>	Independent Safety Assessment processes would be fully compliant with the drafts of RIS-1710-PLT and as soon as this document is published our intended Assessor would become a PAB

ID	Requirement Text	Contract Award Status	Description of contracted solution
TRS-CET-40	Compatibility files shall be produced in accordance with GERT8270 to demonstrate compatibility with the Crossrail Central Operating Section infrastructure.	<b>Fully Compliant</b>	<p>For compatibility assessment the process called up (GE/RT8270) requires hazards at the interface between the Rolling Stock and Infrastructure to be identified and managed. Affected parties must be consulted and all of this must be detailed in a Compatibility File that supports and overall Statement of Compatibility.</p> <p>For the Crossrail Engineering Train there are more parties involved than just Network Rail and Crossrail is likely to be made up of several different parties.</p> <p>The process allows for "The Proposer" to manage the process and produce the Compatibility File and Statement of Compatibility. Our contracted external support would manage the process on behalf of us including producing the Compatibility File and drafting the Statement of Compatibility.</p>
TRS-CET-82	Vehicles shall be demonstrated to be compatible with Network Rail infrastructure over the Crossrail routes.	<b>Fully Compliant</b>	Vehicles are demonstrated to be compatible with Network Rail infrastructure over the Crossrail routes.

## Reference Documents

List of reference documents called up in the scope:

Ref	Document Number	Title	Paragraph referenced
1	CRL1-RFL-O-GPS-CROO1-50001	Operation & Maintenance (O&M) Information Requirements	Assurance - 3.8
2	CRL1-XRL-O8-GPD-CR001-50002	Engineering Safety Management Hazard Management Procedure	Assurance- 3.9
3	CR-MS-102-02-0002	Rolling Stock & Depot Hazard Review Panel	Assurance- 3.10
4	CR-MS-103-02-0046	RfL Product Acceptance Procedure	Assurance- 3.11
5	C122-OVE-R4-DDD-CR001_Z-73060	Bored Tunnels Tunnel and Walkway Setting Out Details - Straight Track	TRS-CET-130 TRS-CET-114
6	RE/PW/2007-A	G Switch Assembly and Machining	TRS-CET-131
7	RE/PW/2318-A	1 in 33.5 Crossing Footprint	TRS-CET-131
8	C122-OVE-R4-DDH-CR001_Z-75883	Stepney Green Junction Switches and Crossing Storage Maintenance Vehicle Space Proofing	TRS-CET-131
9	C122-OVE-R4-DDH-CR001_Z-75863	Fisher Street Crossovers Switches and Crossing Storage Maintenance Vehicle Space Proofing	TRS-CET-132
10	C122-OVE-R4-DDH-CR001_Z-75873	Whitechapel Crossover Switches and Crossing Storage Maintenance Vehicle Space Proofing	TRS-CET-132
11	C122-OVE-R4-DDE-CROO1_Z-11199	Crossrail Central Track Alignment Schematic -Eastbound	TRS-CET-132 TRS-CET-128 TRS-CET-63
12	C122-OVE-R4-DDE-CR001_Z-11099	Crossrail Central Track Alignment Schematic -Eastbound	TRS-CET-132 TRS-CET-128 TRS-CET-63
13	C610-ATC-R6-RSP-CRG03-50038	Rigid Overhead Catenary Functional Description	TRS-CET-133 TRS-CET-14 TRS-CET-136
14	MDF-OHLE-23	Maintenance Data Form	TRS-CET-133
15	C610-ATC-R4-DDD-CRG03-00020	Track Drainage Bord Tunnel, STS - Straight Typical Catchpit Type 1/2/5	TRS-CET-184

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Ref	Document Number	Title	Paragraph referenced
16	C610-ATC-R4-DDD-CRG03-00021	Track Drainage Bard Tunnel, STS-Straight Typical Catchpit Type 1/2/5	TRS-CET-184
17	C631-KBR-M-DDB-CR001_Z-00001	PSD Cross Section @ Gauge Alignment for Design Coordination	TRS-CET-186
18	C100-ATK-A-RGN-CRG02-50047	Generic Platform Edge Screen Design Report	TRS-CET-136
19	C124-MMD-E-RAE-CR001-00001	Tunnel Lighting Evaluation of Tunnel Luminaires	TRS-CET-136
20	S1066	Lighting of London Underground Assets	TRS-CET-187
21	C610-ATC-R4-DDD-CRG01_Z-10023	Bored Tunnel Standard Track Slab Drainage Details Catchpit Type 2	TRS-CET-209 TRS-CET-210
22	C620-SIC-R2-RSP-CR001-50088	Interface Specification Yellow Fleet Airlink / RST	TRS-CET-36
23	C620-SIC-R2-RSP-CR001-50089	Yellow Plant - TMS Interface (Space, Power, Wiring Arrangements and TMS)	TRS-CET-36
24	C620-SIC-R2-RSP-CR001-50090	Yellow Plant - DMI Interface (required if ETCS installed)	TRS-CET-36
25	C620-SIC-R2-RSP-CR001-50091	Yellow Plant- ETCS Interface	TRS-CET-36
26	C620-SIC-R2-RSP-CR001-50098	Yellow Plant - RST Interface	TRS-CET-36
27	C620-XRL-R2-RSP-CRG03-Z-50005	Crossrail Engineering Train, ETCS and Signalling Interface Specification	TRS-CET-36
28	C122-OVE-RGN-CRG01-50003 V3.0	Central Section Structure Gauge	TRS-CET-52
29	CRL1-XRL-K2-ZTM-CR001-50001	Operation & Maintenance (O&M) Information Requirements	TRS-CET-70
30	CRL1-RFL-O8-RSW-CR001-50001	Training Services	TRS-CET-69
31	RIS-1702-PLT	Rail Industry Standard for the Design of On-Track Machines in Working and Travelling Modes	TRS-CET-99
32	RIS-1710-PLT	Rail Industry Standard for the Certification of Railborne Plant	TRS-CET-99
33	MDF_TRK_15R	Maintenance Data Form - Plain Line Rail Renewal	TRS-CET-155
34	C631 -Transformer Transfer through PSD	BOS and TCR Station Transformer Removal/Replacement	TRS-CET-135
35	AVI System Specification	Automatic Vehicle Identification (AVI) System Specification	TRS-CET-172

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### **Appendix 1: CBTC Signalling Installation Instructions**

The Purchaser shall submit all details of the CBTC Signalling Installation Instructions within the timeframes specified in Clause 4.7.2(A) of this Agreement.

## **SCHEDULE 1B: MANAGEMENT OF DELIVERY**

### **1. Project Management**

#### 1.1 Overview

The Purchaser will collaborate with the Manufacturer in the safe and controlled introduction of new or modified Units onto the Crossrail Infrastructure (as such term is defined in Schedule 1A (*Specification*)) in a timely manner.

#### 1.2 Project Start Meeting

Within 10 Working Days of the Commencement Date, the Purchaser will convene a project start meeting with the Manufacturer. The purpose of this meeting is to establish how this Agreement will be delivered. The Purchaser shall issue an agenda in advance of the meeting which shall include inter alia:

- Definition of stakeholders, roles and responsibilities;
- Approach to health & safety;
- Routes and forms of communication;
- Project meetings structure and attendees;
- Planning and programme management;
- Project deliverables; and
- Change control.

#### 1.3 Programme

1.3.1 The Manufacturer shall provide a detailed Contract Programme for the delivery of the Plant and Machinery within the time scales defined in this Agreement. The Contract Programme should be in Primavera or MS Project format covering the full scope of the works contemplated by this Agreement and any supporting services e.g. supply of Spares, training, etc.

1.3.2 The Contract Programme shall:

- show a robust, identifiable and deliverable critical path, with logical sequencing covering the full specification. The Contract Programme must be in logic linked CPM network format showing the critical path(s), early start and finish dates, late start and finish dates and total float. The Manufacturer must submit the Contract Programme in both hardcopy and electronic formats (either XER or MS Project (2010 version or later)).
- not contain any activities that last longer than 60 Working Days, with the exception of submission review/acceptance, material fabrication/procurement activities.

- show achievable activity durations aligned to the productivity assumptions stated;
- include activity and total time risk allowances/floats which demonstrate adequate provision;
- show achievable activity durations aligned to stated productivity assumptions;
- show design, testing and commissioning and handover, acceptance activities and interdependencies (including activities carried out by others where there are interdependencies) are all identified, allowed for and compliant with all programme constraints; and
- include, but not be limited to, the following activities and milestones:
  - Key Dates;
  - Payment application Milestones;
  - Third party dependencies;
  - Mobilisation;
  - Design requirement affirmation;
  - Preliminary Unit Design commencement and completion;
  - Technical compliance confirmation;
  - Preliminary Unit Design submitted to the Purchaser;
  - Preliminary Unit Design approval;
  - Detailed Design commencement and completion;
  - Design integration with signalling systems;
  - Interdisciplinary reviews and checks, as applicable;
  - Detailed Design submitted to the Purchaser;
  - Detailed Design approval;
  - Procurement of material and long lead items;
  - Technical Assurance Plan (to include all test plans);
  - Component testing;
  - Completion of Static Tests and factory acceptance tests;
  - Delivery to Dynamic Test site;
  - Completion of Dynamic Tests (SAT on proxy test facility);

- Pre-delivery acceptance test (fault free mileage and operation);
- Plant and Machinery available for delivery to allow commencement of Infrastructure Testing;
- Delivery including delivery methods to Purchaser's specified site;
- production of training documentation, training of staff in the use and maintenance of the rail head profiling machine;
- Submission of operations and maintenance manual;
- Completion of Dynamic Testing and Infrastructure Testing on Crossrail Infrastructure (as such term is defined in Schedule 1A (Specification));
- Authorisation to place into service (APIS) – approved by the Office of Rail and Road;
- Take Over Certificate / Qualified Take Over Certificate; and
- Fleet Acceptance Certificate.

#### 1.4 Progress Monitoring

##### 1.4.1 Progress Meetings

Both Parties shall review progress every four weeks at an agreed location. These meetings will be recorded by the Purchaser with meeting minutes agreed, circulated to appropriate stakeholders and filed for project reference.

Where appropriate the Manufacturer may be requested to take part in intermediate review meetings with the Purchaser during the project. This may range from a brief review phone call, a video conference, or a face to face meeting.

##### 1.4.2 Progress Report

Five days in advance of a progress review meeting, the Manufacturer shall provide the Purchaser with a progress report containing details of the Design, manufacture, testing and commissioning, approval and acceptance phases of the project as appropriate, including:

- the up to date Contract Programme;
- commentary on any variances against previous programme submission;
- early warning notices issued by either party regarding any issues that may affect safety, the Contract Programme, quality or cost;
- risks and/or issues that have emerged related to the project; and
- narrative describing progress since the previous report including photos, where appropriate.

## 1.5 Communication

### 1.5.1 General Correspondence

The Purchaser shall provide the Manufacturer with templates for project communication and early warning notification between both parties.

Unless instructed otherwise, the Manufacturer shall submit all written documents (including programmes and drawings) to be provided pursuant to this Agreement:

- (i) in English;
- (ii) in electronic form;
- (iii) in good legible quality;
- (iv) where applicable , with incorporated definitions, a graphic scale, and/or any
- (v) other appropriate guide for interpretation; and
- (vi) under cover of a document transmittal.

All correspondence from either Party should be given a unique project communication reference number whenever issued. Project correspondence, technical queries and early warning notices are to be treated as everyday communication and should be sent via email. The address for such communication is [StuartHines-Randle@Crossrail.co.uk](mailto:StuartHines-Randle@Crossrail.co.uk).

## 1.6 Other Documentation

The Manufacturer shall provide the Purchaser with access to the ROBEL Secure Internet File System (SIFS) for sharing this information, which will be online via an internet based method.

## 1.7 Change Management

The following provide a link between the process for identification and resolution of technical issues and the formal variation procedure set out in Clause 23 of this Agreement.

### 1.7.1 Technical Queries

Requests for technical guidance, clarification etc. raised by the Manufacturer will be logged and attended to the Purchaser in a timely manner. The Purchaser will seek to respond within 10 Working Days of receipt of such requests.

### 1.7.2 Early Warning Mechanism

Where either party identifies a concern with regard to safety, the Contract Programme, quality or cost associated with delivery of the project then the relevant party shall issue an early warning notice. Such notices will be recorded and subject

to regular review to enable issues to be evaluated, prioritised and ultimately resolved or mitigated in a timely manner.

## 1.8 Risk Management

The Purchaser will apply a formal risk management process, recording any risks. The Manufacturer shall support the Purchaser with the identification, evaluation and development of mitigation actions and with the regular formal review of risks.

## 2. Pathway Templates

2.1 The Appendices to this Schedule 1B (*Management of Delivery*) include templates to be used by the Parties in respect of the following matters contemplated by this Schedule 1B (*Management of Delivery*):

2.1.1 Technical Query (Appendix 1 of Schedule 1B (*Management of Delivery*)); and

2.1.2 Early Warning Notice (Appendix 2 of Schedule 1B (*Management of Delivery*)).



**Appendix 2 – Early Warning Notice Form**

Purchaser _____		
Manufacturer _____		
Purchaser Representative _____		
<b>EARLY WARNING NOTICE</b>	<b>EW No.</b>	
Issued by		
Purchaser Representative to Manufacturer	<input type="checkbox"/>	
Manufacturer to Purchaser Representative	<input type="checkbox"/>	
Tick box as appropriate		
<b>Description of Early Warning</b>		
<b>Is the matter referred to above likely to</b>		
	Yes	No
Increase the Contract Price	<input type="checkbox"/>	<input type="checkbox"/>
Delay Take Over	<input type="checkbox"/>	<input type="checkbox"/>
Impair the performance of the Plant and Machinery in use	<input type="checkbox"/>	<input type="checkbox"/>
Is a meeting required	<input type="checkbox"/>	<input type="checkbox"/>
Tick box as appropriate		
Signed _____	(Purchaser Representative / Manufacturer*) <i>*delete as necessary</i>	Date _____

## **SCHEDULE 2: CONTRACT PROGRAMME**

Within the period stated in the Contract Particulars the Manufacturer shall, in accordance with Clause 8.1, submit a programme to the Purchaser Representative for his acceptance.

