

**LONDON CYCLE HIRE SCHEME AGREEMENT**

**Schedule 2 – On-Street Infrastructure Statement of Requirement Lot 1**



# **London Cycle Hire Scheme**

## **Schedule 2**

### **On-Street Infrastructure Statement of Requirements**

#### **Lot 1**

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## 1 PRINCIPLE DESIGN REQUIREMENTS

- 1.1 The Service Providers' solution for the On-Street Infrastructure must be designed to meet the installation requirements, future infrastructure removal and expansion requirements as set out in this Agreement.
- 1.2 The design, style and technical functionality for the On-Street Infrastructure shall be consistent throughout the Term unless expressly approved by TTL.
- 1.3 The design of the On-Street Infrastructure shall meet all relevant British and European Standards, as stated in the Common Statement of Requirements.
- 1.4 TTL require that all manufacturers branding be kept to the minimum possible.
- 1.5 The Service Provider shall not commission any special manufacturing with branding removed, but shall ensure that only standard manufacturers' branding appears on any part of the On-Street Infrastructure.
- 1.6 All branding shall be agreed in advance by TTL.
- 1.7 The Service Provider shall:
  - a) in accordance with Clause 29 (*Deleterious Materials*), ensure that no Deleterious Materials are used in any part of the On-Street Infrastructure; and
  - b) in accordance with Clause 28 (Timber Standards), ensure that any timber used in delivering the Services is from a sustainable source.
- 1.8 The Service Provider shall design and manufacture the On-Street Infrastructure to minimise the need for adaption, modification or replacement should TTL request the introduction of a TTL SmartCard as an Additional Service in accordance with Clause 22 (*Additional Services*) and Schedule 33 (*Additional Services*).

## 2 DOCKING STATIONS

- 2.1 The Service Provider shall design, implement and test each Docking Station in accordance with:
- a) the Agreement;
  - b) the Planning Consent obtained by the TfL Group;
  - c) lease and/or licence agreements for the Sites; and
  - d) Highways Agreements obtained by the TfL Group.

### DESIGN

- 2.2 TTL will provide the Service Provider with:
- a) the Location Plan (Red Line Plan);
  - b) the general arrangement drawing for the Terminal provided at Appendix 6 (*General Arrangement for the Terminal*); and
  - c) the indicative Docking Station Layout provided at see Appendix 7 (*Indicative Docking Station Layouts*),

used to obtain Planning Consent for each Site.

- 2.3 To the extent permitted by the Red Line Plan, the Service Provider shall use a consistent configuration of Docking Station components wherever possible to achieve a standardised layout and positioning for Docking Points and Bicycles.
- 2.4 The Service Provider shall develop for each Docking Station a Site Design, including:
- a) Terminal(s);
  - b) foundation design for the Terminal;
  - c) Base Plate design for the Terminal which will be secured to the foundation design;
  - d) Docking Points; and
  - e) any infrastructure required to allow the Site to function (e.g. ducting for power and communications to Docking Points),
- as detailed in Schedule 37 (Docking Station Implementation and Traffic Management).
- 2.5 The Planning Consent granted to the TfL Group will stipulate the maximum number of Docking Points allowed at a Site. This information will be passed to the Service Provider, who shall only deviate from this number of Docking Points with the prior written consent of TTL.
- 2.6 The Service Provider shall ensure that:
- a) Bicycles will be spaced at seven hundred and fifty (750) millimetre centres; and
  - b) Docking Points are located within the Site Design to ensure the required space between docked Bicycles.

An example of acceptable Docking Station layouts is provided at Appendix 7 (*Indicative Docking Station Layouts*).

