



Project Brief

Jerusalem LEZ Plan is Looking for Partners towards MG-4.1 Call in Horizon 2020

Background

The city of Jerusalem has been engaged in a comprehensive development and transportation plan focused inward on the city center and outward on the greater metropolitan area to meet the dual challenge of meeting the needs of its multi-cultural population and at the same time being able to host its many visitors who come to experience its historical, religious, and cultural heritage. A critical factor in the city's ability to function sustainably as a Global city serving people from around the world is improving its transportation system such that it can support the needs of the growing metropolis in terms of mobility and public health. It is critical to move beyond only preventing increasing pollution to the next stage of reducing the level of hazardous emissions.

The city's transportation plan is based upon a policy of inverting the mobility hierarchy in which non-motorized pedestrian and cycling transportation are given the highest priority followed by public transportation and then finally private vehicles. This also merges with the city's environmental plan to further reduce air pollution levels throughout the city but especially in the city center area. Already the city center has been transformed into a pedestrian walkway with the first light rail service as its backbone with air pollution rates along the LRT corridor down over 70% from preceding years. This is a first step towards implementing an integrated transportation system that will ensure clean and efficient access to points throughout the city, with a planned network of 6 interconnected lines linking neighborhoods, the city center, and historical sites.

Further quality of life gains are hoped to be achieved by the implementation of a low emissions zone (**LEZ**) in the city center, limiting access to heavy vehicles (buses and trucks) in order to permit of only those who meet the low emission standards. This will jumpstart the existing initiative of bus providers (public and private) upgrading their fleets and of merchants sending freight on lighter, cleaner trucks. This measure is expected to reduce air pollution levels primarily within the LEZ but will also cascade to the rest of the city with spillover benefits of low emission vehicles traveling on streets outside of the cordon.

Goals

The primary goal of the project being proposed here in the context of Horizon 2020 is to learn from the experience of other cities in the implementation of LEZs and share the knowledge accrued here in order to introduce innovations to reduce the negative impacts of transportation on the environment and human wellbeing/health.

The intention is to share knowledge and implement new solutions that can best enable operationalizing an LEZ to reduce harmful emissions specifically in the city center through an optimal use of technologies, policies, and enforcement, specifically with the assistance of ICT and picture-processing technologies.



An Integrative Approach

The city of Jerusalem is ready to create its own next generation LEZ to restrict the movement of polluting vehicles in environmentally sensitive and high population concentration areas.

A major challenge facing Jerusalem like other cities is the transition from the planning stages of transportation to the ongoing management of transportation. This by its nature involves not only introducing new technologies but restructuring the management of transportation. This requires looking at city management not only as a planning and infrastructure providing process, but one that integrates the users as active providers of information in an automated and autonomous system.

We are faced with the challenge of how to best use the role of city government to regulate, plan, and mobilize the community in the development of the next generation of LEZ technologies, business models, and regulations.

Components of the Proposed Innovation Action (IA) Program

The European Union's Program Horizon 2020 MG-4.1 call affords an opportunity to partner with other cities in Europe in order to meet the overall goal of "increasing the take-up and scale-up of innovative solutions to achieve sustainable mobility in urban areas". We are open to partners and cooperation with cities, academic institutions, and private firms on relevant and similar ideas for the development and implementation of innovations regarding the LEZ plan and other sustainable transportation activities:

- developing the next generation of LEZ technologies, business model, and regulations
- smart information and communications technologies (ICT) and **picture processing** technologies in order to efficiently identify vehicles entering the LEZ to determine if they are in violation of the entry regulations
- development of management solutions for introducing new technologies and regulations
- developing of shared models for planning and management responses to ongoing issues of emissions control and seamless travel
- professional exchanges around common issues pertaining to sustainable mobility

Initial focal point for project proposal

1. Identify and implement new technologies and regulations for reducing city center vehicle emissions, with a focus on ICT and picture-processing technologies
2. Face to face seminars, professional exchanges, and study trips
3. Formative evaluation and consultations
4. Public engagement and strategic planning for sustainable mobility

Status

We are seeking other cities that face similar challenges in the transition from planning to management of transportation, especially LEZs, that are interested in introducing new management frameworks based on new technologies. The target is the development of a joint proposal for the Horizon 2020 MG-4.1 call.

Interested Parties can contact Nimrod Levy of the Jerusalem Municipality: LVNIMROD@jerusalem.muni.il