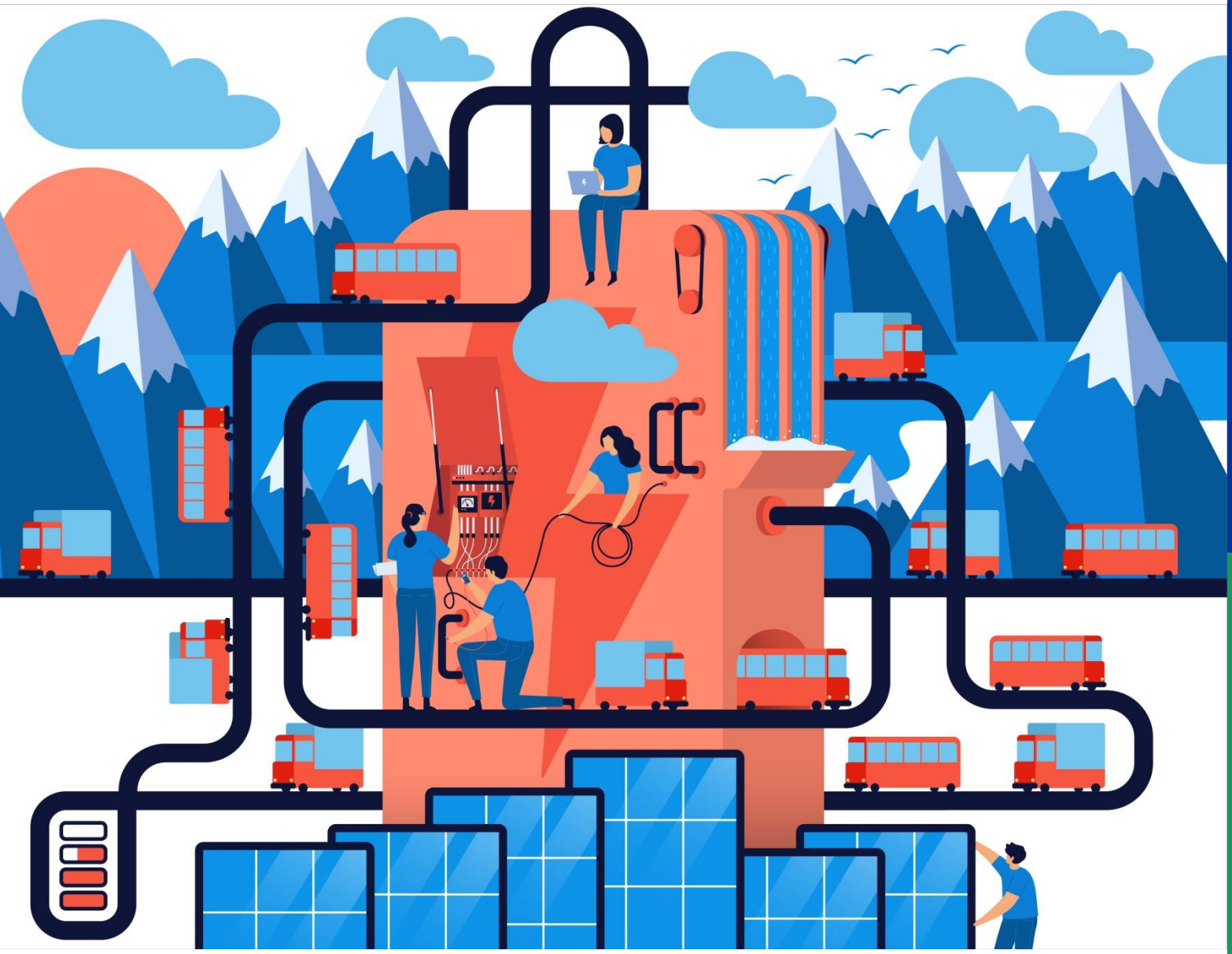
Interreg
Alpine Space
e-SMART
EUROPEAN REGIONAL DEVELOPMENT FUND

EUROPEAN UNION



e-SMART TRAINING MATERIAL

Choosing the right ICT tool for your municipality

This project is co-financed by the European Regional Development Fund through the Interreg Alpine Space programme.

The e-SMART project

While electrification of private transportation has continued to expand constantly, ambitions should move forward towards electric vehicles solutions in Last-Mile-Logistics (LML) and the Local Public Transport (LPT), with electricity generated from renewable energy sources.

The decarbonization of the transport sector and particularly the mass deployment of electric vehicles need truly interoperable roll-outs of electric vehicle charging infrastructures powered by renewable energy as well as an intelligent charging management to prevent peak loads. This is especially important in the Alpine Space, where mobility and transport have always played a significant role.

The e-SMART project addresses this challenge: Bringing developments in e-mobility in LML and LPT together and improving the electric vehicle ecosystem building up on the concept of smart-territorial relationships.

