



PROJECT IDEA PLANNING TEMPLATE

<p>Programme</p>	<p align="center">HORIZON-MISS-2022-CIT-01-01</p> <p>Call: Research and Innovation actions for support the implementation of the Climate-neutral and Smart Cities Mission</p> <p>Topic: Designing inclusive, safe, affordable and sustainable urban mobility</p>
<p>Coordinator / Country</p>	<p align="center">MIA TEKNOLOJİ - TURKEY</p> <p>Please contact ncprtransport@tubitak.gov.tr if you are interested in joining the consortium</p>
<p>Submit Deadline Date</p>	<p align="center">06.09.2022 / 17:00 CET</p>
<p>Application Type / Type of Action</p>	<p align="center">Single Stage / Innovation Actions</p>
<p>Total Budget / Horizon Europe Funding Rates</p>	<p align="center">42.000.000 EUR</p> <p align="center">(8-12 Million EUR for each Project)</p> <p align="center">/</p> <p>70% (except for non-profit legal entities, where a rate of up to 100% applies)</p>
<p>Project Duration</p>	<p align="center">36 Months</p>
<p>Programme Objectives</p>	<p>According to the Zero Pollution Action Plan and SUMP, reducing carbon emissions in cities, directing passengers to mobility vehicles, ensuring road safety and accessibility, and making regulations in urban areas with innovative digital applications.</p>
<p>Eligibility Conditions</p>	<p><i>Applicant cities must have a Sustainable Urban Mobility Plan (SUMP), fully developed or in the preparatory phase, and project actions should link to it.</i></p> <p><i>Collaboration with the Mission Platform is essential.</i></p> <p>The collaboration with the Mission Platform should be formalized through a Memorandum of Understanding to be concluded through the CIVITAS initiative as soon as possible after the project starting date. Proposals should</p>

	<p>ensure that appropriate provisions for activities and resources aimed at enforcing this collaboration are included in the work plan of the proposal</p>			
<p>Project Objectives</p>	<p><u>OBJECTIVES</u></p> <p>Overall Objective of the project is to increase the extend and the take-up of safe, secure, active, affordable, energy-efficient, clean, inclusive and innovative sustainable mobility solutions in cities.</p> <p>Specific objectives that the project is required to address include:</p> <ul style="list-style-type: none"> ● PO1: promote zero-emission, shared, active and human-centred mobility to accelerate the transition towards climate neutrality in partner and follower cities ● PO2: increase the extent and speed of the take-up and upscaling of innovative, best practice and replicable safe, affordable and sustainable urban mobility solutions in partner and follower cities ● PO3: facilitate the common lesson drawing and learning at European level ● PO4: address potential risk raised by expected increases in cycling and e-scooters ● PO5: develop solutions for at least ten unsafe areas/living labs in urban/peri-urban areas using innovative planning, design and implementation approaches, including but not limited to co-creation and/or citizen engagement, modelling and AI, digital and smart enforcement tools, dynamic space reallocation, with a view to reduce road safety risks, reducing exposure to air and noise pollution and the perceived feeling of unsafety for pedestrians and cyclists; ● PO6: re-assess road and public space quality responding to needs of diverse groups (eg women, children, people with disabilities and older people) through actions such as improving data collection for foot, bike and e-scooter traffic as well as the mechanisms for reporting pedestrian and cyclists, e-scooter injuries and deaths; ● PO7: rebalance public space between different modes of transport so that it better reflects the actual or desired local modal split as well as support reaching Vision Zero and zero-emission objectives, thus increasing road safety and quality of life in cities; ● PO8: public space redesign actions would consider the circular economy principles, adaptation to climate change (in particular heatwaves), cross-sectoral synergies and not come at the cost of removing or deterioration of parks, trees or green recreational areas. 			
	<p><u>PRINCIPLES</u></p> <p>Table below demonstrates how the following 3 key principles of the Cities Mission will be internalised within the project:</p>			
	<table border="1"> <tr> <td data-bbox="486 1863 949 2069">(1) the contribution of the action to an overarching strategy aiming at climate neutrality for cities</td> <td data-bbox="949 1863 1406 2069">Proposed projects/initiatives by the partner cities would be part of their existing SUMP, Climate Action Plans or similar. In the absence of such plans, they would at least be carbon neutral.</td> </tr> <tr> <td data-bbox="486 2069 949 2159">(2) the place of the action within a holistic and cross-sectoral approach to climate neutrality, and</td> <td data-bbox="949 2069 1406 2159">Enabling companies to participate in climate work by making procurement policies that more</td> </tr> </table>	(1) the contribution of the action to an overarching strategy aiming at climate neutrality for cities	Proposed projects/initiatives by the partner cities would be part of their existing SUMP, Climate Action Plans or similar. In the absence of such plans, they would at least be carbon neutral.	(2) the place of the action within a holistic and cross-sectoral approach to climate neutrality, and
(1) the contribution of the action to an overarching strategy aiming at climate neutrality for cities	Proposed projects/initiatives by the partner cities would be part of their existing SUMP, Climate Action Plans or similar. In the absence of such plans, they would at least be carbon neutral.			
(2) the place of the action within a holistic and cross-sectoral approach to climate neutrality, and	Enabling companies to participate in climate work by making procurement policies that more			

