

SPECIAL DESCRIPTIVE AND PERFORMANCE CONDITIONS FOR THE SUPPLY AND SETTING UP OF A “BIKE-SHARING SYSTEM”

Art. 1 Scope

These Special Conditions define the requirements for the supply and setting up of a bike-sharing system to make public traditional and pedal assisted bicycles available at pick up and return points. The system shall be designed so that bicycles may also be picked up at one point and returned to a different point. Users shall be identified by electronic card or identification number. The system shall ensure real-time identification of users to check pick up and return operations and remotely disable users in case of improper use. The scope of the project is the following:

- a) Detailed design of the actions required to obtain all opinions and approvals pursuant to municipal, regional and national laws and regulations;
- b) Supply and setting up of 9 automatic pickup and return points (globally comprising 148 bicycle bays to be divided as per the relevant feasibility report and plans);
- c) Supply of 83 traditional bicycles and 9 pedal-assisted bicycles (i.e. globally 92 bicycles) (the minimum number of bicycles is 92; the minimum number of pedal-assisted bicycles is 9; these minimum requirements can be increased when submitting the technical offer);
- d) Supply of a system management software (the use of this software shall be guaranteed free of charge for the whole useful life of the system);
- e) Communication plan.

These Special Conditions define all the performance characteristics of the bike-sharing service and shall be an integral part of the Contract entered into with the Contractor.

Art. 1 Time limit for completion

The works relative to the supply and setting up of the bike-sharing system shall be completed within **150 (one hundred fifty)** calendar, consecutive and uninterrupted days of signing of Contract. For the whole length of works, the Company shall grant access to pedestrians to all entrances along the streets involved in the project. The works provided for by the project shall be carried out in high traffic areas (vehicles and pedestrians). In particular, the public transport service shall be ensured in terms of both transit and travel times in the areas involved in the project. Furthermore, during the execution of works, access to local residential and commercial buildings, shops and public offices, if any, shall always be granted.

Art. 1 Detailed design documents and plans

Detailed design documents and plans shall be drawn up in cooperation with the Municipal Authority to properly and specifically define all architectural, structural and engineering details of the works to be executed. In particular, the minimum requirements for detailed design documents and plans are as follows:

- a) Technical/descriptive report,
- b) Plan showing the location of pick up and return points and pictures,
- c) Technical data sheets for all materials used,
- d) Data sheets showing the technical characteristics of all the elements that make up the system (pick up and return point, bicycle, securing devices, etc.),
- e) Execution details,
- f) Technical data sheet for the management software,

- g) Itemised estimate and economic framework,
- h) Execution calculations for facilities and plants,
- i) List of unit prices,
- j) Time schedule,
- k) Safety Coordination Plan.

The technical offer shall include items a), b), c), d), and e); the other documents shall only be submitted in case of successful tender.

Art. 1 Legal obligations

Detailed design shall include all the documents that are essential to obtain the relevant approvals pursuant to arts. 10 and 146 of Legislative Decree no. 42/2004 (Italian Code of Cultural and Landscape Heritage) as amended and supplemented as well as any other opinion and/or approval required pursuant to municipal, regional and national laws and regulations. Should any competent Superintendence or other body ask for the project to be modified and/or supplemented, the Contractor shall change the project on the basis of the requirements issued by the said bodies within 30 days of the relevant notice sent by the Municipality of Trieste. The Contractor shall obtain all authorisations for public land excavation, modification and occupation and temporary traffic diversion, including any permit for installation and commissioning provided for by municipal regulations and the legislation in force.

Art. 1 Rates and operating hours

The bike-sharing system rates shall be defined at a later stage and directly notified to the Contractor so that the management software can be programmed. The service shall be user-friendly and easy-to-use so that it can be promptly accessed by the largest number of people. The service shall be accessed by identification number (to be obtained from a website through an app for mobile devices by providing credit card details) or by electronic card (to be obtained from information and support points set up by the Municipality of Trieste by providing personal details). The service shall operate 24 hours a day, 7 days a week throughout the year to offer an alternative mode of transport also when the public service is suspended and an increased control of equipment by users also during the night.