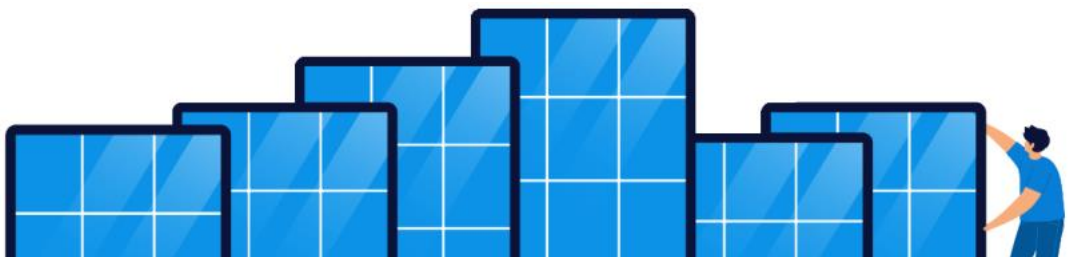
Find out more about the e-SMART project:
www.alpine-space.eu/projects/e-smart

Contents

Objective

This training material aims to inform local PA's and ICT platform providers how to consider needs, gaps and requirements for a city connectivity platform.

Following training action addresses defining local needs and services to incorporate in the platform how to determine the kind of smart infrastructure is present in local municipality and approaches in securing funding for platform development and implementation.



1. Introduction

Choosing the right ICT tool is a serious challenge to any public authority, but presents a particular problem for smaller municipalities.

Smaller municipalities present particular set of social challenges such as low population density, lack of funds and low knowledge level on the side of PA employees.

On the other hand, we must acknowledge specificity of technical needs, which is lack of high-speed internet connections, lack of integrated sensorics in road infrastructure and lack of electric charging infrastructure.

This training action is focused on informing PA personnel on how to manage their expectations about local ICT platforms in regard to the functionalities of the data platform.

2. How to define your town needs

Defining local needs is the most important part of small municipalities platform acquisition process. Each municipality has a specific set of circumstances which city platform has to address.

The first question that arises is, what exactly does “city platform” mean to local public administrators? Depending on the level technical proficiency of PA’s personnel “city platform” may represent a webpage which PA uses to inform local residents, or it may mean a connected sensorially supported ICT tool which connects several difference services from electric charging stations, different modes of local public transport and even connected traffic signals.

Only after the general scope of project is defined, one can start planning what benefits will the future platform bring.

City platform should address the need of several types of its users, as it should server both the PA and its end users – the municipalities’ residents. The main advantages of use of a city platform, supported by advanced sensorics and data collection and evaluation protocols, for PA is access to data about trends of residents’ behaviour in regard to their transportation habits. This data can be used in urban planning, charging infrastructure planning and local public transport operations.

End users have both long term and short benefits of city platforms. Short term benefits are primarily aimed in ease of use of existing municipal services, as example simple access to LPT timetables or information about availability of electric charging points. Long term benefits are harder to observe for end users, because of small long term incremental changes, which modify municipalities’ services in such ways, that they are able to more closely match residents’ needs with a data driven approach.

For successful implementation city data platform should address the following sectors:

- **Informing of local residents**
- **Mobility in municipality**
- **Data collection, evaluation and urban planning.**

3. Functionality breakdown by sector

In following chapter will address city data platform functionalities by above mentioned sectors. The list is not exhaustive and wider considerations should taken.

Informing of local residents

Local residents are often ill informed about services and events in local communities. Data platforms can and should be used as a direct way to communicate with residents. In connection with other functionalities, data platform can be used to warn resident about minor traffic infractions or even be rewarded for explementary habits, such as following traffic regulations perfectly. Providing residents with up-to-date traffic information and informing them which mode of transport is most optimal for their trip is also a possibility.

Mobility in municipality

When it comes to functionalities related to mobility, elaborate mapping of existing and planned services is crucial for provide a comprehensive data platform solution.

Functionalities should include support for local public transport such as ticketing, active smart timetables which benefit end users, while at the same time provide support the systems incorporated in platform inform PA with realistic data about habits and needs of LPT end users, which are extremely beneficial for LPT planning and routing.

In addition to prior consideration, one must plan for future mobility solutions in local municipality and connectivity to larger network of transport solutions. Mobility modes such as buses, taxis, car sharing or micromobility sharing (bicycles, electric scooters…) and eCS hubs have specific set of needs that the platform must be able to process, so opting for an open platform which supports 3rd party modules to be incorporated into the platform provides options for future developments, while keeping data processing inhouse.

Data collection, evaluation and urban planning

Without robust data collection system city platforms cannot function effectively and won't provide PA, end-users and 3rd party service providers with sufficient data to exploit the full potential of the platform.