- 2.7 The Service Provider shall design the Docking Points so as to allow pedestrian passage between Docking Points that are not occupied by a Bicycle.
- 2.8 The Service Provider shall ensure that the Terminal is sited within the Docking Station, such that a circulation area of at least seven hundred (700) millimetres is provided on each side (i.e. a clear area with no obstructions).
- 2.9 The Service Provider shall ensure that each Terminal is within three (3) metres of at least one (1) Docking Point.
- 2.10 The Service Provider shall supply TTL with copies of the Site Design and all working drawings produced for carrying out the installation of the Docking Station.
- 2.11 In accordance with the provisions of Schedule 37 (*Docking Station Implementation and Traffic Management*), the Service Provider shall obtain approval from TTL, the Highway Authority and where relevant the Royal Parks, for each Site Plan prior to commencing implementation for the relevant Docking Station.
- 2.12 The Service Provider shall design each Docking Station so as to allow easy and unimpeded Dock and Release of Bicycles by Customers.
- 2.13 The Service Provider shall design all Docking Stations so that they can be temporarily removed and reinstated from individual Sites within twenty-four (24) hours following written notice from TTL.
- 2.14 The Service Provider shall design all Docking Stations so that when they are temporarily removed, at TTL's request, the Site will not constitute a safety or other hazard, electricity supply accesses will be capped and all surfaces will be flush to the ground.
- 2.15 The Service Provider shall design all Docking Stations so that any components that are required to be buried shall not interfere with any existing statutory undertakers or other underground equipment.
- 2.16 The Service Provider shall design all Docking Stations so that any components that are fixed into the ground are fixed securely with tamper-proof fixings.

## **INSTALLATION OF DOCKING STATIONS**

- 2.17 The Service Provider shall install Docking Stations in accordance with Schedule 37 (*Docking Station Installation and Traffic Management*);
- 2.18 The Service Provider shall produce construction and installation plan for the installation of all Docking Stations, in accordance with:
- a) Schedule 3 (*Milestones and Deliverables*); and
  - b) Schedule 37 (*Docking Station Installation and Traffic Management*).
- 2.19 The Service Provider shall test the Docking Station installations in accordance with:
- a) Schedule 4 (*Testing Regime*); and
  - b) Schedule 37 (*Docking Station Implementation and Traffic Management*).

## **ENVIRONMENTAL REQUIREMENTS**

- 2.20 The Docking Station shall operate:
- a) in accordance with the Statement of Requirements and the Service Levels; and
  - b) under any of the environmental conditions defined in this section, occurring either individually, or in natural combinations.

This shall remain so during normal operation and during any maintenance activities carried out on the Docking Station.

- 2.21 All Docking Station Systems shall be subjected to environmental tests to demonstrate their reliability under the environmental conditions detailed below.
- 2.22 The Docking Station Systems shall conform to all relevant European Union requirements for Electromagnetic Compatibility (EMC). This may be either by:
- a) production of self-certification documentation to demonstrate overall compliance with the EMC requirements; or
  - b) testing the Docking Station Systems to prove compliance.
- 2.23 All Docking Station Systems shall:
- a) be certified with a CE mark; and
  - b) conform to compatible EMC standards under the CE mark,

such that all Docking Station Systems and cabling within the Terminal or Docking Point works without interference to, or susceptibility to interference to, any other CE marked equipment also within the Terminal or Docking Point.

- 2.24 It shall be a condition precedent to Approval of the Docking Station Systems that the Service Provider investigate and complete remedial actions to eliminate any effects arising from electromagnetic emissions or susceptibilities.
- 2.25 No equipment or devices supplied as part of the On-Street Infrastructure shall produce electromagnetic emissions, whether conducted, radiated or induced, which in any way interfere with the normal operation of the London Cycle Hire Scheme.
- 2.26 All equipment and devices supplied by the Service Provider shall function in the presence of electromagnetic emissions, regardless of their source, within the surrounding environment. The surrounding environment shall include communications Systems, microwave, UHF, VHF radio transmissions and repeaters, computer equipment and accessories, traffic control devices, magnetometers, electric motors, control Systems, power tools, welders, power substations and equipment, automotive vehicles, and power transmission lines.
- 2.27 All enclosures for external locations (e.g. Terminal and Docking Points) shall conform to IP 56 specified in BS EN60529.
- 2.28 All externally mounted devices (e.g. illuminators) shall conform to IP 65 specified in BS EN60529.
- 2.29 The Terminal and Docking Points shall comply with all relevant requirements of the following sections of the Highways Agency Document “Environmental tests for motorway communications equipment and portable and permanent road traffic control equipment” TR2130 issue C, Feb 2002:
- a) Section 3.2 Dry heat;
  - b) Section 3.3 Cold;
  - c) Section 3.4 Change of temperature;
  - d) Section 3.5 Damp heat;
  - e) Section 3.6 Solar radiation;
  - f) Section 4.17 Wind;
  - g) Section 3.7 Water Penetration;
  - h) Sections 4.2, 4.3, 4.4 Immersion;
  - i) Sections 4.14, 4.15, 4.16 Bump;
  - j) Section 3.8 Random Vibration; and
  - k) Sections 5.2, 5.3, 5.4 Vibration, random, operational.