Art. 1 Supply of the bike-sharing system

Each pick up and return point shall roughly include the following elements:

- Bicycle bays,
- Bicycles,
- No. 1 info-terminals.

The system shall also include:

- A suitable number (at least 2,000) of electronic cards to ensure full system operability since the start of service,
- The supply and setting up of a management system as defined in the schedule of minimum system requirements enclosed with this Special Conditions.

The Contractor shall supply all the facilities required to set up the bike-sharing system as stated under its offer. All facilities shall be compliant with a standard pick up and return point model that shall be developed so that it can also be set up in urban environments subject to special restrictions (see

Legislative Decree no. 42/2004). The size and characteristics of works and accessories shall comply with the minimum and mandatory requirements stated under the relevant technical data sheets. Pick up and return points shall mention the name of the location where they are installed, the logo of the service provider and as well as any and all identification elements required by the Municipality of Trieste to be communicated during the execution of works.

Art. 1 Minimum system requirements

Minimum system requirements are described in the schedule enclosed with these Special Conditions.

Art. 1 Contractor's obligations

Contractor's obligations:

1. Obligations to be complied with before the award of Contract
2. Before entering into the Contract, the Contractor shall:
 - Subscribe or prove the existence of the insurance policy(ies) under art. 12;
 - Establish a suitable final security deposit for the amount and according to the requirements under art. 11 of the Framework Contract;
 - Notify the Municipal Authority of the name of the Project Manager.

The Project Manager appointed by the Contractor shall be the sole contact for the Contracting Authority during the installation of all supplied materials as well as the person responsible for proper execution of works according to the best rules of the trade and the regulations in force in the field of safety at work (Legislative Decree no. 81/2008).

1. Obligations to be complied with following the award of Contract
2. Within 15 days of signing of Contract and provided that the Municipal Authority has obtained the approvals required pursuant to Legislative Decree no. 42/2004, the Contractor shall:
 - Provide all the detailed design documents that have not been provided upon submission of its technical offer (see art. 3),
 - Notify the Municipal Authority of its contact information (phone numbers).

1. Obligations to be complied with during the execution of works

For the proper execution of works and provision of services as per these Special Conditions, the Contractor shall use an adequate number of duly qualified workers.

The Contractor shall be perfectly fit, organised and equipped for the execution of works by using its own means or through means made available by third parties on the basis of legal instruments and at its own risks.

All machinery and equipment used for the execution of works shall comply with the legislation in force.

All workers used for the execution of works shall behave correctly and politely and shall act at any time with the utmost care and professional diligence.

The Contractor shall direct its workers so that:

- They comply with the instructions issued by the Municipal Authority – Private Building and Public Housing, Mobility and Traffic Department, if any;

- They promptly notify the Municipal Authority of any unexpected event occurred during the execution of works.

The Project Manager shall have the following duties:

- Coordinating the activities of workers;
- Ensuring proper communication with the Municipal Authority,
- Overseeing the proper execution of works according to the requirements laid down in these Special Conditions and the offer submitted by the Contractor.

Art. 1 Municipal Authority's obligations

The Municipal Authority shall apply for landscape and building approvals pursuant to Legislative Decree no. 42 of 22 January 2004 for the project of the provisional Contractor. The Contracting Authority shall apply for electricity supply and bear the costs for connections and bills. The Municipal Authority shall directly:

- Maintain official relations with third parties (official notices to users, press releases, relations with other institutions, etc.);
- Notify system management requirements (operating hours, rates, free use periods) within 30 days of signing of Contract;

The Head of the Private Building and Public Housing, Mobility and Traffic Department at the Municipality of Trieste shall be the sole responsible for this tender.

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Art. 1 Contract performance and supply accounting

With reference to Contract performance and supply accounting, please see Title III of Presidential Decree no. 207/2010 (arts. 297 to 311).

Art. 1 Check of conformity

With reference to Contract check of conformity, please see Title IV of Presidential Decree no. 207/2010 (arts. 312 to 328).