To provide the platform with data one must consider current and future data collection mechanism. Important question is availability of sensorics in road infrastructure to measure traffic and environmental conditions and availability

of sufficient data connection to process collected data. While automated data collection does have its benefits, end users should provide their own input about the state of mobility infrastructure, so the platform should be able to process manually entered data, such as infrastructure damage reports.

Collected data can precisely show what are the gaps in local transportation network and can be used to planning future infrastructure network. Using this data PA is able to place electric charging station, bus stops, vehicle sharing hubs and other mobility nodes according to recorded local needs.

4. Funding and other considerations

Funding of city platform is one of the most common dilemmas in digitalization of local transportation network. Depending on the locality there are several hurdles to overcome, from lack of sensor infrastructure to lack of public funding.

The best ways to find adequate funding for platform are in collaborate efforts such as private-public partnerships, national funding grants and consortiums of several municipalities to acquire a single platform which is shared between all municipalities.

Local platform providers provide specific bonuses, particularly in their knowledge of specific local conditions and opportunities. As mentioned before multi-municipality consortiums can minimize cost of establishing effective platform.

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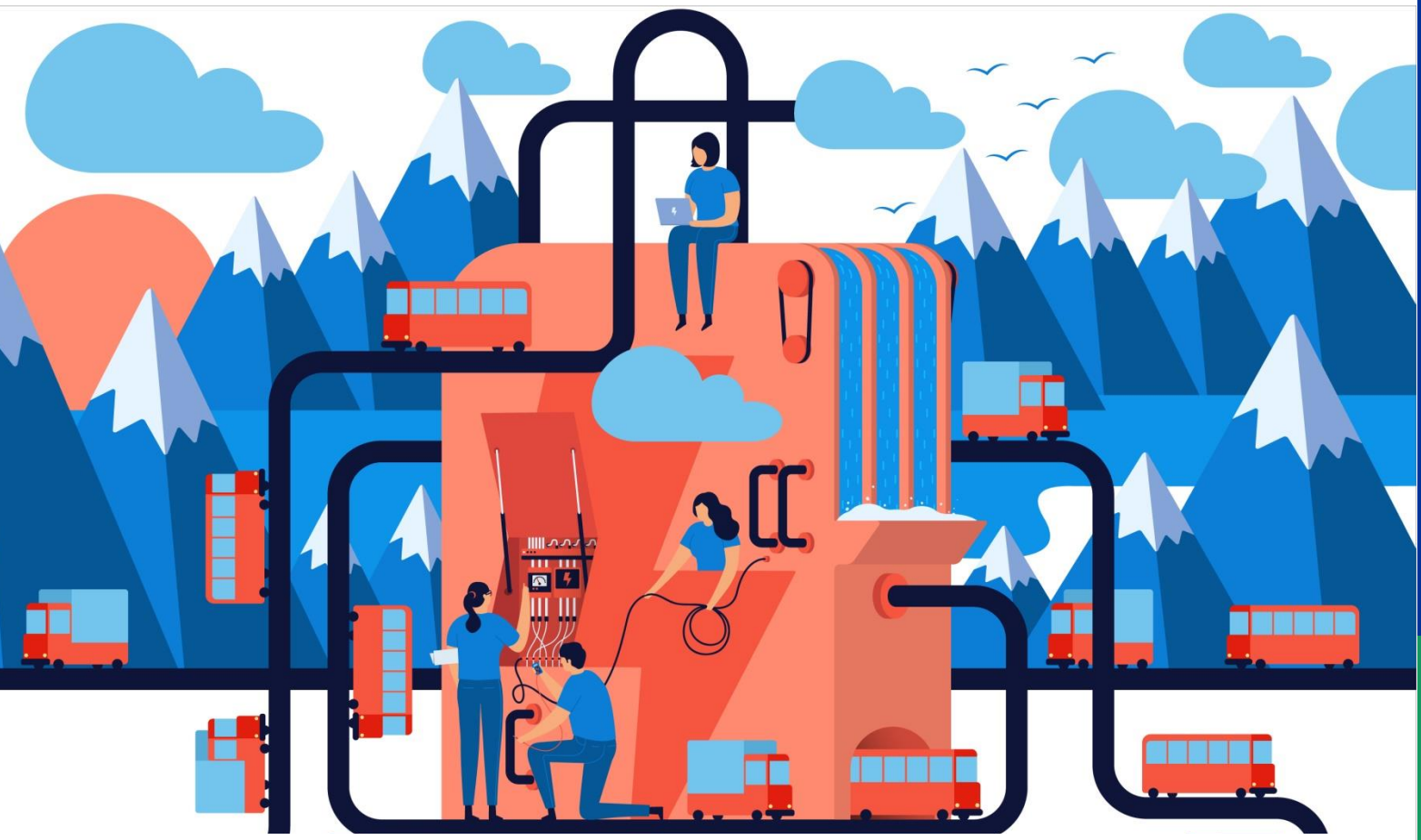

Imprint

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