For the avoidance of doubt, all externally mounted equipment (e.g. illuminators) would be classified as subject to solar heating as specified in 3.1.1 of TR2130C.

- 2.30 For equipment mounted in the Terminal or Docking Point, the dry heat test as outlined in section 3.1 or TR2130C shall be carried out in one of two ways:



- a) All the equipment proposed to be mounted in the Terminal or Docking Point may be tested inside the Terminal or Docking Point respectively, in accordance with Section 3.1.1 of TR2130C, including the effects of solar heating; or
- b) The Service Provider may calculate the theoretical maximum temperature inside the proposed Terminal or Docking Point, taking into account the maximum power dissipation of each piece of equipment, the solar heating of the Terminal or Docking Point, and a sustained ambient temperature of +35 °C. Each piece of equipment in the Terminal or Docking Point may then be individually tested to this theoretical maximum temperature.

2.31 Before installation, the Service Provider shall produce certificates from a certified test house confirming that the Docking Station equipment complies with requirements of paragraphs 2.28, 2.29 and 2.30 above. Any certification obtained outside of this Agreement, is admissible providing there is no difference between the equipment certified, and the equipment proposed for installation.

2.32 The thermal design of the Docking Station equipment cabinet shall, wherever possible, avoid the use of moving parts, including equipment cooling fans.

2.33 The layout and build quality of the equipment shall be subject to the Approval of TTL and shall not be installed on Site unless Approved by TTL.

#### **ENVIRONMENTAL MANAGEMENT**

2.34 The Service Provider shall hold and maintain an environmental management system independently certified to BS EN ISO 14001: 2004, or equivalent, for the Term.

2.35 The Service Provider shall complete an Environmental Management Plan and submit this to TTL for Approval in accordance with Schedule 37 (*Docking Station Installation and Traffic Management*).

### **3 DOCKING POINTS**

- 3.1 The Service Provider shall be responsible for the design, manufacture and installation of Docking Points, taking into consideration and complying with the provisions of the Planning Consents, Highways agreements and relevant leases and/or licence agreements, as applicable to each Site.
- 3.2 The Service Provider shall ensure that each Docking Point contains, as a minimum:
- a) a mechanism for releasing a Bicycle when Hired by a Customer;
  - b) a mechanism to Dock a returned;
  - c) a means of clearly indicating to a Customer when a Bicycle has been successfully Released, Docked or cannot be hired either because there is a fault with the Docking Point or the Bicycle is Damaged;
  - d) a manual means to Dock a Bicycle if there is no power at the Docking Point;
  - e) a communications link to the Service Systems to provide information about Bicycle hire and return including a means to cater for loss and restoration of power and/or communications and/or other System Failure; and
  - f) a SmartCard Reader to allow Registered Customers to obtain Bicycles without having to interact with the Terminal.
- 3.3 The Service Provider shall ensure that the Docking Point design and operation does not require the Customer to physically unlock a release mechanism in order to remove a hired Bicycle.
- 3.4 The Service Provider shall ensure that the Central System records the identity of each unique Bicycle that has been Docked and Released from each Docking Point.
- 3.5 The Service Provider shall design the Docking Points such that each Docking Point will be a single unit not capable of holding more than one (1) Bicycle.
- 3.6 The Service Provider shall ensure that the height of the Docking Points shall be a minimum of seven hundred (700) millimetres and a maximum of one thousand and fifty (1050) millimetres high.