### **SCHEDULE 3: SPARES AND SPECIAL TOOLS**

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**SCHEDULE 3: SPARES AND SPECIAL TOOLS**

**PART A: MAINTENANCE SPARES**

Item	Quantity
[REDACTED]	[REDACTED]

**PART B: ADDITIONAL SPARES**

Item	Quantity
[REDACTED]	[REDACTED]

**PART C: SPECIAL TOOLS**

Item	Quantity
[REDACTED]	[REDACTED]

**SCHEDULE 3A: CONTINUING SUPPORT**

Design Department	██████ €
Assembly Department	██████ €
Machinist	██████ €
Electrician	██████ €
Lacquerer (incl. Lacquer)	██████ €
Field Service (Systems Engineering)	██████ €
Field Service (Service Technician)	██████ €
Field Service (Service Engineer)	██████ €
Field Service (Assembly Operator)	██████ €

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## **SCHEDULE 4: CONTRACT PRICE**

### **PART 1 – PRICING PREAMBLES**

#### **1. PRICING INTRODUCTION**

1.1 This Part 1 provides further details with respect to the Contract Price.

#### **2. PRICING CONCEPT**

2.1 The Contract Price is a fixed sum, for the duration of the Agreement, adjusted in accordance with the contractual Variation procedure. The VAT treatment of supplies pursuant to this Agreement shall be as set out in Clause 21 of this Agreement.

2.2 The Manufacturer will be provided facilities by the Purchaser for Infrastructure Tests, rectification of Defects during the Defect Rectification Period and for compliance with Schedule 3A (*Continuing Support*). Examples of facilities provided include, but are not limited to:

2.2.1 Temporary accommodation;

2.2.2 Health, welfare and safety equipment; and

2.2.3 Admin facilities at the Purchaser's Ruislip's depot, such as desks.

2.3 The Contract Price shall be inclusive of all costs and charges whatsoever and shall be deemed to include all costs, overheads, profit, risk allowances and the like required for the Manufacturer's performance of this Agreement.

#### **3. PRICING APPROACH**

3.1 The Contract Price shall be in Euros (€) and shall include all applicable taxes including any import/export taxes and all other statutory costs and the like but excluding VAT (which shall be dealt with pursuant to Clause 21 of this Agreement).

3.2 Notwithstanding paragraph 2.2 above, the rates and prices for all items and activities required for the Manufacturer's performance of this Agreement are deemed to be fully inclusive, and shall include (without limitation) the costs set out in paragraphs 3.2.1 to 3.2.5 below:

3.2.1 Preliminaries

The following preliminaries are included:

- (A) head office, branch office and Manufacturer's Works support - All head office, branch office and Manufacturer's Works costs directly related to this Agreement including, supervisory, liaison, engineering, planning, quality assurance and administrative staff costs (and includes all associated overheads, communications and data costs, stationery costs, printing costs and postage costs not included in the percentage addition for overheads and profit;

- (B) all costs of temporary accommodation and sanitary facilities necessary for site staff and all associated costs (including heating, lighting, furniture, first aid, associated consumables and all other safety, health and welfare facilities);
- (C) site communications - all costs in connection with the provision of telephones and portable telephones including installation costs, rental and calls, costs of usage of public telephones and other communication equipment and consumables required to enable the Manufacturer to perform its obligations under this Agreement;
- (D) training requirements - course and examination fees, all costs of staff attending medical examinations and training courses to enable the Manufacturer to perform its obligations under this Agreement, and all costs of Manufacturer-run courses and licensing of staff; and.
- (E) Insurance - all costs of complying with the insurance requirements as set out in this Agreement

### 3.2.2 Mobilisation

The mobilisation costs shall include (without limitation) staff costs, costs of training, recruitment, establishment of facilities, purchase of equipment, establishment of process and procedures etc and all other items necessary for the successful commencement of the performance of the Agreement. All costs in connection with mobilisation, set-up and the like and management thereof are deemed to be included.

### 3.2.3 Overheads and Profit

For the avoidance of doubt, overheads shall be deemed to include (without limitation) corporate overhead contribution, profit recovery, headquarters staff costs, Manufacturer offices, yards, depots and other buildings and associated plant, Manufacturer's equipment and vehicles. rents, rates, insurances, running, maintenance and replacement costs for the above, general and administrative head and branch office staff salaries and wages, emoluments, expenses and allowances and all other costs of employment, including costs of and allowance for motor cars, subsistence, hotels, accommodation and the like, travel and associated expenses for directors and general and administrative head and branch office staff, legal and accountancy fees and costs, any financing costs and depreciation associated with all of the above, other non-job related costs and other indirect costs incurred by the Manufacturer in performing its obligations under this Agreement.

### 3.2.4 Attendance and Reporting

The Contract Price is deemed to be fully inclusive of the costs that the Manufacturer incurs in recording and providing information in accordance with this Agreement including as requested by the Purchaser Representative. The Contract Price is also deemed to include the costs of the Manufacturer's personnel attending any meetings.

### 3.2.5 Administration of Change

The Contract Price is deemed to be fully inclusive of the costs that the Manufacturer incurs in recording and providing information in accordance with any Variation Quote, or in the costing or administration of the Variation Procedure.

## **PART 2 – PAYMENT**

### **1. CONTRACT PRICE**

- 1.1 The Manufacturer will be entitled to submit a payment application in respect of a Milestone upon completion of all of the stated criteria, as set out in Part 4 (Payment Milestones) for each relevant Milestone.

### **2. VARIATIONS**

- 2.1 Where a Variation varies the Contract Price, the Variation will be paid by varying the amount due at the relevant Milestone to which the Variation relates. Where the Variation relates to two or more Milestones, the value of the Variation will be divided between those Milestones, based on allocating the value of the Variation between the Milestones in proportion to the value of the Variation related to each Milestone.
- 2.2 Where a Variation varies the Contract Price and the Milestone to which the Variation relates has been paid, payment will be made by varying the amount due in respect of the subsequent Milestone.
- 2.3 Otherwise Variations will be paid once the instructed Variation has been fully completed, unless it is set out in the Variation that payment may be applied for on an interim basis.
- 2.4 Where a Variation does not relate to a Milestone, the Manufacturer will be entitled to apply for payment in respect of Variations at intervals of not less than a month. The Manufacturer may apply for payment of one or more Variations at the same time.

### **3. CONTINUING SUPPORT**

- 3.1 The Manufacturer will be entitled to payment for Schedule 3A (*Continuing Support*) upon completion of its obligations under Schedule 3A (*Continuing Support*) in accordance with the terms of this Agreement.

**PART 3 – CONTRACT PRICE BREAKDOWN**

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### PART 3 – CONTRACT PRICE BREAKDOWN (5)

#### Training

The tenderer shall list below a comprehensive list of cost items forming the training services to be provided under the contract. The tenderer is to enter a description of each item and its base currency cost in cells E267:G276 then input the quantity required for each respective item in cells F279:F288. The tenderer is to price inclusive of delivery to Delivery Location, including any protective packaging necessary to ensure safe arrival.

Item	Rate	Currency
		EUR
		EUR

Item	Quantity	Rate	Unit	Total	Notes
			EUR		
	-		- EUR	-	
	-		- EUR	-	
	-		- EUR	-	
	-		- EUR	-	
	-		- EUR	-	
	-		- EUR	-	
	-		- EUR	-	
	-		- EUR	-	
Total Training			EUR		

#### Technical Assurance & Design Management

The tenderer shall list below all cost items associated with Technical Assurance & Design Management, as detailed in Schedule 1A (Assurance) Management of Delivery. These cost items will include, but not be limited to, the below listed items. The tenderer is to enter a description of each item and its base currency cost in cells E301:G305 then input the quantity required for each respective item in cells F308:F317.

The list of heads of cost below is not intended to be exhaustive; additional items over and above those listed should be included by the tenderer as required.

Item	Rate	Currency
		EUR

Item	Quantity	Rate	Unit	Total	Notes
			- EUR	-	
			- EUR	-	
			- EUR	-	
Total Technical Assurance & Design Management			EUR		





## PART 5 – VALUATION OF VARIATIONS

### 1. SCHEDULE OF RATES AND PRICES

- 1.1 The rates and prices that shall be used to determine the value of Variations in accordance with Clause [REDACTED] are set out in Part 6 of this Schedule 4.
- 1.2 In respect of costs incurred or to be incurred by a third party, the basis of the valuation of this element of the Variation shall be a dated quotation from the third party, to which a [REDACTED] addition, to cover all overheads and profit, may be added. Where the Variation relates to goods, works or services which are significant in value and may be provided by a number of different organisations, the Purchaser Representative may request that the Manufacturer provides three (3) dated quotations and that the value of the Variation is based on the one that provides the Purchaser with the best value for money solution.
2. NOT USED

## PART 6 – SCHEDULE OF RATES AND PRICES

Design Department	[REDACTED] €
Assembly Department	[REDACTED] €
Machinist	[REDACTED] €
Electrician	[REDACTED] €
Lacquerer (incl. Lacquer)	[REDACTED] €
Field Service (Systems Engineering)	[REDACTED] €
Field Service (Service Technician)	[REDACTED] €
Field Service (Service Engineer)	[REDACTED] €
Field Service (Assembly Operator)	[REDACTED] €

**SCHEDULE 5: KEY PERSONNEL**

<u>Name</u>	<u>Department</u>	<u>Role</u>
	PM 69.70	Head of Special Equipment
	PM 69.40	Head of Work Vehicles
	Quality Management	Quality Management
	Approval	Approval and Risk Management
	Production Management	Head of Production Management
	Production Management	
	Technical Sales	Technical Sales Manager
	Technical Sales Manager	
	PM 69.60 (Special Equipment)	Deputy Head of Special Equipment
	PM 69.45 (Special Equipment)	Special Equipment, Work Scheduling
	Mechanics	Mechanic Design
	Hydraulic/Pneumatic	Hydraulic/Pneumatic Design
	Electric	Electric Design
	Documentation	Documentation
	Mechanics	Mechanic Design
	Hydraulic/Pneumatic	Hydraulic/Pneumatic Design
	Electric	Electric Design
	Documentation	Documentation
	Technology Management	Leader Design & Technic
	Hand Guided Machines &	Technical Business Development
	Purchase	Head of Purchasing Department
	Sales	Sales Account Executive
	International Sales	Head of International Sales
	Business Development	Head of Business Development
	Financial Accounting	Head of Financial Accounting
	Dispatch	Head of Transportation
	GL	Managing Director
	GL	Managing Director
	Department	Role
	PM 69.70	Head of Special Equipment
	PM 69.40	Head of Work Vehicles
	Quality Management	Quality Management
	Approval	Approval and Risk Management
	Production Management	Head of Production Management
	Production Management	

**SCHEDULE 6: FORM OF CERTIFICATES**

**PART A: FORM OF QUALIFIED TAKEOVER CERTIFICATE**

<b>QUALIFIED TAKE OVER CERTIFICATE</b>		
<b>TAKE OVER CERTIFICATE</b>	<b>TO No.</b>	
In accordance with Clause 12.4 (Take Over) I hereby certify: <ul style="list-style-type: none"> <li>• The Plant and Machinery to which this certificate relates can be operated safely and in accordance with all Applicable Laws and the terms of all Relevant Consents</li> <li>• That the following Take Over Criteria have not been satisfied:</li> </ul>		
<b>Take Over Criterion (as Clause 12.4.1)</b>	<b>Reason(s) not met</b>	
(B)		
(C)		
(D)		
(E)		
(F)		
(H)		
(I)		
Actual completion was	<b>Day</b>	<b>Month</b>
	<b>Year</b>	
In accordance with clause 12.5 (Qualified Take Over) the Manufacturer shall satisfy the following conditions and complete the following tasks:		
	<b>Condition to be satisfied / task to be performed</b>	<b>Timetable completion for</b>
1		
2		
3		
4		
5		
6		
7		
All the above must be complete on or before [date on which Fleet Acceptance is scheduled to occur pursuant to the Contract Programme]		
Signed _____ Purchaser Representative      Date _____		

Purchaser	_____
Manufacturer	_____
Purchaser Representative	_____

TAKE OVER CERTIFICATE, FOLLOWING QTOC

TO No.

In accordance with clause 12.5 (Qualified Take Over) of the above contract I hereby certify that following conditions have been satisfied / tasks have been performed:

--

Take Over was achieved on **Day** **Month** **Year**

Signed .....

Purchaser Representative

Date .....

**PART B: FORM OF TAKE OVER CERTIFICATE**

Purchaser	.....		
Manufacturer	.....		
Purchaser Representative	.....		
TAKE OVER CERTIFICATE	TO No.		
In accordance with Clause 12.4 (Take Over) of the above contract we hereby certify that the Goods specified in the schedule below was completed and has passed all Tests required by the Test Plan required to be performed prior to Take Over and the Take Over Criteria have been satisfied.			
<p>SCHEDULE</p> <p>[Plant and Machinery to which this certificate applies]</p>			
Planned completion was	<b>Day</b>	<b>Month</b>	<b>Year</b>
Signed .....	For the Manufacturer	Date .....	
Signed .....	Purchaser Representative	Date .....	

