

### Objectives of the measure

- **At measure level:**
  - To generate debate on the importance and complementary of PT and active modes at local level, regarding infrastructure and service;
  - To discuss and promote cycling infrastructure at PT interfaces;
  - Increase opportunities for multi-modal trips with bikes and PT through physical and ticketing integration.
- **Contributing to city level objectives of:**
  - Increase the flexibility of PT by improving the integration between PT and active travel modes;
  - Increase the existence of cycling infrastructure in PT interfaces;
  - Increase the modal share of PT and active modes.

### Description of the measure

- **Situation before:**

The Lisbon metropolitan PT network structure (including bus, subway, trains, boats, trams and lifts) has been in place for decades. Through time, coverage and offer increases were designed always focusing on PT multimodality, but disregarding cycling as a complementary possibility. This is in part due to the fact that cycling infrastructure was inexistent until a little over a decade ago.

Nevertheless, cycling infrastructure has been increasing rapidly in the city of Lisbon, and while its planning considers the PT network as a key element in the design of cycling paths, the same does not happen in terms of cycling parking. Also at ticketing level, the PT services and public bike sharing services are not integrated. A user that wants to use both, has to get different tickets, even for long term tickets.

- **General description:**

The UPPER local partners will sponsor the strategic discussion of promoting the complementary of PT and active modes at local level and will then zoom into practicalities related with the integration of both networks. Special focus will be given to increasing the quality cycle parking infrastructure at interfaces; and integrating PT and public bike sharing services at ticketing level.

Thus, the implementation of cycling infrastructure on Lisbon metropolitan PT interfaces will be undertaken, following the recent EC project SmartHub methodologies. A hierarchy of PT interfaces will be defined, with the support of local stakeholders, namely the metropolitan municipalities, the infrastructure owners and the PT operators. Some bike parkings will then be created at some interfaces, and their use will be monitored.

At the same time, TML and the City of Lisbon will discuss and implement the integration of the Lisbon public bike sharing system GIRA in the Lisbon PT ticketing system '*navegante*'.

- **Sub-measures description**

- **LIS\_09\_01:** Study of bike parking infrastructure on PT interfaces and stations, using SmartHub methodologies;

- **LIS\_09\_02:** Bike sharing integration in the PT ticketing system.

- **Measure outputs:**

This measure will deliver:

- Bike parking infrastructure at PT interfaces;
- PT and public bike sharing ticket integration.

- **Supporting activities:**

- Meeting with local stakeholders, including the 18 Lisbon metropolitan area municipalities, the owners/managers of the interface infrastructures, PT operators and mobility bike and e-scooter service providers regarding the implementation of bike parking infrastructure at PT interfaces;
- Meetings between the City of Lisbon, TML and EMEL, the public bike sharing manager, regarding the ticket integration;
- There might be also meetings with financing institutions, to see how we can guarantee investment to implement the measures.
- Eventually, campaign will be organized to showcase the improvements to be implemented.

- **Interaction with other city measures: UPPER and non-UPPER measures**

This measure is related to other measures in the Lisbon city:

- **LIS\_03:** To improve mobility planning;
- **LIS\_05:** To enhance multimodal interconnection with the peri-urban municipalities;
- **LIS\_06:** To improve comfort, convenience and safety of PT interfaces;
- **LIS\_08:** To implement campaigns and partnership initiatives.

## Target groups and/or geographical impact areas

- **Target groups:** Citizens and PT users in the city of Lisbon and in the Lisbon metropolitan area, and 'GIRA' users in Lisbon.
- **Geographic impact area:** Lisbon metropolitan area.

## Stakeholders

The following stakeholders will be required for the implementation of this measure:

- **Municipalities:** Representatives from the 18 Lisbon metropolitan area municipalities;
- **EMEL:** The parking and mobility Lisbon municipality company, who manages the 'GIRA' bike-sharing system;
- **Infrastructure Managers:** The owners/managers of the interface infrastructures;
- **PTOs;**
- **Shared bike and e-scooter service providers.**

## U-tools support

The implementation of this measure will be actively supported by one IT tool from the UPPER toolkit:

- **U-NEED:** This tool will help on the definition of the higher relevant PT interfaces to start implementation from, as it will help analyse demand, allowing for the planification of interventions with higher impact.

This measure is similar to UPPER measures implemented in other cities, especially:

- **ROM\_03:** To adapt the PT offer and include new mobility services in multimodal interchange nodes;
- **IDF\_04:** Added-value services in multimodal nodes to integrate active modes with PT;
- **OSL\_02:** Design multifunctional hubs to increase the accessibility to public transport and active modes in strategic areas outside the centre and city accesses;
- **OSL\_06:** Develop and implement solutions for improved user experience in the first/last mile;
- **MAN\_07:** Create a network of mobility hubs in cooperation with the regional transport association, open for multi mobility providers;
- **BUD\_05:** New services to increase accessibility and convenience of PT;
- **HAN\_03:** Added-value services in multimodal nodes to integrate PT with active modes.

## Process of implementation of the measure

Stages	Description	Intermediate milestones
<b>Design</b>	Review of the SmartHubs methodologies. Analysis of the structure of the PT and bike sharing ticketing systems.	<ul style="list-style-type: none"> <li>- Design of cycling infrastructures on PT interfaces;</li> <li>- Design the integration of the PT ticketing system and the bike sharing system.</li> </ul>
<b>Preparation</b>	Definition of a hierarchy of PT interfaces, with the support of local stakeholders. Discussion with the relevant stakeholders regarding the implementation of the bikeboxes. Assessment of the potential impacts of the PT - bike sharing ticket integration in the offer and in the demand.	<ul style="list-style-type: none"> <li>- Stakeholder engagement (metropolitan municipalities, the infrastructure owners and the PT operators) for the definition of PT interfaces hierarchy;</li> <li>- Ranking of PT interfaces;</li> <li>- Stakeholder engagement (municipalities, interface owners/managers, PT operators) in the discussion of bikeboxes installation;</li> <li>- Evaluate the potential impacts of the integration between bike sharing and PT ticketing systems.</li> </ul>
<b>Implementation</b>	Installation of test bikeboxes for parking at some interfaces. Implementation of the integrated PT and bike sharing ticketing systems.	<ul style="list-style-type: none"> <li>- Tender of the acquisition of bikeboxes infrastructure;</li> <li>- Selection of interfaces for testing the bikeboxes;</li> <li>- Bikebox installation at test locations;</li> <li>- Monitoring of bikeboxes usage;</li> <li>- Implementation of test trials on the integration of PT and public bike sharing tickets;</li> <li>- Monitoring and corrective actions.</li> </ul>

## Sub-measures and preliminary indicators

Measure	Sub-measure (if applicable)	Impact indicators
<b>LIS_09</b>	<b>LIS_09_01:</b> Bike integration in multimodal hubs.	<ul style="list-style-type: none"> <li>- Number of bike boxes installed;</li> <li>- Number of users of the bikeboxes;</li> <li>- Number of bikes parked in the bikeboxes;</li> <li>- Number of bikes transported in PT.</li> </ul>

<b>LIS_09</b>	<b>LIS_09_02:</b> PT and bike-sharing ticketing integration.	<ul style="list-style-type: none"><li>- Number of <i>'navigante'</i> users that use GIRA compared to total of <i>'navigante'</i> users;</li><li>- Number of GIRA users that use <i>'navigante'</i> compared to total GIRA users.</li></ul>
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