Note. TTL would prefer the height of the Docking Point to be at least one thousand (1000) millimetres to comply with the Disability Discrimination Act (DDA) 1995 guidelines and Department for Transport (DfT) Inclusive Mobility – a guide to best practice on access to pedestrian and transport infrastructure (May 2002) guidelines.

- 3.7 The Service Provider shall ensure that Docking Points are designed such that only a Bicycle designed and manufactured for use in the London Cycle Hire Scheme can be Docked.
- 3.8 The Service Provider shall ensure that Docking Points are designed to minimise the theft of Bicycles.
- 3.9 The Service Provider shall ensure that the Docking Point does not consist of any horizontal or near-horizontal surfaces that would permit the build up of litter or other objects.
- 3.10 The Service Provider shall ensure that the Docking Points are constructed from corrosion resistant material.
- 3.11 The Service Provider shall ensure that the foundation for a Docking Point does not exceed four hundred and fifty (450) millimetres in depth.
- 3.12 The Service Provider shall display, by a means which is resistant to weather and vandalism, the following information on each Docking Point:
- a) a unique number within the Docking Station so that the Docking Point can be easily identified by a Customer; and
  - b) a mini-roundel that identifies the Docking Point as belonging to the London Cycle Hire Scheme.
- 3.13 Requirement Removed
- 3.14 Requirement Removed.
- 3.15 Requirement Removed

## 4 TERMINALS

- 4.1 The Service Provider shall be responsible for the completed design, manufacture and installation of Terminals at each of the Docking Stations, taking into consideration and complying with the provisions of the Planning Consents, Highways agreements and relevant leases and/or licence agreements, as applicable to each Site.

### TERMINAL HOUSING

- 4.2 The general arrangement for the Terminal Housing, used by TTL to obtain Planning Consents, is provided at Appendix 6 (*General Arrangement for the Terminals*).
- 4.3 The Service Provider shall ensure that the dimensions of the Terminal Housing comply with the general arrangements provided at Appendix 6 (*General Arrangement for the Terminal*).
- 4.4 The Service Provider shall ensure that the sides of the rectangular Terminal Housing are of two (2) sizes, parallel sides being equal length; and either:
- a) of five hundred (500) millimetres in length; or
  - b) of three hundred and fifty (350) millimetres in length.
- 4.5 The Service Provider shall ensure that the Terminal Housing is no greater than two thousand four hundred (2400) millimetres in height, including the top cap, roundel and Docking Station name.
- 4.6 The Service Provider shall ensure that the Terminal Housing is manufactured from either
- a) aluminium/aluminium alloy; or
  - b) stainless steel.
- 4.7 The Service Provider shall ensure that the top cap of the Terminal Housing is constructed from radio translucent materials if the aerial is located within the structure.
- 4.8 The Service Provider shall ensure that the top cap of the Terminal is constructed of photovoltaic cells that provide a power source for the Terminal.
- 4.9 The Service Provider shall ensure that the foundation for a Terminal Housing does not exceed four hundred and fifty (450) millimetres in depth.
- 4.10 The Service Provider shall ensure that each Terminal Housing is:
- a) coated with a graffiti proof, sticker resistant, vitreous enamel surface material;

- b) constructed to provide visually contrasting horizontal and vertical edge details; and
- c) complies with the colour references provided at Appendix 6 (*General Arrangement for the Terminal*).

4.11 The Service Provider shall display, by a means which is resistant to weather and vandalism, the following information on each Terminal Housing:

- d) a unique serial number;
- e) signage that clearly identifies the Terminal as part of the London Cycle Hire Scheme, including the roundel design;
- f) the name of the Docking Station of which the Terminal is a component;
- g) London Borough identification (to be supplied to the Service Provider by TTL); and
- h) The traffic sign shown in Appendix 6 (*General Arrangement of the Terminal*)

#### **TERMINAL COMPONENTS**

4.12 The Service Provider shall ensure that each Terminal comprises as a minimum:

- a) a screen;
- b) an input device to allow the Customer to interact with the Services Systems;
- c) a card reader for taking Charge Payments from debit cards/credit cards;
- d) a SmartCard Reader;
- e) a device for printing receipts;
- f) a wireless communications link with the Central Systems, to enable:
  - i. authorisation of Charge Payments; and
  - ii. provision of near realtime information regarding the London Cycle Hire Scheme; and
- g) Customer Information Panels for the display of customer information.