**PART C: FORM OF FLEET ACCEPTANCE CERTIFICATE**

Purchaser	
Manufacturer	
Purchaser Representative	
<b>FLEET ACCEPTANCE CERTIFICATE</b>	
In accordance with Clause 12.6 (Fleet Acceptance) of the above contract we hereby certify that the Fleet Acceptance Criteria have been satisfied.	
<p><b>SCHEDULE</b></p> <p>[Plant and Machinery to which this certificate applies]</p>	
Planned completion was	<b>Day</b> <b>Month</b> <b>Year</b>
Signed _____	For the Manufacturer      Date _____
Signed _____	Purchaser Representative      Date _____



3. The Guarantee is in addition to and not in substitution for any other security or warranty which the Company may at any time hold for the performance of any obligations, warranties, duties and undertakings under the Contract and may be enforced by the Company without first taking any proceedings or exhausting any right or remedy against the Supplier or any other person or taking any action to enforce any other security, bond or guarantee.
4. The Guarantor shall be under no greater obligation or greater liability under this Guarantee than it would have been under the Contract if it had been named as the Supplier in the Contract.
5. The obligations and liabilities hereunder shall remain in full force and effect and shall not be affected, lessened, impaired or discharged by:
  - (a) any alteration or variation to the terms of the Contract;
  - (b) any alteration in the extent or nature or sequence or method or timing or scope of the works, services or supplies to be carried out under the Contract;
  - (c) any extension of time being given to the Supplier or any other indulgence or concession to the Supplier or any forbearance, forgiveness or any other thing done, omitted or neglected to be done under the Contract;
  - (d) any other bond, security or guarantee now or hereafter held for all or any part of the obligations of the Supplier under the Contract;
  - (e) the release, modification, exchange or waiver of any such bond, security or guarantee;
  - (f) any amalgamation or reconstruction or dissolution including liquidation of the Supplier;
  - (g) the making of a winding up order, the appointment of a provisional liquidator, the passing of a resolution for winding up, liquidation, administration, receivership or insolvency of the Supplier;
  - (h) any legal limitation, disability or incapacity relating to the Supplier (whether or not known to you);
  - (i) any invalidity in, irregularity affecting or unenforceability of the obligations of the Supplier under the Contract;
  - (j) the termination of the Contract; or
  - (k) anything the Company or the Supplier may do or omit or neglect to do including, but without limitation, the assertion of or failure or delay to assert any right or remedy of the Company or the pursuit of any right or remedy by the Company.

6. Until all amounts which may be or become payable and all liabilities, obligations, warranties, duties and undertakings in respect of the Supplier's obligations have been irrevocably paid, performed or discharged in full, the Guarantor shall not, after a claim has been made or by virtue of any payment, performance or discharge by it under this Guarantee:
  - (a) be subrogated to any rights, security or moneys held, received or receivable by the Company or be entitled to any right of contribution or indemnity in respect of any payment made or moneys received on account of the Guarantor's liability under this Guarantee;
  - (b) claim, rank, prove or vote as a creditor of the Supplier or its estate in competition with the Company unless the Company so directs; or
  - (c) receive, claim or have the benefit of any payment distribution or security from or on account of the Supplier, or exercise any right of set-off against the Supplier unless the Company so directs.
7. This Guarantee is irrevocable.
8. The benefit of this Guarantee may be assigned by the Company at any time to any assignee of the benefit of the whole of the Contract. No further or other assignments shall be permitted.
9. The Guarantor:
  - (a) gives the guarantee contained in this Guarantee as principal obligor and not merely as surety;
  - (b) agrees to indemnify the Company on written demand against any loss or liability suffered by it if any provision set out in the Contract guaranteed by the Guarantor becomes unenforceable, invalid or illegal, and
  - (c) waives any right it may have of first requiring the Company to proceed against, or enforce any other rights or security or claim payment from, any person before claiming from the Guarantor under this Guarantee.
10. Until all amounts which may be or become payable in respect of the Supplier's obligations have been irrevocably paid in full by the Guarantor, the Company may:
  - (a) refrain from applying or enforcing any other moneys, security or rights held or received by the Company in respect of those amounts, or apply and enforce the same in such manner



and

) Authorised Signatory

) Authorised Signatory

).....

Executed as a deed by affixing the Common Seal of

[COMPANY] )

in the presence of: - )

.....

*[Authorised Signatory]*

Executed as a Deed by [SUPPLIER] )

acting by

) .....

) Authorised Signatory

and

) Authorised Signatory

).....

**SCHEDULE 8: FORM OF TECHNICAL SERVICES AND SPARES SUPPLY  
AGREEMENT**

The form of Technical Services and Spares Supply Agreement shall be agreed by the Parties as soon as reasonably practicable following execution of this Agreement by both Parties.

## SCHEDULE 9: INSURANCE

The Manufacturer shall procure and maintain the insurances as listed below with reputable insurers. The Manufacturer shall ensure any Subcontractors also maintain adequate insurance having regard to their obligations under the relevant Subcontract. Such insurances shall be in effect for the duration of the contract unless otherwise specified. Evidence that such insurance is in effect shall be provided in the form of a broker's letter or similar, within fourteen (14) days of the Commencement Date and at the time of each renewal of such policies. If the Manufacturer fails to maintain the insurance policies as provided in this Schedule 9 (*Insurance*), the Purchaser may effect and keep in force any such insurance and pay such premium or premiums at commercially competitive rates as may be necessary for that purpose and from time to time deduct the amount so paid from any monies due or which become due to the Manufacturer or recover the same as a debt due from the Manufacturer.

- 1.1 Insurance to cover liability for death of or bodily injury or illness sustained by employees of the Manufacturer arising out of or in the course of their employment. Such insurance shall be of an amount and on terms that comply with the appropriate statutory obligations in each country in which the Manufacturer operates.
- 1.2 Public Liability insurance of not less than [REDACTED] per incident or series of incidents arising out of one event; such insurance to cover sums for which the Manufacturer shall be legally liable to pay as damages in respect of death or injury or illness or disease to third parties and/or loss of or damage to third party property. Such insurance shall extend to indemnify the Purchaser as principal, and shall be endorsed such that any care, custody or control exclusion shall not apply to property belonging to the Purchaser or for which the Purchaser is responsible.
- 1.3 Product Liability insurance of not less than [REDACTED] per incident or series of incidents arising out of one event; such insurance to cover sums for which the Manufacturer shall be legally liable to pay as damages in respect of death or injury or illness or disease to third parties and/or loss of or damage to third party property arising as a result of a defect, fault or flaw in the goods supplied. Such insurance shall extend to indemnify the Purchaser as principal, and shall be endorsed such that any care, custody or control exclusion shall not apply to property belonging to the Purchaser or for which the Purchaser is responsible.
- 1.4 Erection All Risk Insurance to cover risks of physical loss or damage to the Goods until Take Over; such insurance shall extend to cover any damage to the Goods by the Purchaser after delivery and prior to Take Over.
- 1.5 Insurance to cover all risk of loss or damage (including theft) to property, the Goods, Plant and Machinery whilst in transit from one place to another or being stored during a journey, whether by land, rail, sea or air.
- 1.6 In the event that the Infrastructure Tests require the Goods to be tested and operated on Network Rail infrastructure, the Purchaser shall use reasonable endeavours to ensure that sufficient public liability insurance is maintained in order to comply with the requirements of the Office of Rail and Road and Network Rail. The Manufacturer shall co-operate with any requests for information to enable such insurance to be effected or with respect to compliance with the terms of the Purchasers' insurances.

## SCHEDULE 10: DISPUTE RESOLUTION PROCEDURE

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

"**Adjudicator**" means an independent person appointed to act as an adjudicator in accordance with paragraph 8 of this Schedule 10 (*Dispute Resolution Procedure*).

"**Dispute**" means any dispute, controversy or claim arising out of or in connection with this Agreement.

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

"**Notice of Adjudication**" means any notice given by a Party to the other party or parties to the Dispute requiring reference of a Dispute to the Adjudicator in accordance with paragraph 7. The Notice of Adjudication shall include:

- (i) the nature and a brief description of the Dispute;
- (ii) details of where and when the Dispute arose; and
- (iii) the nature of the redress which is sought.

"**Referral Notice**" means a notice referring a Dispute to the Adjudicator in accordance with paragraph 11;

"**Senior Representative**" means a representative of a Party at senior executive level.

- 1 The Purchaser and the Manufacturer shall follow the procedure set out in this Schedule 10 (*Dispute Resolution Procedure*) for the management and resolution of Disputes.
- 2 Subject to paragraph 7, any Dispute may in the first instance be referred in writing from the referring Party to the Senior Representatives by notice in writing to the other Party. The written notice from the referring Party shall give brief written particulars of the Dispute, the relief sought and the basis for claiming the relief sought (including the provisions of this Agreement that are relevant to the Dispute). The written notice shall also identify the referring Party's Senior Representative.
- 3 Within fourteen (14) days of receipt of the notice pursuant to paragraph 2, the responding Party provides the referring Party with a brief written response. The response includes identification of the responding Party's Senior Representative.
- 4 The Senior Representatives shall meet and try to reach agreement to resolve the Dispute referred to them pursuant to paragraph 3.
- 5 If the Senior Representatives are unable to, or fail to, reach agreement to resolve the Dispute within fourteen (14) days after the date of the response under paragraph 3, court proceedings shall not be commenced unless and until the Dispute has first been referred to adjudication (and an Adjudicator's decision has been obtained) in accordance with the

procedure in paragraphs 7–28 and notice has been given in accordance with paragraph 29.

6 Each Party bears its own costs and expenses in relation to any reference of a Dispute to the Senior Representatives. Discussions amongst the Senior Representatives and any documents prepared or exchanged in relation to the reference of the Dispute to the Senior Representatives (including, for the avoidance of doubt, the notice under paragraph 2 and any response under paragraph 3) are without prejudice and the Parties shall not make use of or rely upon any without prejudice statements in any proceedings.

7 Notwithstanding the provisions of paragraphs 1, 2, 3, 4, 5 and 6, either Party may give notice at any time of its intention to refer a Dispute to adjudication under the procedure set out in paragraphs 7–29 by giving a Notice of Adjudication to the other parties to the Dispute.

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

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

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

9 Any person requested or selected to act as the Adjudicator in accordance with paragraph 8:

9.1 shall be a natural person acting in his personal capacity; and

9.2 shall not be an employee of any of the parties to the Dispute, and shall declare any interest, financial or otherwise, in any matter relating to the Dispute

10 The terms of remuneration of the Adjudicator shall be agreed by the parties to the Dispute and the Adjudicator with the object of securing the appointment of the Adjudicator within seven (7) days of the Notice of Adjudication. If any party to the Dispute (but not all parties to the Dispute) rejects the terms of the remuneration of the Adjudicator the same shall be settled (and binding upon the parties to the Dispute) by agreement between the Nominating Authority and the Adjudicator (provided that the level of the Adjudicator’s remuneration does not exceed the level originally proposed to the parties to the Dispute by the Adjudicator). If all the parties to the Dispute reject the terms of remuneration proposed by an Adjudicator another person shall be selected as an Adjudicator in accordance with paragraph 8.

11 Where the Adjudicator has been selected in accordance with paragraph 8 the referring Party shall refer the Dispute in writing to the Adjudicator by the Referral Notice in accordance with paragraph 12 within seven (7) days of the date of the Notice of Adjudication or within two (2) days of the date of appointment of the Adjudicator, whichever is later. Upon receipt of the Referral Notice, the Adjudicator must inform

every Party to the dispute of the date that it was received.

12 The Referral Notice shall:

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

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

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

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

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

a person shall be appointed to replace the Adjudicator in accordance with the provisions of paragraph 8. In the event of the parties to the Dispute failing to jointly appoint a person willing and suitable to act as replacement Adjudicator within three (3) days, any party to the Dispute may apply to the Nominating Authority to appoint a replacement

Adjudicator. In any case where the Adjudicator is appointed as a replacement pursuant to this paragraph 14, the parties to the Dispute shall each send to the Adjudicator, as soon as reasonably practicable, copies of all documents supplied by them to the Adjudicator he replaces.

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

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

17 The Adjudicator shall reach his decision and give notice of the decision to the parties to the Dispute within twenty eight (28) days of the date of receipt of the Referral Notice mentioned in paragraph 11, or such longer period as is agreed by the parties to the Dispute after the Dispute has been referred to him. Notice of the Adjudicator's decision (stating that it is given under this Schedule 10 (*Dispute Resolution Procedure*)) shall be in writing and shall include a summary of the Adjudicator's findings and a statement of the reasons for his decision.