Art. 1 Damage, liability and insurance policies

The Contractor shall be directly and indirectly liable for any damage occurred to the Municipal Authority, users, third parties and things and arising from or connected with the activities of its workers during the execution of works. To cover any damage occurred during the execution of works, the Contractor shall subscribe, before entering into the Contract or, at any, rate, before starting the execution the works, a special insurance policy against all risks resulting from the execution of works for a limit of indemnity of EUR 500,000.00.- (five hundred thousand Euros) as well as against civil liability for damage suffered by third parties, including the Municipal Authority, for a limit of indemnity of EUR 500,000.00.- (five hundred thousand Euros). The policy shall be valid until the issue of the certificate of conformity. Alternatively, the Contractor will be entitled to prove the existence of a GTPL policy already subscribed having the same characteristics as those described above and to submit an appendix to the policy stating that it also covers the services under the Contract and there is no limit to the number of claims or to the annual limit of indemnity for damage. The existence of the policy above shall not relieve the Contractor from its liabilities (it shall be only an additional guarantee). A certified copy of the special insurance policy or appendix to the policy above shall be delivered to the

Municipal Authority before signing the Contract or, at any rate, before starting the supply and execution of works, being understood that, in case of serious and unjustified delay, the award of the Contract may be revoked and the provisional security deposit may be retained.

Art. 1 Warranty and after-sale support

The equipment supplied and set up shall have a warranty of at least 2 years from the date of delivery-assembly. This warranty shall also cover the labour costs incurred into for repair and technical support in case of manufacturing defects. With reference to the use of the system software by the Contracting Authority (reporting and control of the operation of pick up and return points and bicycle bays, management of relations with users, service monitoring and reporting) and without prejudice to the obligations to be complied with during the warranty period (in case of faults/manufacturing defects), technical support (both over the phone and on site, where required) shall be provided for the contracted period (at least two years) from the start of service. During the warranty and after-sale support period, the Contractor shall make available the spare parts required in case of fault and/or breakage resulting from manufacturing defects. The technical report shall state the time for replacement and/or repair, which shall not exceed 15 days from the relevant request.

Art. 1

Art. 1 Sub-contracting

Sub-contracting shall be admitted, provided that the Contractor states under its offer the works that it intends to sub-contract to third parties up to a limit of 30% and according to the requirements laid down in art. 118 of Legislative Decree no. 163/2006.

**TECHNICAL DATA SHEET
MINIMUM SYSTEM REQUIREMENTS**

The requirements stated below for the bike-sharing system are mandatory. Any equivalent or improved feature shall be assessed during the tendering procedure. The aesthetical and manufacturing characteristics of the bike-sharing system elements can be freely chosen, provided that the minimum system requirements are complied with. Given the functional and visual impact of those elements on the urban setting, special attention shall be paid to their overall design and manufacturing quality in terms of both safety and aesthetics so that design, size and materials do not impair the prevailing architectural and aesthetical features in the area. The models supplied shall also comply with all applicable laws, legal provisions and regulations currently in force or enacted during the Contract term with no additional claims against or costs to be borne by the Municipality of Trieste. All facilities and works required to complete the setting up of the bike-sharing system shall be sized according to the provisions laid down in the regulations in force and shall stand weathering agents (especially wind) and external stresses from use, impacts and vandalism. Furthermore, special design solutions shall be adopted to minimise land impairment, thus ensuring more flexibility and reducing installation and restoration costs. Special attention shall be paid to setting up and the provisions laid down in Presidential Decree no. 503/96 shall be complied with to grant access to the disabled. Any clear part shall be made of shatterproof and splinterproof materials. Furthermore, corrosion-resistant (including salt corrosion), non-absorbing materials shall be used, and their colour shall not be subject to changes (special protection treatments shall be adopted to ensure their permanent integrity). All facilities shall have washable finishing surfaces to make cleaning and maintenance easier and to easily remove any abusive words written on them. Furthermore, they shall be designed to make assembly and disassembly easier for both individual parts and the facility as a whole. The Contracting Authority will be entitled to recommend slight changes aimed at improving the aesthetical and functional features of facilities that do not substantially modify the Contractor's design.