4.13 The Service Provider shall arrange the following components within a space three hundred and fifty (350) millimetres high, as indicated on the general arrangement drawing provided at Appendix 6 (*General Arrangement for the Terminal*):

- a) a screen;
- b) an input device to allow the Customer to interact with the Service Systems;
- c) a card reader for taking Charge Payments from debit cards/credit cards;
- d) a SmartCard Reader; and
- e) a device for printing receipts.

- 4.14 The Service Provider shall ensure that the all Terminal components can be easily accessed for maintenance activities and rapidly swapped out and replaced.
- 4.15 The Service Provider shall provide two types of Terminal configuration for each Terminal Housing as detailed in Appendix 6 (*General Arrangement for the Terminals*):
- 4.16 TTL will inform the Service Provider of the Terminal configuration required at each Docking Station as part of Annex A to Schedule 37 (*Docking Station Implementation and Traffic Management*).
- 4.17 The Service Provider shall ensure that the Terminal does not consist of any horizontal or near-horizontal surfaces that would permit the build up of litter or other objects.
- 4.18 Requirement Removed

#### **THE TERMINAL SCREEN AND INPUT DEVICE**

- 4.19 The Service Provider shall incorporate the Terminal screen into the Terminal Housing ensuring that it is:
- a) readable in all light conditions (e.g. direct sunlight and at night); and
  - b) recessed and sloped.
- 4.20 The Service Provider shall ensure that the Terminal screen is positioned such that:
- a) the bottom of the Terminal screen is at least one thousand one hundred and forty (1140) millimetres from the base of the Terminal; and
  - b) the top of the Terminal screen is at most one thousand three hundred and sixty two (1362) millimetres from the base of the Terminal.
- 4.21 The Service Provider shall ensure that the Terminal screen has a width of at least two hundred (200) millimetres.
- 4.22 The Service Provider shall incorporate the input device into the Terminal Housing ensuring that it:
- a) Is positioned below the screen;
  - b) allows at a minimum the input of numbers; and
  - c) Is recessed and sloped.

#### **PAYMENT CARD READER**

- 4.23 The Service Provider shall ensure that the Payment Card Reader complies with PCI DSS (version 1.2).

- 4.24 The Service Provider shall ensure that the Payment Card Reader has a card protection device that provides the following functions as a minimum:
- a) a silent alarm to notify the Service Provider instantly of any criminal activity; and
  - b) a device to detect any false fronts or foreign devices being attached.

### **OYSTER CARD READER**

4.25 Requirement Removed

4.26 Requirement Removed

4.27 Requirement Removed

4.28 Requirement Removed

4.29 Requirement Removed

4.30 Requirement Removed

4.31 Requirement Removed

### **SMARTCARD READER**

4.32 The Service Provider shall ensure that the SmartCard Reader can read SmartCards and provides functionality equivalent to ISO 14443 A and B.

4.33 The Service Provider shall ensure that the SmartCard Reader has industry standard security measures to prevent fraudulent activity including card cloning and card skimming.

4.34 The Service Provider shall ensure that they have processes to prevent further security breaches.

### **CUSTOMER INFORMATION PANELS**

4.35 The Customer Information will be provided by TTL electronically and will be used to display the following types of information:

- a) Contact Centre number or contact details;
- b) map of the local area covering nearby Docking Stations;
- c) map of a larger area;
- d) guidance to users; and
- e) key user terms and conditions.

4.36 The Service Provider shall ensure that the Customer Information Panels are illuminated, but not continuously (i.e. illumination when required by the Customer, whether by proximity, pressing a button or other means).

4.37 The Service Provider shall ensure that the Customer Information Panels are incorporated into the Terminal Housing so that they are protected from weather, interference, and vandalism.