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

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

20 The Adjudicator:

20.1 shall act impartially and as an expert (not as an arbitrator) in the conduct of the reference and in reaching his decision;

20.2 shall consider any relevant information submitted to him by any of the parties to the Dispute and make available to them any information to be taken into account in reaching his decision provided in accordance with the procedure (if any) which

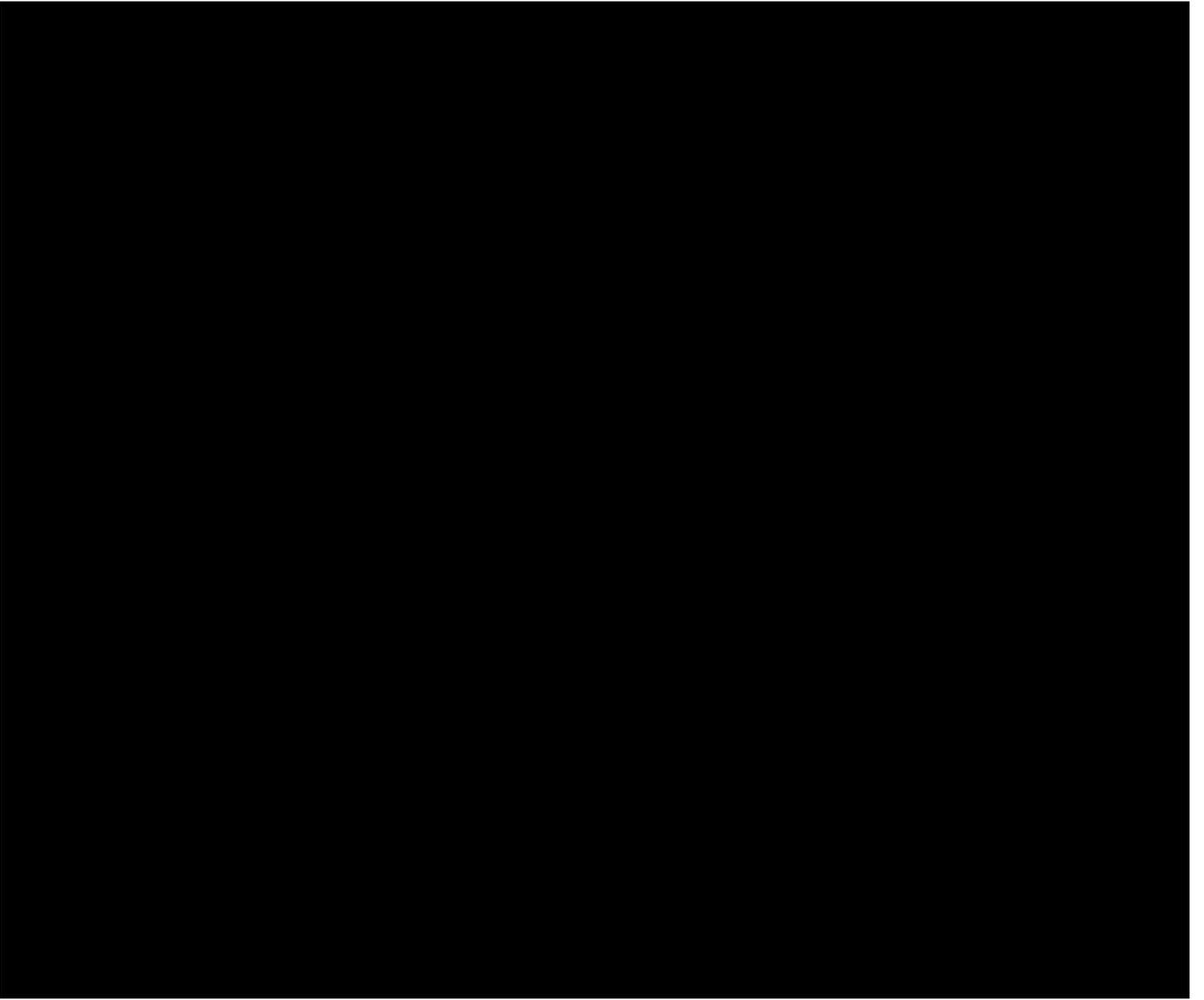
- the Adjudicator may decide;
- 20.3 shall reach his decision in accordance with the law applicable to this Agreement;
- 20.4 may take the initiative in ascertaining the facts and the law in relation to the Dispute;
- 20.5 may with the consent of the parties to the Dispute seek legal or technical advice from consultants whose appointment by the Adjudicator (including terms of remuneration) is subject to the approval of the parties to the Dispute;
- 20.6 shall, where a translation of any document is required, decide by whom it should be provided in the event that the parties to the Dispute do not agree.
- 21 The Adjudicator shall decide in his discretion on the procedure to be followed in the adjudication. In particular he may, but is not obliged to:
- 21.1 convene meetings upon reasonable notice to the parties to the Dispute at which such parties and their representatives are entitled to be present;
- 21.2 submit lists of questions to the parties to the Dispute to be answered in such meetings or in writing within such reasonable time as he requires;
- 21.3 require the parties to the Dispute to provide him with such information and other facilities as he reasonably requires for the determination of the Dispute;
- 21.4 otherwise take such action and adopt such procedures as do not conflict with any of the provisions of this Agreement and are reasonable and proper for the just, expeditious and economical determination of the Dispute;
- 21.5 inspect any part of the Railway Infrastructure, the Manufacturer's Works or the facilities of any relevant Subcontractor.
- 22 The Adjudicator shall not be liable for anything done or omitted in the discharge or purported discharge of his functions as an adjudicator unless the act or omission is in bad faith. The Parties also agree that any employee or agent of the Adjudicator shall be similarly protected from liability.
- 23 All meetings are private and save as required by law the Adjudicator and the Parties shall keep confidential the Dispute, all information of whatever nature provided to him by or on behalf of any Party and his decision.
- 24 The Parties to a contract to which the Dispute relates shall continue to observe and perform all the obligations contained in such contract, notwithstanding any reference to the Adjudicator, and insofar as the same is consistent with any safety review procedures to which the parties to the Dispute are bound, give effect forthwith to the Adjudicator's decision in every respect unless and until as hereinafter provided the Dispute is finally determined by a court in any legal proceedings, by arbitration (if the parties otherwise agree to arbitration) or by agreement. Any party to the Dispute may apply to any appropriate court for enforcement of the Adjudicator's decision. Neither any form of enforcement of the Adjudicator's decision nor any form of challenge to the enforcement

of the Adjudicator's decision nor any dispute arising out of or in connection with such enforcement or challenge are regarded and treated as a Dispute for the purposes of this Schedule 10 (*Dispute Resolution Procedure*).

- 25 After the giving of a Notice of Adjudication, the Parties may seek to agree how the Adjudicator allocates the costs and fees excluding his remuneration and expenses which are dealt with in paragraph 26 below of the adjudication as between the Parties. If such an agreement is reached between the Parties, they shall notify the Adjudicator, who shall allocate costs and fees in accordance with such agreement. The Parties agree to be bound by the Adjudicator's allocation of costs and fees and to pay such costs and fees in accordance with the Adjudicator's direction unless and until the direction of the Adjudicator is set aside or revised by a court pursuant to any legal proceedings.
- 26 Subject to any agreement of the Parties, the Adjudicator shall allocate payment of his remuneration and expenses as between the Parties. Unless the Parties otherwise agree, the Adjudicator awards the payment of his remuneration and expenses on the general principle that costs should follow the event, except where it appears to the Adjudicator that in the circumstances this is not appropriate in relation to the whole or part of his remuneration or expenses. The Parties agree to be bound by the Adjudicator's allocation of payment of his remuneration and expenses and pay such remuneration and expenses in accordance with the Adjudicator's direction unless and until the direction of the Adjudicator is set aside or revised by a court pursuant to any legal proceedings.
- 27 All notices, written submissions and any other written communications between the parties to the Dispute and the Adjudicator shall either be delivered by hand, sent by facsimile or sent by first class pre-paid post or recorded delivery (airmail if posted to or from a place outside the United Kingdom) and, in each case, copied simultaneously (delivered or sent as aforesaid) to the other Parties. Copies by way of confirmation of all communications by facsimile between the parties to the Dispute and the Adjudicator shall also be sent by first class post (airmail if posted to or from a place outside the United Kingdom) not later than the next following Working Day the date of the original facsimile transmission.
- 28 All information of whatever nature provided to the Adjudicator by any party to the Dispute shall be copied to the other parties simultaneously.
- 29 If any party to a Dispute is dissatisfied with the Adjudicator's decision on that Dispute, that party may commence court proceedings for the final determination of the Dispute.







[REDACTED]

**SCHEDULE 12: NOT USED**

## Single Licensee Escrow Agreement<sup>1</sup>

Date: [ ]

Owner: [ ]

Agreement Number: [ ]

Notice: The parties to this Agreement are obliged to inform NCC Group of any changes to the Escrow Materials or in their circumstances (including change of name, registered office, contact details or change of owner of the intellectual property in the Escrow Materials)

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<sup>1</sup> This agreement has been negotiated with the NCC Group. Any proposed amendments should be agreed with the Legal team prior to being sent to either the Owner or NCC Group

**Escrow Agreement Dated:**

**Between:**

- (1) [ ] whose registered office is at [ ] (Company Registration Number: 01139050) ("**Owner**");
- (2) **TRANSPORT FOR LONDON**, a statutory corporation established under the Greater London Authority Act 1999 of Windsor House, 42-50 Victoria Street, London SW1H 0TL<sup>2</sup> ("**Licensee**"); and
- (3) **NCC GROUP ESCROW LIMITED** a company registered in England whose registered office is at Manchester Technology Centre, Oxford Road, Manchester M1 7EF, ENGLAND (CRN: 3081952) ("**NCC Group**").

**Background:**

- (A) The Licensee has been granted a licence to use the Software which comprises computer programs.
- (B) Certain technical information and/or documentation relating to the Software is the confidential information and intellectual property of ROBEL (which has granted the Owner the right to license such information and/or documentation to the Licensee and to enter into this Agreement) or a third party.
- (C) The Owner acknowledges that in certain circumstances, such information and/or documentation would be required by the Licensee in order for it to continue to exercise its rights under the Licence Agreement.
- (D) The parties therefore agree that such information and/or documentation should be placed with a trusted third party, NCC Group, so that such information and/or documentation can be released to the Licensee should certain circumstances arise.

**Agreement:**

In consideration of the mutual undertakings and obligations contained in this Agreement, the parties agree that:

**1 Definitions and Interpretation**

1.1 In this Agreement the following terms shall have the following meanings:

"**Agreement**" means the terms and conditions of this escrow agreement set out below, including the schedules hereto.

"**Confidential Information**" means all technical and/or commercial information not in the public domain and which is designated in writing as confidential by any party together with all other information of any party which may reasonably be regarded as confidential information.

"**Escrow Materials**" means the Software and Source Code.

"**Fleet Acceptance Longstop Date**" means 15 December 2019.

"**Full Verification**" means the tests and processes forming NCC Group's Full Verification service and/or such other tests and processes as may be agreed between the parties for the verification of the Escrow Materials.

"**Independent Expert**" means a suitably qualified and independent solicitor or barrister.

"**Integrity Testing**" means those tests and processes forming NCC Group's Integrity Testing service, in so far as they can be applied to the Escrow Materials.

"**Intellectual Property Rights**" mean any copyright, patents, design patents, registered designs, design rights, utility models, trademarks, service marks, trade secrets, know how, database rights, moral rights, confidential information, trade or business names, domain names, and any other rights of a similar nature including industrial and proprietary rights and other similar protected rights in any country or jurisdiction together with all registrations, applications to register and rights to apply for registration of any of the aforementioned rights and any licences of or in respect of such rights.

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<sup>2</sup> Where the contracting party is a different TfL Group company then these details will need to be amended accordingly.

"**Licence**" means the licence granted to the Licensee to use the Software.

"**Licence Agreement**" means the agreement listed in schedule 3 under which the Licensee was granted the Licence.

"**Order Form**" means the order form setting out the details of the order placed with NCC Group for setting up this Agreement.

"**Release Purposes**" means the purposes of understanding, maintaining, modifying and correcting the Software exclusively for and on behalf of the Licensee together with such other purposes (if any) as are permitted under the Licence Agreement.

"**Release Events**" has the meaning given to it in Clause 6.1 of this Agreement.

"**ROBEL**" means Robel Bahnbaumaschinen GmbH, a member of the Owner's Group, being a company incorporated in Germany with registered number HRB 181, and having its registered office at Industriestr. 31, Freilassing, 83395, Germany.

"**Software**" means the software package together with any updates and upgrades thereto and new versions thereof licensed to the Licensee under the Licence Agreement.

"**Source Code**" means the computer programming code of the Software in human readable form and such other material and documentation (including updates and upgrades thereto and new versions thereof) as are necessary to be delivered or deposited to comply with clause 2 of this Agreement.

"**Third Party Material**" means Source Code which is not the confidential information and intellectual property of the Owner or the Licensee.

1.2 This Agreement shall be interpreted in accordance with the following:

1.2.1 headings are for ease of reference only and shall not be taken into consideration in the interpretation of this Agreement;

1.2.2 all references to clauses and schedules are references to clauses and schedules of this Agreement; and

1.2.3 all references to a party or parties are references to a party or parties to this Agreement.