		tightly include sustainability, energy efficiency and emissions
	(3) diversity in terms of geographical location and size of cities.	Partner and follower cities are chosen from small, medium and large cities from 4 countries where take up off sustainable urban mobility and climate neutrality are addressed at a different level.
<p><u>MOBILITY SOLUTIONS</u> Innovative sustainable urban mobility solutions to be explored, planned and/or implemented by the project include</p> <ol style="list-style-type: none"> 1. <i>Creating Sustainable Streets</i> <ul style="list-style-type: none"> ● Developing green, connected and active walking and cycling corridors to improve the accessibility, affordability, safety and security of the transport system for vulnerable road users ● Planning and implementation of public transport and walking-oriented neighborhoods ● Sustainable and intelligent street lighting (eg solar-powered, LEDs, etc) ● Integrated charging stations by using renewable energy (for electric vehicles, bikes, scooters etc) 2. <i>Improving road safety for all, specific focus on vulnerable users</i> <ul style="list-style-type: none"> ● Assessing the level of service for vulnerable road users (disabled groups, elderly, children, women, cyclists etc) – using ‘Healthy Streets’ approach developed in London ● Planning and implementing safer street infrastructure for vulnerable road users addressing: <ul style="list-style-type: none"> ○ footway treatments and crossings ○ service infrastructure (eg resting points, toilets, etc) ○ cycle ways and paths etc ● Application of 20km/h or 30km/h speed reductions – city wide, in specific areas and/or streets (e.g. school streets, shopping streets, etc) ● Neighbourhood based sustainable mobility planning through co-creation ● adopting Vision zero and safe system approach 3. <i>Reducing Exposure to Air and Noise Pollution</i> <ul style="list-style-type: none"> ● Assessing, mapping and reporting air and noise pollution / exposure through innovative methods ● Placement of sensors measuring air and noise pollution– early warning systems / alarms according to the level pollution / noise rate for application of regulatory and physical restrictions ● Developing air and noise quality zones - measures to regulate motor vehicular access to urban infrastructure (developing Low Emission Zones, access restrictions etc) ● Intelligent and innovative air and noise reduction infrastructure (eg filtration units, panels, green walls, etc) 4. <i>ITS and C-ITS applications</i> <ol style="list-style-type: none"> 4.1 <i>Providing Mobility as a Service -MaaS</i> 		

Extended mobile app

The mobile application which contains information on multimodal transportation systems (such as bus, taxi, rail systems, e-scooter, e-bikes, and rent a car) provides the following:

- It plans minimum carbon emissions and the shortest time point of destination of users by providing route optimization between transportation systems. Thus, reactive traffic management and control will be ensured, and traffic congestion will be prevented with Intelligent Transportation Systems.
- The departure time, location, and route information of the transportation systems are obtained by providing integration with the municipality and transportation institution and are presented to users through the application. Predictive Traffic management and control will be provided by analyzing these data. Thus, the real behavior and conditions of the regions will be predicted.
- It provides users with density information of routes by ensuring integration with GIS.
- It offers users a comprehensive choice by having e-bikes and e-scooter shared mods of different brands on a single platform.
- Public Transport and emergency vehicle priority will be notified to users via the application or via VMS.

4.2 Electronic Fee Collection

- Payment Possibilities in Public Transport;
- Bicycle and Scooter Rental
- Money Transfer Between Users
- Payment by App (Mobile Wallet)
- Payment at Contracted Sales Points

4.3 Smart Intersection Management System

Overlooking the entire intersection, the system can collect a variety of required data such as vehicle entry and exit directions, number of vehicles passing, classification of vehicles, and average speed. Then the system processes data and controls the intersection in real-time. The system enables fuel reduction and greenhouse gas emission reduction.

- Public Transport Priority
It is aimed to provide the following advantages with the public transportation priority, which can be created simultaneously with route optimization and intersection management systems;
 - Real-time tracking of bus location and status
 - Traffic green light priority for late-running buses
 - Bus/Timetable performance and reliability reports
 - Real-time Bus arrival information for bus stops
 - access control to road infrastructure,
 - user mobility behaviour monitoring, and demand management

In this way, efficient public transportation systems with fewer carbon emissions will be brought to cities.