4.38 The Service Provider shall ensure that the Customer Information Panels are flush finished with easily replaceable 8mm OptiWhite toughened



glass with foam backing to hold information which is easily accessible for refreshment/replacement.

4.39 The Service Provider shall be responsible for installing and replacing the information provided by the TfL Group on the correct Customer Information Panels in the material format to be specified by TTL.

**OYSTER CONTROLLER**

4.40 Requirement Removed

## **5 POWER AND COMMUNICATIONS**

### **Power**

- 5.1 TTL shall:
- a) be responsible for the installation of an Electrical Feeder Pillar for each Docking Station, subsequent to a Site survey; and
  - b) liaise with the Power Provider for the provision of an unmetered 16 amp supply of electrical power to the Electrical Feeder Pillar.
- 5.2 The Service Provider shall provide and install underground duct links between the Electrical Feeder Pillar and the Docking Station.
- 5.3 The Service Provider shall provide all cabling and connectors to facilitate local power distribution between the Electrical Feeder Pillar and the Docking Station, as required.
- 5.4 The Service Provider shall provide a ducting design to pass through the Base Plate into the Terminal for each Docking Station.
- 5.5 The Service Provider shall ensure that the maximum mains power consumption of any Docking Station shall not exceed five hundred (500) watts.
- 5.6 The Service Provider shall test and accept the power supply from the Electrical Feeder Pillar to the Docking Station.
- 5.7 The Service Provider shall ensure that the Docking Station is energy efficient and, where possible, renewable energy generation should be used.
- 5.8 The Service Provider shall detail the planned energy consumption for each Docking Station as part of the Site Design.
- 5.9 The Service Provider shall perform the tests and deliver the report detailed in Appendix 11 (*Unmetered Supply Test*) to report the actual energy consumption for each Docking Station as part of the Site Acceptance Tests.

### **COMMUNICATIONS**

- 5.10 The Service Provider shall install equipment capable of utilising a wireless telecommunications link between each Docking Station and the Central System.
- 5.11 Where necessary, the Service Provider shall provide any SIM cards required for the wireless telecommunications links between each Docking Station and the Central System.

5.12 The Service Provider shall manage all communications links between the Docking Points, Terminals and the Central System.

5.13 The Service Provider shall encrypt any Data transferred between the:

- a) Terminals and the Central System; and
- b) Terminals and the Docking Points,

in a format to be agreed with TTL and compatible with relevant standards (e.g. PCI DSS).

## **6 BICYCLES**

### **GENERAL REQUIREMENTS**

- 6.1 The Service Provider shall submit the Bicycle design to TTL for Approval prior to it being put into production in accordance with Schedule 3 (*Milestones and Deliverables*).
- 6.2 The Service Provider shall submit a prototype Bicycle to TTL for Approval prior to it being put into production in accordance with Schedule 3 (*Milestones and Deliverables*).

### **BICYCLE DESIGN**

- 6.3 The Service Provider shall ensure that each Bicycle is of a uniform design, and has a colour scheme and livery as specified by TTL.
- 6.4 The Service Provider shall ensure that the Bicycle design complies with CEN (European Committee for Standardisation) Safety Requirements and Test Methods for Cycles (<http://www.cen.eu/cenorm/homepage.htm>) in particular and where relevant:
- a) EN 14764 City and trekking bicycles - Safety requirements and test methods
  - b) TC 333 WI 00333002 Cycles - Vocabulary - Terminology (ISO 8090:1990 Modified)
  - c) EN 14766 Mountain bicycles – Safety requirements and test methods
  - d) prEN 14872 Bicycles - Accessories for bicycles - Luggage carriers
- 6.5 The Service Provider shall ensure that the Bicycle design is certified as meeting the above standards.
- 6.6 The Service Provider shall ensure that each Bicycle shall weigh no more than twenty five (25) kilograms.
- 6.7 The Service Provider shall ensure that each Bicycle is identifiable by:
- a) a frame number;
  - b) an asset number; and
  - c) a unique Bicycle reference number.
- 6.8 The Service Provider shall ensure that the unique Bicycle reference number is permanently recorded on the Bicycle in characters no less than thirty five (35) millimetres high and is visible from both sides of the Bicycle.