## 2 Owner's Duties and Warranties

2.1 The Owner shall:

2.1.1 deliver a copy of the Escrow Materials each time there is a change to such item of Escrow Materials;

2.1.2 ensure that each item of the Escrow Materials deposited with the NCC Group comprises the latest version of such item of information or documentation used by the Licensee and, where such item comprises the Source Code, ensure that each copy of the Source Code comprises the Source Code of the latest version of the Software used by the Licensee;

2.1.3 deliver to NCC Group a replacement copy of the relevant Escrow Materials within 30 days after the anniversary of the last delivery of the relevant Escrow Materials to ensure that the integrity of the Escrow Material media is maintained;

2.1.4 deliver a replacement copy of the Escrow Materials to NCC Group within 14 days of a notice given to it by NCC Group under the provisions of clause 4.1.3;

2.1.5 deliver with each deposit of the Escrow Materials the following information:

2.1.5.1 details of the deposit including, where applicable, the full name of the relevant Escrow Material (i.e. the original name as set out under schedule 1 together with any new names given to the Escrow Materials by the Owner), version details, media type, backup command/software used, compression used, archive hardware and operating system details; and

- 2.1.5.2 password/encryption details required to access the Escrow Materials;
- 2.1.5.3 any other information or documentation required to be disclosed under any Licence Agreement or to facilitate the use of any of the Escrow Materials.
- 2.1.6 deliver with each deposit of the Source Code the following technical information (where applicable):
  - 2.1.6.1 documentation describing the procedures for building, compiling and installing the software, including names and versions of the development tools;
  - 2.1.6.2 software design information (e.g. module names and functionality); and
  - 2.1.6.3 name and contact details of employees with knowledge of how to maintain and support the Source Code; and
- 2.1.7 if required by the Licensee, use its best endeavours to obtain the right to deposit a backup copy of the object code of any third party software package and any other information or documentation required to access, install, build or compile or otherwise use the Source Code.
- 2.2 The Owner warrants to both NCC Group and the Licensee at the time of each deposit of the Escrow Materials with NCC Group that:
  - 2.2.1 other than any third party object code referred to in clause 2.1.7, any Third Party Material or any Escrow Materials owned by the Licensee by virtue of the provisions of the Licence Agreement, ROBEL owns the Intellectual Property Rights in the Escrow Materials and the Owner is authorised by ROBEL to enter into this Agreement;
  - 2.2.2 in respect of any Third Party Material, it has been granted valid and ongoing rights under licence by the third party owner(s) thereof to deal with such Third Party Material in the manner anticipated under this Agreement and that the Owner has the express authority of such third party owner(s) to deposit the Third Party Material under this Agreement as evidenced by a signed letter of authorisation in the form required by NCC Group;
  - 2.2.3 in entering into this Agreement and performing its obligations under it, it is not in breach of any of its ongoing express or implied obligations to any third party(s);
  - 2.2.4 the Source Code deposited under clause 2.1 contains all information in human-readable form (except for any third party object code deposited pursuant to clause 2.1.8) and is on suitable media to enable a reasonably skilled programmer or analyst to understand, maintain, modify and correct the Software; and
  - 2.2.5 in respect of any third party object code that the Owner, at its option, or, at the request of the Licensee, deposits with NCC Group in conjunction with the Source Code pursuant to clause 2.1.7, it has the full right and authority to do so.

### **3 Licensee's Responsibilities and Undertakings**

- 3.1 The Licensee shall notify NCC Group of any change to the Escrow Materials that necessitates a replacement deposit of the Escrow Materials.
- 3.2 In the event that the Escrow Materials are released under clause 6, the Licensee shall, subject to the terms of the Licence Agreement:
  - 3.2.1 keep the Escrow Materials confidential at all times and ensure that any other person to whom the Escrow Materials is disclosed pursuant to clause 3.2.3 does the same;
  - 3.2.2 use the Escrow Materials only for the Release Purposes;
  - 3.2.3 not disclose the Escrow Materials to any person save as permitted under the terms of any relevant Licence Agreement or as otherwise required for the Release Purposes;
  - 3.2.4 hold all media containing the Escrow Materials in a safe and secure environment when not in use; and

3.2.5 forthwith destroy the Escrow Materials should the Licensee cease to be entitled to use the Escrow Materials under the terms of the Licence Agreement.

3.3 In the event that the Escrow Materials are released under clause 6, it shall be the responsibility of the Licensee to obtain the necessary licences to utilise the object code of any third party material deposited by the Owner pursuant to clause 2.1.8.

#### 4 NCC Group's Duties

4.1 NCC Group shall:

4.1.1 at all times during the term of this Agreement, retain the latest deposit of the Escrow Materials in a safe and secure environment;

4.1.2 inform the Owner and the Licensee of the receipt of any deposit of the Escrow Materials by sending to both parties a copy of the Integrity Testing report or Full Verification report (as the case may be) generated from the testing processes carried out under clause 10; and

4.1.3 notify the Owner and the Licensee if it becomes aware at any time during the term of this Agreement that the copy of the Escrow Materials held by it has been lost, damaged or destroyed so that a replacement may be obtained.

4.2 In the event of failure by the Owner to deposit any Escrow Materials with NCC Group, NCC Group shall not be responsible for procuring such deposit and may, at its sole discretion, notify the Licensee of the Owner's failure to deposit any Escrow Materials.

4.3 NCC Group may appoint agents, contractors or sub-contractors as it deems fit to carry out the Integrity Testing and the Full Verification processes. NCC Group shall ensure that any such agents, contractors and sub-contractors are bound by the same confidentiality obligations as are contained in clause 8.

4.4 NCC Group has the right to make such copies of the Escrow Materials as may be necessary solely for the purposes of this Agreement.

#### 5 Payment

5.1 The parties shall pay NCC Group's standard fees and charges as published from time to time or as otherwise agreed, in the proportions set out in schedule 2. NCC Group's fees as published are exclusive of value added tax.

5.2 NCC Group shall be entitled to review and vary its standard fees and charges for its services under this Agreement from time to time but no more than once a year and only upon 45 days written notice to the parties.

5.3 All invoices are payable within 30 days from the date of invoice. NCC Group reserves the right to charge interest in respect of the late payment of any sum due under this Agreement (both before and after judgement) at the rate of 2% per annum over the prevailing base rate of HSBC Bank Plc accruing on a daily basis from the due date therefor until full payment.

#### 6 Release Events

6.1 Subject to: (i) the remaining provisions of this clause 6 and (ii) the receipt by NCC Group of its release fee and any other fees and interest (if any) outstanding under this Agreement, NCC Group will release the Escrow Materials to a duly authorised officer of the Licensee if any of the following events ("**Release Event(s)**") occur:

6.1.1 if the Owner is a company:

6.1.1.1 an order is made for the winding up of the Owner, the Owner passes a resolution for winding up (other than for the purposes of a solvent reconstruction or amalgamation) or a liquidator of the Owner is appointed; or

6.1.1.2 an order is made for the appointment of an administrator of the Owner or an administrator of the Owner is appointed; or

6.1.1.3 the Owner enters into a compromise or arrangement with creditors; or

- 6.1.1.4 the Owner has a receiver, administrative receiver or manager appointed over all or any part of its assets or undertaking; or
- 6.1.1.5 the Owner is dissolved; or
- 6.1.2 if the Owner is an individual:
  - 6.1.2.1 the Owner enters into a compromise or arrangement with creditors; or
  - 6.1.2.2 the Owner is declared bankrupt; or
  - 6.1.2.3 the Owner dies; or
- 6.1.3 if the Owner is a partnership:
  - 6.1.3.1 any of the partners in the Owner are declared bankrupt or enter into a compromise or arrangement with creditors; or
  - 6.1.3.2 the Owner is wound up or dissolved; or
  - 6.1.3.3 the Owner enters into a compromise or arrangement with creditors; or
  - 6.1.3.4 a partnership administration order is made in respect of the Owner; or
- 6.1.4 any similar or analogous proceedings or event to those in clauses 6.1.1 to 6.1.3 above occurs in respect of the Owner within any jurisdiction outside England; or
- 6.1.5 the Owner ceases to carry on its business or the part of its business which relates to the Escrow Materials; or
- 6.1.6 the Owner assigns its rights to the Intellectual Property Rights in the Escrow Materials to a third party ("**Assignee**") and the Assignee fails, within 60 days of all parties' knowledge of such assignment, to continue escrow protection for the benefit of the Licensee by failing to enter into either:
  - 6.1.6.1 a novation agreement with the Licensee and NCC Group for the assumption of the Owner's rights and obligations under this Agreement by the Assignee; or
  - 6.1.6.2 a new escrow agreement with the Licensee for the Escrow Materials which offers the Licensee substantially similar protection to that provided by this Agreement without significantly increasing the overall cost to the Licensee, provided that if the Assignee offers to enter into a novation or new escrow agreement within 60 days of all parties' knowledge of the assignment and the Licensee fails to accept the Assignee's offer within 30 days of such offer being notified to the Licensee, there shall be no Release Event under this clause; or
- 6.1.7 the Owner or, where relevant, its agent, parent, subsidiary or associated company is in material breach of its obligations under the relevant Licence Agreement or any maintenance agreement entered into in connection with the Escrow Materials and has failed to remedy such default as required by the terms of the Licence Agreement or such maintenance agreement.
- 6.2 The Licensee must notify NCC Group of the Release Event specified in clause 6.1 by delivering to NCC Group a statutory or notarised declaration ("**Declaration**") made by an officer of the Licensee declaring that such Release Event has occurred, setting out the facts and circumstances of the Release Event, that the Licence Agreement and any maintenance agreement, if relevant, for the Escrow Materials was still valid and effective up to the occurrence of such Release Event and exhibiting such documentary evidence in support of the Declaration as NCC Group shall reasonably require.
- 6.3 Upon receipt of a Declaration from the Licensee claiming that a Release Event has occurred:
  - 6.3.1 NCC Group shall submit a copy of the Declaration to the Owner by courier or other form of guaranteed delivery; and

- 6.3.2 unless within 14 days after the date of despatch of the Declaration by NCC Group, NCC Group receives a counter-notice signed by a duly authorised officer of the Owner stating that in their view no such Release Event has occurred or, if appropriate, that the event or circumstance giving rise to the Release Event has been rectified as shown by documentation in support thereof,

NCC Group will release the Escrow Materials to the Licensee for its use for the Release Purposes.

- 6.4 Upon receipt of the counter-notice from the Owner under clause 6.3.2, NCC Group shall send a copy of the counter-notice and any supporting evidence to the Licensee by courier or other form of guaranteed delivery.
- 6.5 Upon receipt by the Licensee of the counter-notice from NCC Group or, in any event, within 90 days of despatch of the counter-notice by NCC Group, the Licensee may give notice to NCC Group that they wish to invoke the dispute resolution procedure under clause 7.
- 6.6 If, within 90 days of despatch of the counter-notice by NCC Group to the Licensee, NCC Group has not been informed by the Licensee that they wish the dispute resolution procedure under clause 7 to apply, the Declaration submitted by the Licensee will be deemed to be no longer valid and the Licensee shall be deemed to have waived their right to release of the Escrow Materials for the particular reason or event specified in the original Declaration.
- 6.7 For the avoidance of doubt, where a Release Event has occurred under clauses 6.1.1 to 6.1.5, a subsequent assignment of the Intellectual Property Rights in the Escrow Materials shall not prejudice the Licensee's right to release of the Escrow Materials and its use for the Release Purposes.

## **7 Disputes**

- 7.1 NCC Group shall notify the Owner of the Licensee's request for dispute resolution. Unless the Owner or the Licensee objects, NCC Group's Chief Executive Officer for the time being will appoint an Independent Expert to resolve the dispute. If the Owner or the Licensee objects to this appointment, they shall endeavour to appoint a mutually acceptable Independent Expert within 7 days of registering their objection. If they fail to appoint an Independent Expert within this 7 day period, NCC Group shall request that the President of The Law Society appoints an Independent Expert to resolve the dispute. Any appointment of an Independent Expert under this clause shall be binding upon the parties.
- 7.2 Within 5 working days of the appointment of the Independent Expert, the Owner and the Licensee shall each provide full written submissions to the Independent Expert together with all relevant documentary evidence in their possession in support of their claim.
- 7.3 The Independent Expert shall be requested to give a decision on the matter within 14 days of the date of referral or as soon as practicable thereafter and to send a copy of that decision to the Owner, Licensee and NCC Group. The Independent Expert's decision shall be final and binding on all parties and shall not be subject to appeal to a court in legal proceedings except in the case of manifest error.
- 7.4 If the Independent Expert's decision is in favour of the Licensee, NCC Group is hereby authorised to release and deliver the Escrow Materials to the Licensee within 5 working days of the decision being notified by the Independent Expert to the parties.
- 7.5 The parties hereby agree that the costs and expenses of the Independent Expert shall be borne by the party against whom the decision of the Independent Expert is given.

## **8 Confidentiality**

- 8.1 The Escrow Materials shall remain at all times the confidential and intellectual property of its owner.
- 8.2 Subject to the terms of the Licence Agreement, in the event that NCC Group releases the Escrow Materials to the Licensee, the Licensee shall be permitted to use the Escrow Materials only for the Release Purposes.
- 8.3 NCC Group agrees to keep all Confidential Information relating to the Escrow Materials that comes into its possession or to its knowledge under this Agreement in strictest confidence and secrecy. NCC Group further agrees not to make use of such information and/or

documentation other than for the purposes of this Agreement and, unless the parties should agree otherwise in writing, will not disclose or release it other than in accordance with the terms of this Agreement.

## **9 Intellectual Property Rights**

- 9.1 The release of the Escrow Materials to the Licensee will not act as an assignment of any Intellectual Property Rights that the Owner, ROBEL or any third party possesses in the Escrow Materials.
- 9.2 The Intellectual Property Rights in the Integrity Testing report and any Full Verification report shall remain vested in NCC Group. The Owner and the Licensee shall each be granted a non-exclusive right and licence to use such report for the purposes of this Agreement and their own internal purposes only.

## **10 Integrity Testing and Full Verification**

- 10.1 NCC Group shall bear no obligation or responsibility to any party to this Agreement or person, firm, company or entity whatsoever to determine the existence, relevance, completeness, accuracy, operation, effectiveness, functionality or any other aspect of the Escrow Materials received by NCC Group under this Agreement.
- 10.2 As soon as practicable after the Escrow Materials has been deposited with NCC Group, NCC Group shall apply its Integrity Testing processes to the Material.
- 10.3 Any party to this Agreement shall be entitled to require NCC Group to carry out a Full Verification. Subject to clause 10.4, NCC Group's prevailing fees and charges for the Full Verification processes and all reasonable expenses incurred by NCC Group in carrying out the Full Verification processes shall be payable by the requesting party.
- 10.4 If the Escrow Materials fail to satisfy NCC Group's Full Verification tests as a result of being defective or incomplete in content, NCC Group's fees, charges and expenses in relation to the Full Verification tests shall be paid by the Owner.
- 10.5 Should the Escrow Materials deposited fail to satisfy NCC Group's Integrity Testing or Full Verification tests under clauses 10.2 or 10.3, the Owner shall, within 14 days of the receipt of the notice of test failure from NCC Group, deposit such new, corrected or revised Escrow Materials as shall be necessary to ensure its compliance with its warranties and obligations in clause 2. If the Owner fails to make such deposit of the new, corrected or revised Escrow Materials, NCC Group will issue a report to the Licensee detailing the problem with the Escrow Materials as revealed by the relevant tests.