4.4.Demand responsive transport for disabled and elderly - customer makes

contact with the system (phone or online) to arrange a trip from place A to place B at around x O'clock on a specific day.

- **Route Optimization Application**
Different transportation modes can reach the destination by the shortest route by changing their routes according to the traffic density data from the Smart Intersection Management System.

4.5 Collecting and analysing mobility data for monitoring, evaluation and providing intelligent solutions

- Automated data collection systems for walking, cycling, public transport and other vehicles and passengers
- Data processing and analysis (mobility pattern, behaviour and problem)
(Data that comes from smart intersections, smart stations, shared vehicles, and IoT sensors in the environment are made meaningful and analyses are made. Analysed data is visualised and shared with local authorities)

4.6 Sustainable urban freight and logistics - eg route optimisation for last mile, waste management, etc

4.7 Parking management and information – early warning and routing systems for parking, on and off street parking sensors, intelligent enforcement methods (mobile scanners/vehicles) etc

5. Shared and electric mobility scheme development and implementation

- Bike sharing and/or scooter sharing – including regulatory, operational and impact assessments
- assessing and addressing safety and adverse impact of scooters and bikes on vulnerable road users and creating solution

6. Sustainable Urban Mobility Hubs + innovations centres /shared workspaces

Creating mobility hubs with remote/shared working environment / technoparks for accelerating initiatives of incubations/start-ups

(The list of potential measures / initiatives above will be presented to/ discussed with the partner and follower cities. Once they have chosen their provisional measures, it will be presented in a table format in the proposal)

Table 1: initiatives/measures by partner and follower cities to be investigated, planned and/or implemented

SUMP Themes/ measures	Partner City 1	Partner City 2	Partner City 3	Partner City 4	Follower Cities	Champ. Cities
1	x				Bodrum, X, Y	Istanbul
2				x	X, Z	A
3		x				B
4	x				Bodrum, Izmir, Y	C
5			x			A
6	x					B

Target Groups / Sector	<ul style="list-style-type: none"> ● Mobility Solution Providers such as SMEs and public institutions ● Local Authorities (metropolitan, medium, and small-sized municipalities) ● Advocates and institutions in relation to Zero carbon, Climate Change and road safety such as research centres, NGOs, etc. ● Vulnerable road users and the general public
Expected Outcomes	<ul style="list-style-type: none"> ● Creating a plan and digital solution for sustainable mobility in the functional urban and semi-urban areas ● Developing a structure for all transport modes in an integrated, sustainable and zero pollution way ● Composing basement for the involvement of citizens and stakeholders in each phase of mobility solutions ● Boosting the technological, industrial, and knowledge capacity of mobility solutions across the climate change both public, private, and academic sectors ● Defining a long-term vision and clear implementation plans for bringing together concepts of mobility and climate change (with the active participation of local authorities and NGOs) ● Raising awareness of sustainable urban mobility planning and initiatives/measures in follower cities.
Academic / Sectoral Outcomes	<ul style="list-style-type: none"> ● To raise awareness of the various mobility concepts (e-vehicles, smart stations, etc.) besides creating a consciousness of the importance of infrastructure design and adaptation to climate change for a sustainable mobility plan. ● Significantly reduce the use of fossil fuel vehicles by creating sustainable behaviour and habit changes in terms of mobility vehicle preference by populations ● Composing cross-sectoral know-how accumulation during the project realisation process (SME - University -NGOs cooperation)

<p>Tangible Outcomes</p>	<ul style="list-style-type: none"> ● Actualizing 10 living labs with sustainable and enduring qualities that will include comprehensive mobility solutions and measuring the impact of the project proposal in the living labs ● To reveal the result of comparison of the current situation and the carbon emission value resulting from the use of mobility vehicles. ● To create a guide for future projects, local governments, the mobility sector, and academic peripheries ● Creating a SUMP topic and/or practitioner guides ● Obtaining a solution that will provide road safety for various road users (pedestrians, electric bicycle, electric scooter, private vehicle, bicycle, etc.) (will be detailed) ● Analysis and visualisation of mobility data collected from shared tools. For example; modal split, air and noise quality, traffic incident and accident rates, speeds, journey times etc. ● Measuring the correct layout of different modes of transport ● Evaluating user satisfaction and perceived safety and security of mobility options
<p>(Desirable) Partner Profile</p>	<ul style="list-style-type: none"> ● Local Authorities (Municipalities) - preferably with the capability of providing living lab and must have a Sustainable Urban Mobility Plan (SUMP) - ● Local Authorities (Municipalities) - as follower cities ● SMEs - Companies that offer AI-based software solutions within the scope of mobility and experienced in EU projects as a partner/coordinator in the past ● NGOs - preferably experience in awareness studies/activities in the field of climate change, zero pollution, and urban mobility ● Universities/Research Centres: preferably with has published research publications on mobility, experience in working with local authorities in the framework of strategy development or composing guidance for local mobility solutions, involved in EU projects as a partner or coordinator
<p>Milestones</p>	<p>WP-1 Project Management and Coordination WP leader: MIA Task Leaders are in brackets if any different than the WP leader- TBA</p> <ul style="list-style-type: none"> T-1.1 The collaboration with the Mission Platform (TBA) T-1.2 Project Visibility Management T-1.3 Prepare a detailed DMP (Data Management Plan) T-1.4 Prepare quarterly reports on project progress T-1.5 Prepare and collect financial reports T-1.6 Create a database and store project documentation