- 6.9 The Service Provider shall design the Bicycle such that Customers can step through the frame to mount the Bicycle
- 6.10 The Service Provider shall design the Bicycle to suit users of a minimum height of one thousand and five hundred (1,500) millimetres.
- 6.11 The Service Provider shall design the Bicycle such that the seat is adjustable, and the seat height can be increased by at least three hundred (300) millimetres.
- 6.12 The Service Provider shall design the Bicycle such that the seat can be adjusted easily and securely by hand and without the need for any tools.
- 6.13 The Service Provider shall design the Bicycle so as to deter the removal of any of the Bicycle components (e.g. the seat, the handle bars, etc.) by anyone other than the Service Provider.
- 6.14 The Service Provider shall design the Bicycle to deter access to the inside of the frame tubing by anyone other than the Service Provider.
- 6.15 The Service Provider shall design the Bicycle to prevent Customers, or the general public, from tampering with it.
- 6.16 The Service Provider shall design the Bicycle to keep Customers safe when riding. For example, it should not be possible for clothing to get caught in the moving parts of the Bicycle.
- 6.17 The Service Provider shall ensure that there are unobstructed reflectors on both the front and rear of the Bicycle.
- 6.18 The Service Provider shall ensure that there are reflectors on both the front and rear wheels facing sideways.
- 6.19 The Service Provider shall ensure that there are mudguards on both the front and rear wheels of the Bicycle that will protect the Customer from the elements.
- 6.20 The Service Provider shall ensure that the mudguard on the rear wheel will accommodate a potential Sponsor's logo on both sides, which will have a maximum size of fifteen (15) cm squared facing sideways
- 6.21 The Service Provider shall ensure that the Bicycle tyres are resistant to punctures.
- 6.22 The Service Provider shall design the Bicycle so as to include three (3) hub gears.
- 6.23 The Service Provider shall design the Bicycle such that the drive mechanism, cables and wires are covered to deter access by anyone other than the Service Provider.

6.24 The Service Provider shall design the Bicycle so as to include dynamo hub lighting on both the front and rear of the Bicycle which shall operate whenever the Bicycle is in motion and whilst stationary for example at red traffic lights.

6.25 The Service Provider shall detail how the Bicycle lighting will function when stationary, especially when the Bicycle has only travelled a short distance, giving details of how long the illumination will be maintained.

Note: The longest red light phase of a traffic light sequence within the London Cycle Hire Scheme area is two (2) minutes

6.26 The Service Provider shall design the Bicycle so as to include a carrying device that allows:

- a) the contents of the carrying device to be clearly visible and securely carried;
- b) Sponsor branding, size 150mm x 150mm, to be displayed on the front;
- c) Sponsor branding to be easily changed; and
- d) discourages the collection or build up of litter and liquids.

6.27 The Service Provider shall not affix or permit any Third Party to affix any other advertising materials.

6.28 The Service Provider shall design the Bicycle so as to include a hand operated bell.

6.29 The Service Provider shall design the Bicycle so as to deter more than one (1) Customer from using the Bicycle at any one time.

6.30 The Service Provider shall ensure that the Bicycle is not supplied with a lock.

## **7 ADDITIONAL SERVICES**

### **7.1 INTRODUCTION**

This section details the Additional Services which may be required by TTL in accordance with Clause 22 (*Additional Services*) and Schedule 33 (*Additional Services*).

Additional Services includes any optional elements of the London Cycle Hire Scheme and covers the potential extension and expansion of the London Cycle Hire Scheme, LCHS Assets and Services Systems.

The LCHS Assets, Service Systems and Services shall be capable of supporting any of the following options together with the flexibility to add future charging criteria. The methods of flexibility are to be jointly agreed with the Service Provider.

### **7.2 PORTABLE DOCKING STATIONS**

7.2.1 TTL anticipates that there may be a future need for the provision of a Portable Docking Station solution to provide extra capacity for:

- a) major events;
- b) where the London Cycle Hire Scheme operation is being hampered by a shortfall in capacity; and
- c) any expansion of the London Cycle hire Scheme whilst new Docking Station Sites go through the planning process.