## **11 NCC Group's Liability**

- 11.1 Nothing in this clause 11 excludes or limits the liability of NCC Group for:-
- 11.1.1 fraud or fraudulent misrepresentation;
  - 11.1.2 death or personal injury caused by NCC Group's (or its employees', agents' or sub-contractors') negligence; or
  - 11.1.3 any matter for which it is not permitted by law to exclude or limit, or to attempt to exclude or limit, its liability.

Without prejudice to clauses 11.1.1 to 11.1.3 (inclusive), the following provisions set out the entire financial liability of NCC Group (including any liability for the acts or omissions of its employees, agents and sub-contractors) arising out of or in connection with this Agreement, whether in contract, tort, misrepresentation, under statute or otherwise, howsoever caused including (without limitation) by negligence and also including (without limitation) any liability arising from a breach of, or a failure to perform or defect or delay in performance of, any of NCC Group's obligations under this Agreement.

- 11.2 NCC Group shall not be liable for any loss or damage caused to the other parties except to the extent that such loss or damage is caused by the negligent acts or negligent omissions of or a breach of any contractual duty by NCC Group, its employees, agents or sub-contractors in performing its obligations under this Agreement and in such event NCC Group's maximum aggregate liability arising out of or in connection with this Agreement, whether in contract, tort, misrepresentation, under statute or otherwise, howsoever caused including (without limitation) by negligence and also including (without limitation) any liability arising from a breach of, or a

failure to perform or defect or delay in performance of, any of NCC Group's obligations under this Agreement, shall be limited to £2,500,000 (two million five hundred thousand pounds).

- 11.3 Subject to clause 11.1 NCC Group shall not be liable to the other parties for any:
- 11.3.1 indirect, consequential and/or special loss or damage;
  - 11.3.2 loss of profit (direct or indirect);
  - 11.3.3 lost of revenue, loss of production or loss of business ( in each case whether direct or indirect);
  - 11.3.4 loss of goodwill, loss of reputation, or loss of opportunity (in each case whether direct or indirect);
  - 11.3.5 loss of anticipated saving or loss of margin (in each case whether direct or indirect); and/or
  - 11.3.6 loss or damage arising out of any failure by the Owner to keep full and up to date back-ups and security copies of any Escrow Materials delivered under this Agreement,

arising out of or in connection with this Agreement, whether in contract, tort, misrepresentation, under statute or otherwise, howsoever caused including (without limitation) by negligence and also including (without limitation) any liability arising from a breach of, or a failure to perform or defect or delay in performance of, any of NCC Group's obligations under this Agreement.

- 11.4 NCC Group shall not be liable in any way to the Owner or the Licensee for acting in accordance with the terms of this Agreement and specifically (without limitation) for acting upon any notice, written request, waiver, consent, receipt, statutory declaration or any other document furnished to it pursuant to and in accordance with this Agreement.
- 11.5 NCC Group shall not be required to make any investigation into and shall be entitled in good faith without incurring any liability to the Owner or the Licensee to assume (without requesting evidence thereof) the validity, authenticity, veracity and due and authorised execution of any documents, written requests, waivers, consents, receipts, statutory declarations or notices received by it in respect of this Agreement.

## 12 Indemnity

- 12.1 Save for any claim falling within the provisions of clause 11.1.1, the Owner and the Licensee jointly and severally agree at all times to indemnify and hold harmless NCC Group in respect of all of its legal and all other costs, fees and expenses incurred directly or indirectly as a result of being brought into or otherwise becoming involved in any form of dispute resolution proceedings or any litigation of any kind between the Owner and the Licensee in relation to this Agreement to the extent that this Agreement does not otherwise provide for reimbursement of such costs.
- 12.2 The Owner shall assume all liability and shall at all times indemnify and hold harmless NCC Group and its officers, agents, sub-contractors and employees from and against any and all liability, loss, damages, costs, legal costs, professional and other expenses and any other liabilities of whatever nature, awarded against or agreed to be paid or otherwise suffered, incurred or sustained by NCC Group, whether direct, indirect or consequential as a result of or in connection with any claim by any third party(s) for alleged or actual infringement of Intellectual Property Rights arising out of or in connection with all and any acts or omissions of NCC Group in respect of the Escrow Materials as contemplated under this Agreement.

## 13 Term and Termination

- 13.1 This Agreement shall continue until terminated in accordance with this clause 13.
- 13.2 If the Owner or the Licensee, as the case may be, fails to pay an invoice addressed to it for services under this Agreement within 30 days of its issue, NCC Group reserves the right to give that party written notice to pay the outstanding invoice within 30 days. If the Licensee has not paid its invoice by the expiry of the 30 day notice period, this Agreement will automatically immediately terminate. If the Owner has not paid its invoice by the expiry of the 30 day notice period, NCC Group will give the Licensee a period of 15 days to pay the Owner's invoice. If the Owner's invoice has not been paid by the expiry of the 15 day optional payment period given to the Licensee, this Agreement will automatically immediately terminate. Any amounts owed by the Owner but paid by the Licensee will be recoverable by the Licensee direct from the Owner as a debt and, if requested, NCC Group shall provide appropriate documentation to assist in such recovery.

- 13.3 Upon termination under the provisions of clause 13.2, for 30 days from the date of termination NCC Group will make the Escrow Materials available for collection by the Owner or its agents from the premises of NCC Group during office hours. After such 30 day period NCC Group will destroy the Escrow Materials.
- 13.4 Notwithstanding any other provision of this clause 13, NCC Group may terminate this Agreement by giving 30 days written notice to the Owner and the Licensee. In that event, the Owner and the Licensee shall appoint a mutually acceptable new custodian on similar terms and conditions to those contained herein. If a new custodian is not appointed within 14 days of delivery of such notice, the Owner or the Licensee shall be entitled to request the President for the time being of the British Computer Society (or successor body) to appoint a suitable new custodian upon such terms and conditions as he/she shall require. Such appointment shall be final and binding on the Owner and the Licensee. If NCC Group is notified of the new custodian within the notice period, NCC Group will forthwith deliver the Escrow Materials to the new custodian. If NCC Group is not notified of the new custodian within the notice period, NCC Group will return the Escrow Materials to the Owner.
- 13.5 The Licensee may terminate this Agreement at any time by giving written notice to NCC Group. Upon such termination, NCC Group will return the Escrow Materials to the Owner.
- 13.6 If NCC Group discovers that a Release Event has occurred and the Licensee has failed to exercise its right to claim for release of the Escrow Materials under clause 6.2, NCC Group shall have the right to terminate this Agreement upon 30 days written notice to the Owner and the Licensee. The Licensee shall have the option of applying for release in accordance with clause 6 during this notice period, but if it fails to do so, upon the expiry of this notice period, this Agreement shall automatically terminate and, unless otherwise instructed by the Owner or the Assignee prior to expiry of the notice period, NCC Group shall destroy the Escrow Materials.
- 13.7 If the Intellectual Property Rights in the Escrow Materials have been assigned to a third party and the proviso in clause 6.1.6 applies such that there has been no Release Event under that clause, NCC Group shall be entitled to terminate this Agreement immediately by written notice to the Owner and the Licensee and upon such termination, unless otherwise instructed by the Owner or the Assignee, NCC Group shall destroy the Escrow Materials.
- 13.8 On the earlier of:
- 13.8.1 the date falling six (6) months after the Fleet Acceptance Longstop Date; and
- 13.8.2 lawful termination of the License in accordance with the terms of the License Agreement,
- the Licensee shall give notice to NCC Group within 14 days thereof to terminate this Agreement, failing which, the Owner shall be entitled to give written notice to NCC Group to terminate this Agreement. Upon receipt of such a notice from the Owner, NCC Group shall notify the Licensee of the Owner's notice to terminate. Unless within 14 days of NCC Group giving such notice to the Licensee, NCC Group receives a counter-notice signed by a duly authorised officer of the Licensee disputing the termination of the Licence Agreement, then the Licensee shall be deemed to have consented to such termination and this Agreement shall immediately automatically terminate. Any disputes arising under this clause shall be dealt with in accordance with the dispute resolution procedure in clause 7. Upon termination under this clause, NCC Group shall return the Escrow Materials to the Owner.
- 13.9 **Subject to clause 13.8**, the Owner may only terminate this Agreement with the written consent of the Licensee.
- 13.10 This Agreement shall automatically immediately terminate upon release of the Escrow Materials to the Licensee in accordance with clause 6.
- 13.11 If this Agreement is superseded and replaced by a new agreement in respect of the Escrow Materials, this Agreement shall, upon the coming into force of the new agreement, automatically terminate. The relevant party or parties shall request NCC Group to either transfer the Escrow Materials to the new agreement or ask the owner under the new agreement to deposit new material. If new material is deposited, upon its receipt, NCC Group shall, unless otherwise instructed, destroy the Escrow Materials.
- 13.12 The provisions of clauses 1, 3.2, 3.3, 5, 8, 9, 10.1, 11, 12, 13.12 to 13.14 (inclusive) and 14 shall continue in full force after termination of this Agreement.

- 13.13 On and after termination of this Agreement, the Owner and/or the Licensee (as appropriate) shall remain liable to NCC Group for payment in full of any fees and interest which have become due but which have not been paid as at the date of termination.
- 13.14 The termination of this Agreement, however arising, shall be without prejudice to the rights accrued to the parties prior to termination.

## 14 General

- 14.1 A party shall notify the other parties to this Agreement, within 30 days of its occurrence, of any of the following:
- 14.1.1 a change of its name, registered office, contact address or other contact details; and
  - 14.1.2 any material change in its circumstances that may affect the validity or operation of this Agreement.
- 14.2 Within 14 days of any assignment or transfer by the Owner of any part of its Intellectual Property Rights in the Escrow Materials, the Owner shall notify:
- 14.2.1 NCC Group and the Licensee of such assignment and the identity of the Assignee; and
  - 14.2.2 the Assignee of the provisions of clause 6.1.6.
- 14.3 The formation, existence, construction, performance, validity and all other aspects of this Agreement shall be governed by and construed in accordance with the laws of England and the parties submit to the exclusive jurisdiction of the English courts.
- 14.4 This Agreement, together with the Order Form and any relevant NCC Group standard terms and conditions represent the whole agreement relating to the escrow arrangements between NCC Group and the other parties for the Escrow Materials and shall supersede all prior agreements, discussions, arrangements, representations, negotiations and undertakings. In the event of any conflict between any of these documents, the terms of this Agreement shall prevail.
- 14.5 Unless the provisions of this Agreement otherwise provide, any notice or other communication required or permitted to be given or made in writing hereunder shall be validly given or made if delivered by hand or courier or if despatched by first class recorded delivery (airmail if overseas) addressed to the address specified for the parties in this Agreement (or such other address as may be notified to the parties from time to time) or if sent by facsimile message to such facsimile number as has been notified to the parties from time to time and shall be deemed to have been received:
- (i) if delivered by hand or courier, at the time of delivery;
  - (ii) if sent by first class recorded delivery (airmail if overseas), 2 business days after posting (6 days if sent by airmail);
  - (iii) if sent by facsimile, at the time of completion of the transmission of the facsimile with facsimile machine confirmation of transmission to the correct facsimile number of all pages of the notice.
- 14.6 The Owner and the Licensee shall not assign, transfer or subcontract this Agreement or any rights or obligations thereunder without the prior written consent of the other parties.
- 14.7 NCC Group shall be entitled to transfer or assign this Agreement upon written notice to both the Owner and the Licensee.
- 14.8 This Agreement shall be binding upon and survive for the benefit of the successors in title and permitted assigns of the parties.
- 14.9 If any provision of this Agreement is declared too broad in any respect to permit enforcement to its full extent, the parties agree that such provision shall be enforced to the maximum extent permitted by law and that such provision shall be deemed to be varied accordingly. If any provision of this Agreement is found by any court, tribunal or administrative body of competent jurisdiction to be wholly or partly illegal, invalid, void or unenforceable, it shall, to the extent of

such illegality, invalidity or unenforceability, be deemed severable and the remaining part of the provision and the rest of the provisions of this Agreement shall continue in full force and effect.

- 14.10 Save as expressly provided in this Agreement, no amendment or variation of this Agreement shall be effective unless in writing and signed by a duly authorised representative of each of the parties to it.
- 14.11 The parties shall not be liable to each other or be deemed to be in breach of this Agreement by reason of any delay in performing, or failure to perform, any of their obligations under this Agreement if the delay or failure was for a reason beyond that party's reasonable control (including, without limitation, fire, flood, explosion, epidemic, riot, civil commotion, any strike, lockout or other industrial action, act of God, war or warlike hostilities or threat of war, terrorist activities, accidental or malicious damage, or any prohibition or restriction by any governments or other legal authority which affects this Agreement and which is not in force on the date of this Agreement). A party claiming to be unable to perform its obligations under this Agreement (either on time or at all) in any of the circumstances set out above must notify the other parties of the nature and extent of the circumstances in question as soon as practicable. If such circumstances continue for more than six months, any of the other parties shall be entitled to terminate this Agreement by giving one month's notice in writing.
- 14.12 No waiver by any party of any breach of any provisions of this Agreement shall be deemed to be a waiver of any subsequent or other breach and, subject to clause 6.6, no failure to exercise or delay in exercising any right or remedy under this Agreement shall constitute a waiver thereof.
- 14.13 This Agreement is not intended to create any right under the Contracts (Rights of Third Parties) Act 1999 which is enforceable by any person who is not a party to this Agreement and the rights of any third party under the said act are hereby expressly excluded.
- 14.14 This Agreement may be executed in any number of counterparts and by different parties in separate counterparts. Each counterpart when so executed shall be deemed to be an original and all of which together shall constitute one and the same agreement.

