

# SILVERTOWN TUNNEL

## Volume 3: Project Agreement – Schedules 2 to 31

### Schedule 14 – User Charging Interface

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## **SCHEDULE 14**

### **USER CHARGING INTERFACE**

#### **Part 1 - User Charging Infrastructure**

##### **1. TfL General Requirements**

1.1 Project Co shall design and construct the Passive User Charging Infrastructure in accordance with the requirements of this Part 1 (*User Charging Infrastructure*) at the detection points located within the Order Limits as shown on drawings ST150030-ATK-ZZZ-ZZ-DRG-ZZ-4011 and ST150030-ATK-ZZZ-ZZ-DRG-ZZ-4012 on the CD Rom referred to in clause 1.2(o).

##### **2. Detailed Design**

2.1 Project Co shall:

2.1.1 develop detailed designs for the Passive User Charging Infrastructure which are based on and consistent with:

a. the TfL user charging installation requirements, as shown on drawing ST150030-ATK-ZZZ-ZZ-DRG-ZZ-4023 on the CD Rom referred to in clause 1.2(o); and

b. Project Co's draft user charging design in Annex 2 (*Project Co's draft user charging design*),

and are in accordance with all other requirements of this Agreement (the "**Passive User Charging Infrastructure Design**"); and

2.1.2 submit the Passive User Charging Infrastructure Design to TfL in accordance with the Review Procedure.

##### **3. Specification**

3.1 Project Co shall design and construct the Passive User Charging Infrastructure to:

3.1.1 be capable of mounting multiple items of Active User Charging Infrastructure at each detection point referred to in paragraph 1.1 to cover each individual traffic lane; and

3.1.2 permit the mounting of forward facing and backward facing detection equipment.

3.2 Project Co shall ensure that the Passive User Charging Infrastructure Design includes but is not limited to:

3.2.1 structural supports;

3.2.2 cable ducting;

3.2.3 cable trays and supports; and

3.2.4 chambers and cabinets.

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- 3.3 In designing and constructing the Passive User Charging Infrastructure, Project Co may, subject to compliance with Schedule 10 (*Design and Construction Requirements*), utilise gantries otherwise required for mounting signs and signals as structural supports or utilise separate structures.
- 3.4 Project Co acknowledges and agrees that:
- 3.4.1 any gantries which are proposed as structural supports for the Passive User Charging Infrastructure shall be categorised as Category II Structures ; and
- 3.4.2 any poles or masts which are proposed as structural supports for the Passive User Charging Infrastructure shall be categorised as Category I Structures,
- for the purposes of Schedule 9 (*Certification and Review Procedure*).

**4. Power and Telecommunications**

- 4.1 Project Co shall ensure that power supplies for the Active User Charging Infrastructure are installed at termination cabinets, easily accessible, within twenty (20) meters of each detection point within the Order Limits as shown on drawings ST150030-ATK-ZZZ-ZZ-DRG-ZZ-4011 and ST150030-ATK-ZZZ-ZZ-DRG-ZZ-4012 on the CD Rom referred to in clause 1.2(o).
- 4.2 Project Co shall ensure that the power supplies installed pursuant to paragraph 4.1 shall have a means of metering capable of separately identifying power consumption by the Active User Charging Infrastructure.
- 4.3 Project Co shall ensure that the power supplies installed pursuant to paragraph 4.1 terminate in separate termination cabinets which shall be for TfL's sole use.
- 4.4 Project Co shall provide ducts and cable supports from the termination cabinets installed pursuant to paragraph 4.3 as necessary to provide power cable routes to the detection equipment.
- 4.5 For the avoidance of doubt, Project Co shall not be responsible for installing and connecting power cabling from the termination cabinets to the detection equipment.
- 4.6 Project Co shall provide cable duct routes from connection points on the existing telecommunications network to within twenty (20) meters of each detection point within the Order Limits as shown on drawings ST150030-ATK-ZZZ-ZZ-DRG-ZZ-4011 and ST150030-ATK-ZZZ-ZZ-DRG-ZZ-4012 on the CD Rom referred to in clause 1.2(o) which shall be for TfL's sole use.
- 4.7 Project Co shall provide ducts and cable supports from the termination cabinets to provide communication cable routes to detection equipment.
- 4.8 For the avoidance of doubt, Project Co shall not be responsible for installing and connecting data cabling from the detection equipment to points on the telecommunications network.

**5. Safety and Security**

- 5.1 Project Co shall incorporate road restraint protection to structural supports installed as part of the Passive User Charging Infrastructure in accordance with the requirements of Schedule 10 (*Design and Construction Requirements*).

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5.2 Project Co shall design and construct security measures in the Passive User Charging Infrastructure to prevent unauthorised access to the Passive User Charging Infrastructure and Active User Charging Infrastructure.

5.3 Project Co shall provide a safe means of access to TfL or any TfL Related Parties with appropriate security clearance to the Passive User Charging Infrastructure and Active User Charging Infrastructure as reasonably required by TfL.