- 7.2.2 Should TTL decide to implement the Portable Docking Solution proposed by the Service Provider, this will be delivered through a Change Control Request, the response to which will include the Service Provider's final costs encompassing any on-going costs in relation to the management, deployment, operation and storage of the Portable Docking Stations.
- 7.2.3 The Service Provider is asked to provide further details as to how they would provide Portable Docking Stations, as detailed in this section 7, and the cost of provision and operation of such. This shall include details of an outline deployment and management regime for the operational management of the Solution and likely indicative resource, storage and operational requirements and costs associated with the delivery of the Service Provider's proposed solution. These costs should clearly differentiate between any one-off set-up costs and any incremental costs.
- 7.2.4 The Portable Docking Station solution shall be based upon the Service Provider providing a total of ten (10) Portable Docking Stations each of which shall comprise the following:
- a) one (1) Terminal; and
  - b) twenty (20) Docking Points.
- 7.2.5 The Service Provider shall design the Portable Docking Station capability such that:
- a) all components are fixed to a Base Plate of no greater width than one thousand eight hundred (1,800) millimetres;
  - b) the Base Plate can be adjusted to ensure a horizontal or near horizontal surface;
  - c) a connection to an external power source is provided;
  - d) an integrated power unit is provided;
  - e) there is no trip or other safety hazard; and
  - f) all areas where staff or members of the public may walk have a non-slip surface.



- 7.2.6 The Service Provider shall ensure that the Portable Docking Station delivers the full functionality of the permanent Docking Station.
- 7.2.7 The Service Provider shall ensure that the Portable Docking Station integrated power unit, is at a minimum, powered by either an LPG powered generator or by a low or zero emission power source (such as battery powered).
- 7.2.8 The Service Provider shall ensure that the Portable Docking Station is capable of operating from the integrated power unit for no less than twelve (12) hours.
- 7.2.9 The Service Provider shall design the Portable Docking Station so that it is compatible in manufactured parts and design with all other Docking Stations.

### **7.3 Terminals**

**Requirement 7.3.1 removed**

### **7.4 Docking Points**

**Requirements 7.4.1 to 7.4.4 removed.**

### **7.5 PROMOTION OF THE CYCLE HIRE SCHEME**

- 7.5.1 In order to promote the Cycle Hire Scheme, TTL will be participating at various events in particular the London Cycle Show in October 2009 and at various road shows for London Boroughs. TTL would like the Service Provider to participate in such events and to provide examples of Terminal, Docking Points and Bicycles for display and exhibition.
- 7.5.2 The Service Provider shall provide a demonstration Docking Station capability to TTL consisting of:
- a) six (6) Docking Points;
  - b) twelve (12) Bicycles; and
  - c) a Terminal with the required branding and signage
- 7.5.3 The Service Provider shall give details of what promotional materials shall be available and by when, including but not limited to:
- a) Mock-ups or artists impressions of:
    - I. Bicycles
    - II. Docking Points
    - III. Terminals
  - b) Prototype versions of:
    - I. Bicycles
    - II. Docking Points
    - III. Terminals
  - c) Final versions of:
    - I. Bicycles
    - II. Docking Points
    - III. Terminals

- d) Other marketing collateral

## **7.6 TRAINING CYCLES**

- 7.6.1 TTL requires up to two hundred (200) bicycles for use by the London Boroughs to provide cycle training to prospective London Cycle Hire Scheme users during 2010.
- 7.6.2 By 5 January 2010, the Service Provider shall deliver to TTL one hundred (100) bicycles painted in the London Cycle Hire Scheme livery.
- 7.6.3 At TTL's request, the Service Provider shall deliver a further one hundred (100) bicycles painted in the London Cycle Hire Scheme livery, on a date to be agreed.
- 7.6.4 The Service Provider shall ensure that the bicycles are of the London Cycle Hire Scheme design where manufacture of the bicycles has commenced.
- 7.6.5 The Service Provider shall give details of the expected stages and timeframes for putting bicycles into production.