Signed for and on behalf of [ ]<sup>3</sup>

Name: ..... | .....

Position: ..... | (Authorised Signatory)

Signed for and on behalf of **TRANSPORT FOR LONDON**

Name: ..... | .....

Position: ..... | (Authorised Signatory)

Signed for and on behalf of **NCC GROUP ESCROW LIMITED**

Name: ..... | .....

Position: ..... | (Authorised Signatory)

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<sup>3</sup> Insert company name of Owner

**Schedule 1**  
**NOT USED**

**Schedule 2**  
**NCC Group's Fees**

	DESCRIPTION	OWNER	LICENSEE
1	Annual Fee (payable on completion of this Agreement and in advance of each anniversary thereafter)		
2	Scheduled Update Fee (2 <sup>nd</sup> and subsequent scheduled deposits in any one year, payable on completion of this Agreement and in advance of each anniversary thereafter)		
3	Unscheduled Update Fee (per unscheduled deposit)		
4	Release Fee (plus NCC Group's reasonable expenses)		

Additional fees will be payable to NCC Group by the Licensee (unless otherwise agreed between the parties) for the following where applicable:

- Storage Fee for deposits in excess of 1 cubic foot;
- Any novation or replacement of this Agreement at the request of the Owner or the Licensee;
- Integrity Testing Fee for deposits consisting of more than 5 media items.

**Schedule 3**  
**Licence Agreement**

*A Manufacture and Supply Agreement relating to the procurement of two (2) engineering trains made between the Licensee and the Owner and dated [                      ].*

**SCHEDULE 14: QUENSH**

**NOT USED**

## SCHEDULE 15: FORM OF SUBCONTRACTOR WARRANTY

**THIS DEED** is made on ● 201 ●

### **BETWEEN:**

- (1) **TRANSPORT FOR LONDON** whose registered office is Windsor House, 42-50 Victoria Street, London SW1H 0TL (the "**Purchaser**" which expression shall include its successors and assigns);
- (2) ● whose registered office is situate at ● (the "**Subcontractor**"); and
- (3) ● whose registered office is situate at ● (the "**Manufacturer**").

### **WHEREAS:**

- (A) The Manufacturer has entered into a contract dated ● (the "**Contract**") with the Purchaser for the manufacture and supply of a modular points and crossings delivery and installation system (the "**Works**").
- (B) The Subcontractor [**has entered**] [**will shortly enter**] into a subcontract (the "**Subcontract**") with the Manufacturer for the design and carrying out of certain parts (the "**Subcontract Works**") of the Works more particularly defined in Annex ● hereto<sup>4</sup>.

### **NOW IT IS AGREED:**

1. Terms and expressions defined in the Subcontract shall where the context so permits have the same meanings in this Deed. The following expressions have the meanings set out herein:
  - (a) "Completion" means [ ];<sup>5</sup>
  - (b) "Connected Persons" means of any of the Subcontractor's employees, directors, consultants, agents, subcontractors, subconsultants, suppliers, shareholders, professional advisers (including lawyers, auditors, financial advisers, accountants and technical consultants) or underwriters;
  - (c) "Documents" means documents, items of information, data, reports, drawings, specifications, plans, software, designs, inventions and any other materials provided by or on behalf of the Subcontractor in connection with the Subcontract Works (whether in existence or to be made);
  - (d) "Minimum Records" means all records relating to the Subcontractor's operations, method statements, costs and expenses, subcontracts, claims relating to compensation events and financial arrangements and any document referred to therein or relating thereto and any similar records which the Purchaser may reasonably request;

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<sup>4</sup> A description of the Works should be provided in the Annex.

<sup>5</sup> This will depend on the length of the subcontract.

- (e) "Operator" means a person with statutory duties to provide or secure the provision for Greater London of public passenger services by railway who secures the provision of such services either through contractual arrangements in the terms of the PPP Contracts or otherwise;
- (f) "Prohibited Act" means:
  - (i) offering or agreeing to give to any servant, employee, officer or agent of the Purchaser or the Manufacturer any grant, gift or consideration of any kind as an inducement or reward for doing or not doing (or for having done or not having done) any act in relation to the obtaining or performance of the Subcontract or any other contract with the Purchaser or the Manufacturer or for showing or not showing favour or disfavour to any person in relation to the Subcontract or any other contract with the Purchaser or the Manufacturer;
  - (ii) entering into the Subcontract or any other contract with the Purchaser or the Manufacturer in connection with which commission has been paid or has been agreed to be paid by the Subcontractor or on his behalf or to his knowledge unless, before the relevant contract or document is entered into, particulars of any such commission and the terms and conditions of any such contract or document for the payment thereof have been disclosed in writing to the Purchaser or the Manufacturer;
  - (iii) committing any offence under the Prevention of Corruption Acts 1889-1916 and/or the Bribery Act 2010, under any law or legislation creating offences in respect of fraudulent acts, or at common law in respect of fraudulent acts in relation to the Subcontract or any other contract with the Purchaser or the Manufacturer; or
  - (iv) defrauding or attempting to defraud the Purchaser or the Manufacturer;
- (g) "Safety Breach" means a material breach of the Subcontract caused by the gross incompetence, wilful default or reckless disregard to safety of the Subcontractor (or anyone employed or acting on behalf of the Subcontractor) which has materially affected (or which had the potential to materially affect) the safe provision of the Subcontract Works, the safe operation of the Railway Infrastructure and/or the safety of the Purchaser's employees, or the public or any other persons;
- (h) "TfL Group" means Transport for London, a statutory body set up by the Greater London Authority Act 1999 and any of its subsidiaries and their subsidiaries;
- (i) ["Crossrail Network" means the stations and depots (wherever situate), assets, systems, track and other buildings, which are used in the maintenance and provision of the Crossrail Services].

2. The Subcontractor warrants and undertakes to the Purchaser that:

- (a) he has exercised and will continue to exercise all the reasonable skill, care and diligence to be expected of a competent Subcontractor experienced in carrying out works of a similar scope, size and complexity to the Subcontract Works; and
  - (b) he has complied with and will continue to comply with the terms of the Subcontract.
- 3. The Subcontractor warrants and undertakes to the Purchaser that it has not selected or specified for use, and that it will not select or specify for use or allow to be used any substance or material which are not in accordance with the TfL Standards, general good building and engineering practice and the requirements of the Specification.
- 4. The Subcontractor further warrants and undertakes to the Purchaser that:
  - (a) the Subcontract Works will on Completion satisfy all performance or output specifications and other requirements contained or referred to in the Subcontract;
  - (b) the Subcontract Works and all materials comprised in them will correspond as to description, quality and condition with the requirements of the Subcontract and will be of sound manufacture and workmanship;
  - (c) the Subcontract Works are integrated with the designs of the Purchaser, the Manufacturer and others as specified in the Subcontract;
  - (d) he has exercised and will continue to exercise all reasonable skill, care and diligence in the design of the Subcontract Works insofar as they have been or will be designed by or on behalf of the Subcontractor;
  - (e) the Subcontract Works will on Completion comply with all applicable law and all relevant TfL Standards;
  - (f) he shall not commit a Prohibited Act and/or Safety Breach; and
  - (g) the Subcontract Works will be carried out and completed timeously in accordance with the time constraints set out in the Subcontract.
- 5. The Subcontractor warrants and undertakes to the Purchaser that he has maintained and will continue to maintain all insurances required to be maintained pursuant to the terms of the Subcontract and that insofar as he is responsible for the design of the Subcontract Works, he has professional indemnity insurance with a limit of indemnity of not less than £[ ] in respect of each and every claim which may be made against the Subcontractor in relation to the Subcontract Works. The Subcontractor shall maintain such professional indemnity insurance for a period of 12 years from Take Over (as defined in the Contract) provided such insurance remains available at commercially reasonable rates and shall notify the Purchaser forthwith if such insurance ceases to be so available. When deciding whether such insurances are available at commercially reasonable rates, no account shall be taken of any increase in the premium or imposition of terms which arise as a result of the Subcontractor's insurance claims record.
- 6. As and when reasonably requested by the Purchaser, the Subcontractor shall produce for inspection documentary evidence that the insurances referred to in Clause 5 are being

properly maintained and that payment has been made of the last premiums due in respect of such insurances.

7. To the extent that the intellectual property rights in any and all Documents have not already vested in the Purchaser or the Manufacturer, the Subcontractor grants to the Purchaser an irrevocable non-exclusive, non-terminable, royalty-free licence to copy and make full use of any and all Documents and all amendments and additions to them and any works, designs or inventions of the Subcontractor incorporated or referred to in them for the following purposes:
  - (a) understanding the Works;
  - (b) operating, maintaining, repairing, modifying, altering, enhancing, re-figuring, correcting and replacing the works, any equipment or plant and materials;
  - (c) extending, interfacing with, integrating with, connection into and adjusting the works and/or the works of third parties;
  - (d) enabling the Purchaser to carry out the operation, maintenance, repair, renewal and enhancement of the Railway Infrastructure;
  - (e) enabling the Purchaser to perform his function and duties as Infrastructure Manager (as defined in the Railways and Other Guided Transport Systems (Safety Regulations 2006) and Operator of the Railway Infrastructure;
  - (f) executing or completing the Works; and
  - (g) designing, testing and commissioning the Works

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

8. The Subcontractor agrees:
  - (a) on request at any time to give the Purchaser or any persons authorised by the Purchaser access to the material referred to in Clause 7 and at the Purchaser's expense to provide copies of any such material; and
  - (b) at the Subcontractor's expense to provide the Purchaser with a set of all such material on Completion of the Subcontract Works.
9. If called upon to do so by the Purchaser, the Subcontractor shall provide the Purchaser with such information relating to the Subcontract Works as it may reasonably require including without limitation copies of and extracts from Documents prepared or provided by the Subcontractor for the purposes of the Works provided that neither the provision of such information nor any inspection of the Works by the Purchaser nor the approval by the Purchaser of any material shall limit or discharge, or be deemed to limit or discharge the obligations of the Subcontractor under the Subcontract or relieve the Subcontractor from any liability which he has in relation to the Subcontract Works.

10. The Subcontractor warrants and undertakes to the Purchaser that he shall maintain and retain the Minimum Records for a minimum of twelve (12) years from Completion of the Works with respect to all matters for which the Subcontractor is responsible under the Subcontract. The Subcontractor further warrants and undertakes to the Purchaser that the Subcontract contains open-book audit rights in favour of the Purchaser and its authorised representatives and that he shall undertake his obligations and exercise his rights under the Subcontract on an open-book basis. The Purchaser and his authorised representatives may from time to time audit on an open-book basis and check and take copies of and extracts from any document or record of the Subcontractor including, without limitation, the Minimum Records. The Subcontractor further warrants that it shall promptly provide all reasonable co-operation in relation to any audit or checking including, without limitation, granting access to premises, equipment, systems and senior personnel and making documents available. Without prejudice to the foregoing, the Subcontractor acknowledges and agrees that the Purchaser may audit and check any and all records as are necessary in order to monitor compliance with the Subcontractor's obligations under the Subcontract with respect to Prohibited Acts and Safety Breaches at any time during performance of the Subcontract and during the 12 years thereafter.
11. The Subcontractor shall provide such assistance to the Purchaser as it may reasonably require in connection with the Subcontract Works.
12. In the event that the Contract or the employment of the Manufacturer thereunder is determined for any reason whatsoever including but not limited to the insolvency or winding-up of the Manufacturer (voluntary or otherwise), the Subcontractor shall without allowing any break or intermission to occur in the performance of his duties:
  - (a) continue to observe and carry out his obligations under the Subcontract and this Deed;
  - (b) if so required by notice in writing from the Purchaser treat the Purchaser as Purchaser under the Subcontract to the exclusion of the Manufacturer whereupon all rights and obligations of the Manufacturer under the Subcontract shall thereafter be exercisable and performed by the Purchaser; and
  - (c) accept and enter into any deeds or other documents as are required to put into legal effect any further novation of the Subcontract reasonably required by the Purchaser.
- 13.1 The Subcontractor warrants and undertakes to the Purchaser that he will promptly inform the Purchaser of any default by the Manufacturer under the Subcontract and that he will not, without first giving the Purchaser at least twenty one (21) days' notice in writing, exercise any right he may have to terminate the Subcontract or to treat the same as having been repudiated by the Manufacturer or to suspend performance of his obligations under the Subcontract.
- 13.2 The Subcontractor's right to terminate the Subcontract or to treat the same as having been repudiated or to suspend performance of his obligations thereunder shall cease if within the period of the aforesaid notice and subject to Clause 14 hereof the Purchaser shall have given notice in writing to the Subcontractor requiring the Subcontractor to accept the

instructions of the Purchaser or its appointee to the exclusion of the Manufacturer in respect of the carrying out and completion of the Subcontract Works upon the terms of the Subcontract.