BICYCLES

Bicycles shall comply with the manufacturing and functional characteristics laid down in art. 68 of the Italian Traffic Rules. Their manufacturing features shall minimise the chance of vandalism and removal of loose parts; this aspect shall be duly described in the technical/descriptive report enclosed with the offer. The bicycle selected for the system shall:

- Be made of easily replaceable mechanical parts;
- Be easy to use;
- Be customisable with reference to colours, graphics, logos chosen by the Contracting Authority;
- Be equipped with a locking device firmly attached to the frame to secure it to the bay;
- Be made of salt corrosion-resistant materials;
- Be certified according to UNI EN 14764 “City and trekking bicycles – Safety requirements and test methods”.

The bicycle shall have the following characteristics:

- Frame sizes for young people and adults (both males and females);
- Painted metal frame;
- Aluminium parts (handlebar, levers, pedals, bells, etc.);
- 26”- 28” wheels;
- Explosion-proof tires;
- Gear with at least 3 options;
- Easy-to-clean basket to avoid waste accumulation;
- Durable and highly protective plastic mudguards;
- Front and rear brakes;
- Antiskid pedals;
- Ergonomic and waterproof grips;
- Ergonomic seat with antitheft system with adjustable height and waterproof surface;
- Ergonomic handlebar;
- Kickstand;
- Full front and rear lights to be always on when the bicycle is running (dynamo fitted into the hub);
- Special keys shall be used to disassemble hubs and wheel nuts for wheel removal prevention;
- Stainless screws and bolts;
- Serial number.
- Furthermore, electric bicycles shall be equipped with:
 - 250 W electric engine;
 - 36 V and 12 AH lithium-ion battery built in the frame;
 - Antitheft locks and screws;

- Display showing battery charge.

Electric bicycles shall be recharged by battery replacement or through the locking device. The Contractor shall submit any and all certifications required to prove quality and suitability for use of the main materials used for this supply.

PICK UP AND RETURN POINTS

Pick up and return points shall be made of modules, i.e. bicycle bays. Each bicycle bay shall contain at least one bicycle. The bays of each pick up and return point shall be arranged according to different configurations (one or two rows, etc.) to adapt to the characteristics of the sites where they are located (e.g. irregular covering, etc.). In general, pick up and return points shall properly and harmoniously fitted into the urban layout taking into account the local architectural and landscape features. Bicycle bays shall:

- Enable the bicycle to be firmly locked; bays shall have no parts that can be used to lock other bicycles that do not belong to the bike-sharing service fleet;
- Have a height not exceeding 110 to minimise their visual impact on the architectural setting;
- Be made of materials (e.g. steel) properly protected against weathering agents (special attention shall be paid to salty environments) to ensure durability and resistance to vandalism;
- Be directly activated by electronic cards and other options offered by the Contractor (e.g. identification number) for locking/unlocking the bicycle.

The technical solution chosen for setting up pick up and return points shall minimise land impairment, thus ensuring more flexibility and reducing installation and restoration costs.

INFO-TERMINALS

Each pick up and return point shall include an info-terminal to display at least the following elements:

- Map of the area,
- Map of pick up and return points,
- Rules for use of the system (e.g. rates, where to subscribe, terms and conditions for subscription, etc.),
- Useful information, phone and web contacts.

The provision of other types of information by info-terminals (e.g. situation of neighbouring pick up and return points in terms of number of bicycles or number of free bays at each pick up and return point) shall be regarded as an improvement during the tendering procedure.

Info-terminals shall monitor and report on pick up and return points and may include electronic equipment and systems for data transmission to the central control room.

Info-terminals shall preferably be equipped with a lighting system to make information readable also in the night-time.

The information on the bike-sharing service shall be displayed on an outdoor digital device. It shall be written at least in Italian and English and shall be clearly and quickly readable for users.

