

RAPTOR Niche Urban Mobility Challenge Definition Template

Overview

Challenge

(External: this will be the challenge definition published to attract solution providers)

City	Cascais
Area (neighbourhood/ zone of city, if relevant)	Parede commerce and service area
Challenge Area (Select one)	Select from <ul style="list-style-type: none"> • Energy & Mobility, • Sustainable Urban Logistics • Future Mobility • Active Mobility • Public Realm
Challenge name (Max three words)	On-demand Mobility
Challenge Statement (Question format)	What on-demand transport service would most effectively serve the Parede commerce and service area?
What is the problem? (Description of 300 words max.)	<p>Parede is an old town integrated in the municipality of Cascais. The centre of Parede, mostly along Av. da República, is a quite dynamic area because of its local commerce and services. Although it has a dense pedestrian usage, several issues arise from the existence of heavy traffic, originated both from local users as well as crossing traffic. While the city council would like to introduce some traffic restrictions in the area, alternatives for accessing commerce and services need to be created. In addition, such alternatives could also serve the needs of local residents to travel to the nearby train station and bus station, especially the elderly.</p> <p>Considering the nature of the local flows, geography and target population, the mobility department considers that a flexible, on-demand solution would be appropriate to fill the gap. Such a solution should be tailored to the geography (urban and with a relatively high dense urban fabric), population characteristics (the main target is the elderly population) and flows (disperse origins with most destinations either along the commerce and services stretch, or the local train station). The study area has 0,2 km² and 1562 inhabitants, of which 465 +65 years and 233 -18 years. Especially located along the</p>

	<p>República Avenue, there are 24 restaurants, 48 local trade stores, and 34 services. The República Avenue is characterized by narrow walkways with high pedestrian density. The solution should include a scheme of operation of the flexible service that is appropriate for the challenge. Community-based solutions are also possible. The city council may be responsible for supplying vehicles, drivers and the management of the service. For that aim, the solution should include a user information system, a vehicle driver interface, a management system, and a monitoring system that the city can use.</p>
<p>Expected Outputs (Potential solution objectives – max. 5 bullet points)</p>	<ul style="list-style-type: none"> • The citizens of Parede will also have more options to move around, traveling to either its centre or the train station • The elderly in particular will feel a sense of freedom given by a service that adjusts to their needs, contributing to their quality of life through access to social connections and an active life • The users of the commerce and services of Parede will have a safer, cleaner and more pleasant public space, with less traffic and more pedestrian space
<p>Expected impacts (Measurable KPIs -) (max. 5 bullet points)</p>	<ul style="list-style-type: none"> • Possibility for any citizen to reach from their home to the centre of Parede (and vice-versa) within 1 hour • >80% of users rate the service positively • Vehicle occupancy rate per trip >30%

Detailed Challenge Overview

(Internal: provide extra information to understand the context of the challenge and city operations. This won't be published)

<p>What are the root causes? (300 words max)</p>	<p>While the city council would like to introduce some traffic restrictions in the area, this is politically difficult if alternatives are not created for accessing commerce and services. In addition, such alternatives could also serve the needs of local residents to travel to the nearby train station, especially the elderly.</p>
<p>Who is affected? (7 bullet points max.)</p>	<p>Users of the public space in the Parede commerce and service area</p>
<p>What is the scale of the problem? (100 words max.)</p>	<p>The case is characterized by a micro urban centre (with commerce and services) surrounded by a residential area with a significant share of elderly population. This situation is analogous to multiple other cases in urban areas, including in Cascais and in multiple other locations of the Metropolitan Area of Lisbon.</p>

<p>Who are the problem owner(s)? (5 bullet points max.)</p>	<p>The city council, as representative of the interests of the general population</p>
<p>Interested/affected stakeholders</p>	<p>Local citizens Local businesses and services Local workers Train service operator and infrastructure manager</p>
<p>Are there any linked solutions already (being) developed in your city to address this challenge</p>	<p>New municipal road public transport network (bus); Universal free of charge of the new municipal road public transport network (bus); MobiCascais App: travel planning and real-time visualization of the new municipal road public transport network (bus);</p>
<p>Link to relevant part of Local Policy Plan</p>	<p>The Cascais SUMP 2021 (Plano de Deslocações Urbanas) was approved in January 2022, and will have a term of ten years. The Cascais SUMP 2021 defines nine strategic axes, of which we highlight three: A) Cascais, a council with high quality of life for residents, workers and visitors; D) Cascais, a green and sustainable council that promotes the reduction of environmental impacts and the fight against climate change; F) Cascais, a dynamic, adaptable and innovative council that invests in technology and innovation, improving the efficiency of transport networks and services. The Cascais SUMP 2021 establishes as goals, among others, to reach a quota of internal trips by bicycle equal to or greater than 7,5%, reach a quota of internal trips on foot equal to or greater than 40%, and ensure that 75% of residents, 80% of the schools and 100% of the health equipment are served by the structuring cycling network. Also sets as a goal, as defined by the EU, a 55% reduction in CO² emissions, and achieve a share of zero emission vehicles equal to or greater than 50%.</p>
<p>What can you commit to fix the problem through RAPTOR? (100 words max.)</p>	<p>The city council may be responsible for supplying vehicles, drivers and the management of the service. For that aim, the solution should include a user information system, a vehicle driver interface, a management system, and a monitoring system that the city can use. Unless the solution model proposed includes a communication and marketing element, the city council may also be responsible for the communication of the service to the local audience. For that aim, it will rely on the involvement and support of local businesses and services, whose clients and workers may become beneficiaries of the solution.</p>