**6. Certification of Passive User Charging Infrastructure**

6.1 Project Co shall comply with the requirements of clause 14.2 (*TfL UC Installation Period*) in relation to inspection of the Passive User Charging Infrastructure by the Independent Certifier.

6.2 The Passive UC Infrastructure Completion Certificate to be issued by the Independent Certifier shall be in the form shown in Annex 1 (*Passive UC Infrastructure Completion Certificate*).

**Annex 1 of Part 1 – Passive UC Infrastructure Completion Certificate**

1. We refer to the agreement between TfL and Project Co dated [ ] (the "**Project Agreement**") relating to the Silvertown Tunnel Project.
2. Words and expressions defined in the Project Agreement shall have the same meanings in this certificate.
3. We certify that:
  - a. we have used reasonable professional skill and care in examining the Passive User Charging Infrastructure in accordance with the Independent Certifier's Deed of Appointment and clause 14.2 (*TfL UC Installation Period*) of the Project Agreement; and
  - b. the Passive User Charging Infrastructure has been designed, constructed and completed by Project Co in accordance with the D&C Requirements and the terms of the Project Agreement.
4. This document shall serve as the Passive UC Infrastructure Completion Certificate.

Signed

Independent Certifier

Name

Title

Date

**Annex 2 of Part 1 - Project Co's draft user charging design**

**Excluded commercially sensitive information**

## **SCHEDULE 14**

### **USER CHARGING INTERFACE**

#### **Part 2 - Works UC Interface Protocol**

##### **1. Requirements for Works UC Interface Protocol**

- 1.1 Project Co shall develop a user charging interface protocol from the Effective Date until the Permit to Use Date in accordance with the requirements of this Part 2 (*Works UC Interface Protocol*) (the "**Works UC Interface Protocol**").
- 1.2 Project Co shall submit the Works UC Interface Protocol to TfL under the Review Procedure and shall ensure the Works UC Interface Protocol has been endorsed by TfL as "received" or "received with comments" in accordance with the Review Procedure prior to the commencement of the TfL UC Installation Period.
- 1.3 The Works UC Interface Protocol shall detail the interfaces and working arrangements between Project Co, the D&C Contractor, TfL and any TfL Related Parties responsible for the installation and commissioning of the Passive User Charging Infrastructure and the Active User Charging Infrastructure (as applicable) and any other parties necessary for completion of the TfL User Charging System.
- 1.4 Project Co shall ensure that the Works UC Interface Protocol shall include but not be limited to:
  - 1.4.1 communications between the relevant parties referred to in paragraph 1.3 (including nominated contacts and responsibilities);
  - 1.4.2 programme co-ordination (including notice periods and response periods);
  - 1.4.3 network occupancy and temporary traffic management proposals and arrangements;
  - 1.4.4 safety co-ordination and responsibilities, site safety rules, permit to work arrangements and method statements;
  - 1.4.5 access arrangements;
  - 1.4.6 use of plant and equipment;
  - 1.4.7 quality control;
  - 1.4.8 damage and rectification;
  - 1.4.9 testing and commissioning;
  - 1.4.10 inspection and handover; and
  - 1.4.11 records and certification,in accordance with this Agreement (where applicable).



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## **SCHEDULE 14**

### **USER CHARGING INTERFACE**

#### **Part 3 - Services UC Interface Protocol**

##### **1. Requirements for Services UC Interface Protocol**

- 1.1 Project Co shall develop and implement a user charging interface protocol for the Availability Period in accordance with the requirements of this Part 3 (*Services UC Interface Protocol*) (the "**Services UC Interface Protocol**").
- 1.2 Project Co shall submit the Services UC Interface Protocol to TfL under the Review Procedure and shall ensure that the Services UC Interface Protocol has been endorsed by TfL as "received" or "received with comments" in accordance with the Review Procedure prior to the Permit to Use Date.
- 1.3 The Services UC Interface Protocol shall detail the interfaces and working arrangements between Project Co, any O&M Contractor, TfL and any TfL Related Parties responsible for the operation and maintenance of the Active User Charging Infrastructure and the Passive User Charging Infrastructure (as applicable) and any other TfL Related Parties responsible for network operation and maintenance.
- 1.4 The Services UC Interface Protocol shall cover arrangements for accessing the Passive User Charging Infrastructure and the Active User Charging Infrastructure for the purposes of operation and maintenance.
- 1.5 Project Co shall ensure that the Services UC Interface Protocol shall include but not be limited to:
  - 1.5.1 communications between the parties referred to in paragraph 1.3 (including nominated contacts and responsibilities);
  - 1.5.2 programme co-ordination (including notice periods and response periods);
  - 1.5.3 network occupancy and temporary traffic management proposals and arrangements;
  - 1.5.4 safety co-ordination and responsibilities, site safety rules, permit to work arrangements and method statements;
  - 1.5.5 access arrangements;
  - 1.5.6 use of plant and equipment;
  - 1.5.7 quality control;
  - 1.5.8 damage and rectification; and
  - 1.5.9 user charging system technology and equipment refresh,and such contents shall be consistent with the provisions of this Agreement.