This information module shall be made of painted and coated materials resistant to weathering agents.

Each info-terminals shall accommodate the electricity meter (alternatively, the electricity meter may be installed in other cabinets in close proximity having a similar appearance and colour).

ACCESS TO THE SYSTEM

Bicycles shall be unlocked by two systems: special electronic card and identification number (or similar system). Cards shall have the following characteristics:

- *Microchip*, whose number shall uniquely identify the user; this card may be compatible with readers of other services;
- *Serial number*;
- *Distinctive graphics and colours of the service and the Municipality of Trieste.*

The duplication of cards shall be prevented.

Furthermore, a method shall be devised to deduct the amount for the use of the bike-sharing service from the card.

Users shall buy their identification numbers via Internet or app by providing their credit card details.

DATA TRANSMISSION SYSTEM

Real time data transmission shall be based on a UMTS communication system (this requirement is mandatory) (the use of a Wi-Fi system shall be taken into consideration as an improvement) to be implemented with copper or optical fibre connections. To this end, the support structures for info-terminals, stands, etc., hosting the data transmission system shall include copper or optical fibre cable ducts that no further actions are required after the completion of works for connecting the system. The system shall send data on the use of bicycles to a processing centre on a daily basis for statistical purposes. On the basis of this information, the Municipal Authority shall plan service development. Routers/modems shall use standard SIM cards (no fixed IP) to be supplied by the Contracting Authority.

The structure containing the data transmission system shall include an active device (switch/router), which may also be incorporated in the system itself (e.g. the same that manages UMTS and Wi-Fi), to connect the system at any time through (Ethernet) copper cables or media converters for single-mode/multi-mode fibre connections.

MANAGEMENT SYSTEM REQUIREMENTS

The management system shall have the following features:

- Entering/updating of user personal details;
- Acquisition of data on the use of bicycles over 24 hours to obtain an origin/destination matrix of movements (information on the number of movements from pick up and return point “X” to pick up and return point “Y” during the day);
- Detection of tampering/faults of bicycles and pick up and return points;
- Generation of data on failure to return bicycles;
- Mapping of bicycles in use and length of use;
- Mapping of points at which bicycles are picked up;
- Recognition of rejected bicycles and improper lock warning;
- Rate calculation on the basis of pick up and return data.

The Contracting Authority shall directly and autonomously acquire the data above from the management system.

Acquisition of the following additional data shall be regarded as an improvement of the minimum requirements above:

- Daily use report for each bicycle (data on pick up and return at the various points with times, length of use, user ID, etc.);
- Kilometres run by each user;
- Kilometres run by each bicycle to plan routine maintenance;
- Number of users accessing the system (based on each pick up and return point);
- Web viewing of bicycles (for traditional and pedal-assisted bicycles respectively) and available free bikes at each pick up and return point.

The system shall not require the installation of dedicated PC software applications. It shall be accessed by the Contracting Authority via Internet through the most common web surfing browsers (Explorer, Chrome, Firefox, Safari, etc.). Access shall be protected by passwords or high-level authentication systems. In particular, appropriate security standards shall be adopted for credit card transactions. The software system shall have the following features:

- Management of all installed pick up and return points;
- Web, app and front office access by users.

The Municipality of Trieste shall use the information system (software + related applications) supplied by the Contractor free of charge throughout the useful life of the bike-sharing system. The same shall apply to the applications through which users are granted access to the system.

Maintenance/technical support both for the first two years and the following ones shall include all system updates and fixes in case of faults as well as all consulting and training activities. Maintenance/technical support fees for the activities above shall be included in the supply for the period stated under the technical offer (at least two years). The Municipality of Trieste shall be granted access to the system administration console for all non-substantial changes (e.g. changes to rates, operating hours, locations or links to institutional websites that provide instructions for use, etc.).

LOCKING OF BICYCLES OUTSIDE PICK UP AND RETURN POINTS

Suitable systems shall be designed to lock bicycles during stops made outside pick up and return points (e.g. antitheft cables).