14. The provisions of Clauses 12 and 13 hereof are conditional upon any notice given by the Purchaser pursuant thereto stating that the Purchaser or its appointee accepts liability for payment of the last unpaid invoice submitted by the Subcontractor. Upon the issue of any such notice by the Purchaser, the Subcontract shall continue in full force and effect as if no right of termination on the part of the Subcontractor had arisen and the Subcontractor shall be liable to the Purchaser or its appointee under the Subcontract in lieu of its liability to the Manufacturer. If any notice given by the Purchaser under Clauses 12 or 13 requires the Subcontractor to accept the instructions of the Purchaser's appointee, the Purchaser shall be liable to the Subcontractor as guarantor for the payment of all sums from time to time due to the Subcontractor from the Purchaser's appointee. For the avoidance of doubt neither the Purchaser nor his appointee shall be liable for any work carried out prior to the date of the Purchaser's notice.
15. The Manufacturer has agreed to be a party to this Deed for the purposes of acknowledging that the Subcontractor shall not be in breach of the Subcontract by complying with the obligations imposed on it by Clauses 12 or 13 hereof.
16. This Deed may be assigned by the Purchaser to any member of the TfL Group without limitation and otherwise to any other person on two occasions without the consent of the Subcontractor being required and the Subcontractor shall do all such acts, deeds and things as may be reasonably necessary to give effect to any such assignment. No further assignment shall be permitted without the consent of the Subcontractor.
17. The Subcontractor shall not be entitled to contend that any person to whom this Deed is assigned in accordance with Clause 16 is precluded from recovering under this Deed any loss incurred by such assignee resulting from any breach of this Deed (whenever happening) by reason that such person is an assignee and not a named promisee under this Deed.
18. The liability of the Subcontractor under this Deed shall cease 12 years following Completion of the whole of the Works.
19. The Subcontractor hereby covenants that if required by the Purchaser it will enter into further deeds of warranty with all and each of such persons who shall acquire or agree to acquire an interest in the whole or any part of the Subcontract Works. Each such deed of warranty shall be in the same form mutatis mutandis as this Deed or in such substantially similar form as may reasonably be required by the Purchaser.
- 20.1 Without limitation to Clause 2 above, the Subcontractor hereby warrants to the Purchaser that:
  - (a) except as provided under deeds of warranty required pursuant to the Subcontract, it shall not, without the prior written approval of the Purchaser, at any time for any reason disclose to any person or publish or make any statement concerning the Subcontract, this Deed or the project to which the Subcontract Works relate;

- (b) it shall treat all information obtained under, arising from or in connection with the Subcontract, this Deed and the project as confidential, and that other than for the purpose of providing the Subcontract Works, it shall not disclose any information or documents concerning the Subcontract to any other person; and
  - (c) it shall not, without the prior written consent of the Purchaser, disclose any information obtained by it concerning the Purchaser or the TFL Group to any other person.
- 20.2 The Purchaser may require as a precondition to the granting of such consent that any such third party provides a confidentiality undertaking in terms satisfactory to the Purchaser.
- 20.3 Clause 20.1 does not apply to the disclosure of:
  - (a) any information which is already in the public domain at the time of its disclosure other than by breach of these provisions,
  - (b) any information disclosed by the Subcontractor to any Connected Persons provided that such recipients agree in writing to be bound by the terms of this confidentiality provision; and
  - (c) any information which is required to be disclosed by any applicable law or statutory requirement, the regulations of any stock exchange, any taxation authorities or by an order of a court or other tribunal of competent jurisdiction or any relevant regulatory body.
- 20.4 The Subcontractor shall procure that the Connected Persons comply with the provisions of this Clause 20 and is responsible to the Purchaser for any act or omission of any Connected Person in breach of such obligations.
- 20.5 The Subcontractor shall notify the Purchaser promptly if the Subcontractor becomes aware of any breach of confidence by a Connected Person and shall give the Purchaser all assistance the Purchaser may reasonably require in connection with any proceedings the Purchaser may bring or other steps the Purchaser may take against that Connected Person or any other person for such breach of confidence.
- 20.6 The Subcontractor acknowledges that damages would not be an adequate remedy for any breach of this Clause 20 by the Subcontractor and that (without prejudice to all other remedies to which the Purchaser may be entitled to as a matter of law) the Purchaser shall be entitled to any form of equitable relief to enforce the provisions of this Clause 20.
- 20.7 At the Purchaser's request and in any event upon the termination or expiry of the Subcontract, the Subcontractor shall promptly deliver to the Purchaser or destroy as the Purchaser may direct all documents and other materials in the possession, custody or control of the Subcontractor (or the relevant parts of such materials) that bear or incorporate the whole or any part of the confidential information and if instructed by the Purchaser in writing, remove all electronically held confidential information, including the purging of all disk-based confidential information and the reformatting of all disks.

- 21.1 The Subcontractor shall owe no greater obligations to the Purchaser than he owes to the Manufacturer under the Subcontract.
- 21.2 The Subcontractor shall be entitled in any action or proceedings by the Purchaser to rely on any limitation in the Subcontract and to raise the equivalent rights in defence of liability as he would have against the Manufacturer thereunder.
22. The rights and benefits conferred upon the Purchaser by this Deed are in addition to any other rights and remedies the Purchaser may have against the Subcontractor including without limitation any remedies in negligence.
23. The Manufacturer agrees that he will not take any steps which would prevent or hinder the Purchaser from exercising his rights under this Deed and confirms that the rights of the Purchaser in Clauses 12 and 13 override any obligations of the Subcontractor to the Manufacturer under the Subcontract.
24. Any notice to be given hereunder shall be deemed to be duly given if it is in writing and delivered by hand at or sent by registered post to the registered office or principal place of business in the United Kingdom for the time being of the party to be served and in the case of any such notice sent by registered post shall be deemed to have been received 48 hours after being posted.
- 25.1 Any dispute or difference arising out of or in connection with this Deed may be referred to adjudication in accordance with Schedule 10 of the Contract which shall be deemed to be included in this Deed as if it were recited herein in full (with the necessary changes).
- 25.2 The Adjudicator's decision shall be binding on the parties until the dispute or difference is finally determined by the Courts in accordance with Clause 25.3.
- 25.3 The Courts of England and Wales shall have jurisdiction over any dispute or difference arising out of or in connection with this Deed. The Law of England and Wales shall be the proper law of this Deed.
26. Nothing in this Deed confers or is intended to confer on any third party any benefit or the right to enforce any term of this Deed pursuant to the Contracts (Rights of Third Parties) Act 1999.

**IN WITNESS** whereof this Deed has been executed and unconditionally delivered as a Deed by the parties the day and year first above written.

**THE COMMON SEAL** of  
**TRANSPORT FOR LONDON**

was affixed to **THIS DEED**

in the presence of:

Signature of Authorised Signatory

Print name of Authorised Signatory

**THE COMMON SEAL** of

**[THE SUB-CONTRACTOR]**

was affixed to **THIS DEED**

in the presence of:

Signature of Director

Print name of Director

Signature of Director/Secretary

Print name of Director/Secretary

**EXECUTED AND DELIVERED AS**

**A DEED by**

**[THE CONTRACTOR ]**

acting by:

Signature of Director

Print name of Director

Signature of Director/Secretary

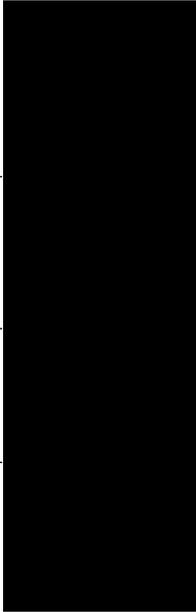
Print name of Director/Secretary ]

**ANNEX**  
(Subcontract Works)

**SCHEDULE 16: CONTRACT PARTICULARS**

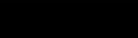
**Items of Contract Particulars**

(a) The Key Dates and Conditions are:

No	Title	Key Date	Condition
(1)	Preliminary Unit Design		Preliminary Unit Design certificate has been signed by the Parties as per the assurance section of Schedule 1A ( <i>Specification</i> ) to demonstrate Assurance Acceptance.
(2)	Take Over – first Unit		Take Over Certificate has been signed by the Parties.
(2)	Take Over – second Unit		Take Over Certificate has been signed by the Parties.
(3)	Fleet Acceptance		Fleet Acceptance Certificate has been signed by the Parties.

(b) The Change Date is:	[REDACTED]
(c) The Commencement Date is:	[REDACTED]
(d) The Contract Price is:	€22,225,235
(e) Details of the Manufacturer's insurance policy including limits on the Manufacturer's liability for insurance Losses:	As appended to this Schedule 16
(f) The Delivery Location(s) is/are:	Within the boundaries of the M25 London, UK  To be notified by Purchaser within two (2) months of planned Take Over of the first unit.
(g) The Fleet Acceptance Longstop Date is:	[REDACTED]
(h) Manufacturer Guarantee to be provided:	[REDACTED]
(i) The Manufacturer Guarantor is:	[REDACTED]
(j) The Manufacturer's Works are:	Industriestraße 31, 83395 Freilassing, GERMANY
(k) Performance Bond to be provided:	[REDACTED]
(l) The Performance Period Targets are:	98% of shifts successfully completed in the Performance Period in line with the RAMS target (as detailed in Schedule 1A ( <i>Specification</i> ))
(m) The Plant and Machinery is:	Set out in Schedule 1A ( <i>Specification</i> )
(n) The Purchaser Representative is:	[REDACTED]
(o) The Railway Infrastructure is:	The Crossrail Infrastructure (as such term is defined in Schedule 1A ( <i>Specification</i> ))
(p) The Relevant CBTC Signalling Date is	[REDACTED]
(q) If a programme is not included in Schedule 2 ( <i>Contract Programme</i> ), the Manufacturer shall submit the programme under Clause 8.1.1 within this many days of the date of this Agreement:	Two (2) weeks from the Commencement Date
(r) The other information which the Specification requires the Manufacturer to show on the	Such information detailed in Appendix 1 ( <i>Contract Programme Information Requirements</i> ) to this

Contract Programme is:	Schedule 16 ( <i>Contract Particulars</i> )
(s) Under Clause 8.2 the programme should be in the following form:	Primavera P6 (version 6.2.1 or later) or MS Project (2010 onwards), or such other form as may be reasonably required by the Purchaser
(t) The Infrastructure Testing Deliverables under Clause 12.3.3 are:	<ul style="list-style-type: none"> <li>(a) track access;</li> <li>(b) diesel fuel;</li> <li>(c) pilotmen (to allow access over the Crossrail Infrastructure (as such term is defined in Schedule 1A (<i>Specification</i>)));</li> <li>(d) safety related staff to create safe testing locations; and</li> <li>(e) geometry information and ALC files; and</li> <li>(f) all material, e.g. rails, switches, etc. for properly executing tests.</li> </ul>
(u) The amount of liquidated damages payable per week under Clause 13.1 is:	<div style="background-color: black; width: 100%; height: 15px; margin-bottom: 5px;"></div> <div style="background-color: black; width: 80%; height: 15px; margin-bottom: 5px;"></div> <div style="background-color: black; width: 5%; height: 15px; margin-bottom: 5px;"></div> <div style="background-color: black; width: 85%; height: 15px;"></div>
(v) The maximum amount of liquidated damages payable under Clause 13.1 in the aggregate (expressed as a percentage of the Contract Price) is:	<div style="background-color: black; width: 60%; height: 15px;"></div>
(w) The amount of liquidated damages under Clause 13.3 is:	<div style="background-color: black; width: 70%; height: 15px;"></div>
(x) The maximum amount of liquidated damages payable under Clause 13.3 (expressed as a percentage of the Contract Price) is:	<div style="background-color: black; width: 60%; height: 15px;"></div>
(y) The maximum amount payable by the Manufacturer in relation to warranty claims and for Defect rectification pursuant to the Manufacturer's obligations under Clause 17 (expressed as a percentage of the Contract Price) is:	<div style="background-color: black; width: 60%; height: 15px;"></div>

(z) The Purchaser's UK VAT registration number under Clause 21 is:	GB 756277008
(aa) The amount of the Performance Bond under Clause 22.2 is:	
(bb) The Manufacturer's total aggregate liability to the Indemnified Parties under Clause 29.4.1 is:	
(cc) The notice details for the Purchaser / Purchaser Representative under Clause 36.1.2 are:	<p>Address:</p> <p>30th Floor – Crossrail  25 Canada Square  Canary Wharf  London  E145LQ</p> <p>Attention: </p> <p>Email: </p>
(dd) The notice details for the Manufacturer under Clause 36.1.2 are:	<p>Address:</p> <p>Plasser UK,  Manor Road,  West Ealing,  London  W13 0PP</p> <p>Attention: </p> <p>Email: </p>

## **Appendix 1 – Contract Programme Information Requirements**

The Contract Programme shall include (without limitation) the following activities and milestones:

1. Key Dates (as Definitions Clause 1.1).
2. Payment application milestones.
3. Third party dependencies.
4. Mobilisation.
5. Design Requirement Affirmation.
6. Preliminary Unit Design Commencement & Completion.
7. Technical Compliance Confirmation.
8. Preliminary Unit Design submitted to the Purchaser.
9. Preliminary Unit Design Approval.
10. Detail Unit Design Commencement & Completion of each unit.
11. Design Integration with signalling systems of each unit.
12. Interdisciplinary Reviews and Checks as applicable of each unit.
13. Detail Unit Design submitted to the Purchaser of each unit.
14. Detail Unit Design Approval of each unit.
15. Procurement of material & Long Lead Items of each unit.
16. Technical Assurance Plan (to include all Test Plans) of each unit.
17. Components testing of each unit.
18. Completion of Factory Acceptance Tests of each unit.
19. Delivery to dynamic test site of each unit.
20. Completion of Dynamic Testing (SAT on proxy test facility) of each unit.
21. Pre-delivery Acceptance Test (fault free mileage & operation) of each unit.
22. Plant & Machinery available for delivery to allow commencement of Infrastructure Testing of each unit.
23. Delivery including delivery methods to Purchaser's specified site.
24. The production of training documentation, training of staff in the use & maintenance of the Engineering Trains.
25. Submission of O & M manual of each unit.

26. Completion of Dynamic Testing & Infrastructure Testing on Crossrail infrastructure of each unit.
27. Authorisation to Place into Service (APIS) - Approved by ORR for each unit.
28. Take Over Certificate / Qualified Take Over Certificate of each unit.
29. Fleet Acceptance Certificate.