

Objectives of the measure

- **At measure level:**
 - Identify accessibility gaps and impact of new shared mobility stations.
- **Contributing to city level objectives of:**
 - Establish synergies between PT and shared mobility operators.
 - Offer attractive travel alternatives to the users.

Description of the measure

- **Situation before:**

Currently, in the city of Thessaloniki only 5 fixed shared mobility stations exist, that can't provide adequate access to shared mobility services to a large portion of city's residents. Also, some dockless schemes exist; yet the allocation of vehicles mostly meets the needs of the residents and visitors of the city centre while the other areas remain underserved. Moreover, the co-operation between shared mobility services and public transport is inadequate. It is expected that synergies between the transport operators can contribute to offering competitive alternatives to the use of private cars, also for people living in peri-urban areas.

- **General description:**

The outcome of this measure will be a study regarding accessibility in the city of Thessaloniki and a tool (neutral platform) for assisting evidence-based decision-making for developing viable and personalized mobility packages, as well as targeted behavioural change activities by identifying the areas which can be significantly benefited by shared mobility.

More specifically, the following steps will be followed:

1. Identifying areas where first/last mile of trips is far from ideal for the users and shared modes could significantly benefit the citizens and/or visitors of these areas. The identification of these areas will be based on surveys, as well as based on calculations of metrics regarding how easily the areas can be accessed through public transport and car. It is noted that this analysis will be made on a traffic analysis zone (TAZ) level.
2. The TAZs that mainly produce trips towards the areas that were identified in the previous step, and the TAZs that mainly attract trips from those areas will be found through Thessaloniki's macroscopic traffic model. For the specific ODs, the (generalized) cost for the different available modes will be calculated.
3. Based on the above, optimal locations for shared mobility hubs will be proposed. Taking into consideration these optimal locations, the (generalized) cost for multimodal trips that include shared mobility modes will be calculated and compared with the cost of the existing available modes.

For assisting stakeholders in identifying the impact of shared mobility hubs allocation and assessing the competitiveness of multimodal trips with shared modes, the neutral platform will include a user-friendly UI, where stakeholders will be able to select possible locations for multimodal hubs and examine for specific ODs if (and how) a multimodal trip that includes shared modes is competitive comparing with the existing available modes.

- **Measure outputs:**

This measure will deliver:

- An accessibility analysis for the city of Thessaloniki.
- Report on how PT can be combined with shared mobility services for offering a competitive alternative to private cars.
- A digital service assisting evidence-based decision-making.

- **Supporting activities:**

In the initial steps of the measure implementation, a survey will be carried out for including users' perspective in the accessibility analysis. Also, the outcomes of the measure will be communicated to the transport operators of Thessaloniki for triggering successful synergies.

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

This measure is related to other measures in Thessaloniki to enhance PT-based intermodality:

- **TES_01:** Optimum transfers on P&R areas based on real-time data
- **TES_05:** To enhance the information provided through adapted services for different groups of passengers
- **TES_10:** To incentivize the use of PT in combination with active modes

Target groups and/or geographical impact areas

- **Target groups:** Local authorities, transport operators, MaaS providers, potential PT and shared mobility users.
- **Geographic implementation area:** This measure covers the whole city, including peri-urban areas.

Stakeholders

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

- **CERTH:** Accessibility analysis, analysis for shared mobility optimal locations, development of digital service, data provision.
- **TheTA:** Facilitate synergies between PT and shared mobility operators, data provision.
- **Transport operators:** Investigate synergies based on the measure outcomes.

U-tools support

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

- **U-NEED:** It can be used for assisting in performing an accessibility analysis in the territory of Thessaloniki's metropolitan area.

Link to other UPPER measures

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.
- **LIS_09:** To improve the integration of PT and active travel modes.
- **HAN_04:** Promotion of active modes as a complement of PT.
- **VAL_05:** New Multimodal Digital Mobility Services (MDMS) with a focus on accessibility and inclusion.
- **BUD_02:** To create new mobility packages of Multimodal Digital Mobility Services (MDMS).

Process of implementation of the measure

Stages	Description	Intermediate milestones
Design	Data collection	<ul style="list-style-type: none"> - OD matrices per mode - PT static data - Travel times - Design of survey
Preparation	Data processing and analysis	<ul style="list-style-type: none"> - Accessibility analysis - Generalized cost calculation - Assessment of shared mobility contribution in accessibility improvement - Development of digital service - Reporting synergies opportunities between operators - Communication of measure's outcomes to transport operators

Sub-measures and preliminary indicators

Measure	Sub-measure (<i>if applicable</i>)	Impact indicators
TES_08	n/a	<ul style="list-style-type: none"> - Modal split - Number of operators that established a synergy