T-1.7 Management of Transnational Meetings

WP-2 Living Labs – Application of SUMP themes / measures in cities

WP leader: KUTEM

Task Leaders are in brackets – TBC

Living Lab cities: Ankara (MIA/KUTEM), City 2 (??), City 3(??), City 4(??)

Follower Cities: Bodrum (KUTEM), TBC

Champion Cities: Cities which already have experience in SUMP topics (4 cities)

T2.1 General analysis and assessment – Living Lab local application sites / areas within planning and SUMP context

T2.2 Determination and engagement of target groups and stakeholders in accordance with the Communication Plan

T2.3 Agreeing objectives, targets and SUMP themes, initiatives / measures to be planned and/or implemented – Package of measures

T2.4 Development of action plans in each partner city - Planning, feasibility and/or implementation programme of the selected measures

T2.5 Implementation of measures, if applicable

T2.6 Local Monitoring and Evaluation Plan and reporting of results / process

WP-3 Capacity Building

WP leader: TBA

Task Leaders are in brackets – TBA

T3.1: Training needs assessments and capacity building programme for Living Labs, follower cities and countries (at national level)

T3.2: Development of training materials

T3.3: Preparation of local (for living labs) and national training (for all cities in the country) programmes

T3.4 Planning and realisation of the local and the national training events

T3.4 Peer-to-peer capacity building and site visit activities between Living Labs, champion cities and follower cities

T3.5: Webinars

WP-4 Communication, Dissemination and Exploitation

WP leader: TBA

Task Leaders are in brackets – TBA

T4.1: Project and Local Dissemination Planning

T4.2: Preparation of Project website incl. internal working platform

T4.3: General dissemination and communication material (roll up, postcard, leaflet, ppt etc.).

T4.4: Project and Topic brochures

T4.5: Writing regular articles, news items and dissemination work in social media.

T4.6: Direct communication at an international and EU level (incl. conferences)

T4.7: Providing information on the project website, for Eltis, Civitas, etc.

T4.8: Communication at local, regional and/or national level

T4.9: Participating high level advocacy meetings (at national meetings/workshops/events)

T4.10: Video Clips of Living Labs cities and their measures

T4.11: Clustering and liaising with other relevant RDI projects and European initiatives

	<p>T4.12: Exploitation of project results – Final project conference</p> <p>WP-5 Monitoring, Evaluation and Quality Assurance WP leader: TBA Task Leaders are in brackets – TBA</p> <p>T5.1 Developing Project and Local Monitoring and Evaluation Plans – including project and local KPIs T5.2 Developing Data management Plan T5.3 Quality Assurance Guidance T5.4 Collection of baseline and “after” evaluation data, and process data. T5.5: Final evaluation analysis and reporting - The data collected by cities in Task 5.4 will be analysed T5.6 Quality assurance of approaches, services and products of the project - All services and products of the project will be quality checked and ensured against a set of criteria set out in the quality assurance guidance (D5.3).</p> <p>WP-7 Ethics Requirements WP leader: TBA This work package sets out the 'ethics requirements' that the project must comply with.</p>
<p>Current Partner Profile</p>	<p>Coordinator: MIA TEKNOLOJİ - Turkey (SME)</p> <p>MiA, which has an experienced Mobility Team; It offers comprehensive solutions to the mobility needs of local authorities with station installation and integration, field and operation management, electronic payment systems and fleet management software. MIA Teknoloji is in cooperation with KUTEM (Urban Transportation Technology Accessibility Implementation And Research Centre), which plays an active role in the regulation of urban transportation and has competencies in SUMP procedures. Within the scope of the project, KUTEM will take part as a partner in creating the SUMP guide.</p> <p>Partners 1: Gazi University KUTEM, Turkey (University) 2: Sabancı University, Turkey (University)</p> <p>Partner Cities: Living Labs Partner- City 1: Istanbul Metropolitan Municipality - Turkey</p> <p>Follower Cities Bodrum Municipality - Turkey Izmir Metropolitan Municipality - Turkey</p>

