Shared Use Mobility Agency: from concept to the implementation in Elba Island





IN BRIEF

In the framework of CIVITAS DESTINATIONS Project a *Shared Use Mobility Agency* (SUMA) has been designed as one of the local measures carried out by the local project "ELBA Sharing" in the Elba Island (Tuscany Region-Italy). Its implementation, which was launched as a demo in October 2018, is targeted to the specific needs of small towns affected by tourist flow.

With its whole implementation the Agency acts as an "umbrella" organization able to co-ordinate the different shared mobility services with the conventional public transport services in order to increase the sustainable and full accessible mobility and to act as a backbone of seamless and MaaS initiative.

The Shared Use Mobility Agency offer integrated access to several "on demand and shared" individual and collective services by co-ordinated management of the various actors and services through ad-hoc organization framework, technology platform and soft measures.

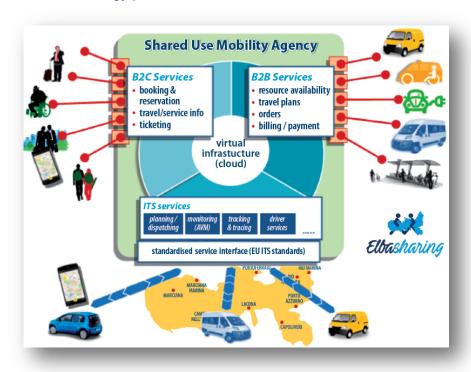


Figure 1 - Shared Use Mobility Agency in CIVITAS DESTINATIONS Project (Source: Elba Sharing, 2019)

For whom is this article intended?



This article provides useful information on the different functionalities and components of the Agency, i.e. ICT platform, model business and specific organization/operation structure. Moreover, it describes in details how the Agency has been tailored and personalised around the mobility demand and the territorial context of Elba Island in order to answer to the needs and requirements of residents and tourists.



This article is addressed to a broad audience in order to communicate to the different stakeholder the usefulness of an innovative approach of shared mobility, in its different aspects and in a particular context represented by a small touristic island.

Overview

Over Europe SUMA is a "pioneer" experience of the implementation of a "Shared Mobility Agency", reconciling the two "opposite" dimensions of Public Transport and ridesharing services which need to be seen as complementary rather than competitive. The innovativeness concept of the Agency lies in the fact that users have a unique point of access to all information on the overall mobility offer in a consistent and efficient way (information, booking, etc.). It functions as a "broker" for the management and coordination of the different flexible and ridesharing services integrated with conventional public transport services.

Another innovative aspect in this model is to assign the coordinating action to Public Authorities (i.e. Municipalities) trying to overcome the leading position taken currently by commercial companies (not only for the provision of ridesharing services but also for managing the integration with conventional transport services). Finally, the business model (based on CANVAS approach), under development, is a key action in order to understand the financial sustainability the organization structure, skills/competencies needs and operational procedures for the management of the Agency.

Shared Use Mobility Agency (SUMA)

SUMA aims to reduce the level of private trips during the summer period and to increase the use of different "collective" transport services also during low seasons. It is composed by an ICT platform, model business and specific organization/operation structure and has been tailored around the mobility demand and the territorial context of Elba Island.

SUMA provides answers to the fragmentation of the current mobility offer in terms of user information, service marketing and accessibility, operator cooperation, etc. by the integration of some specific ride sharing services and variable demand with PT services.

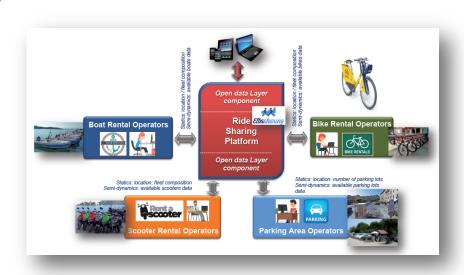
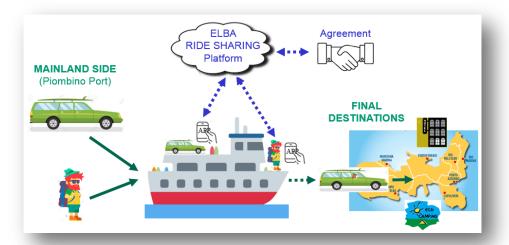


Figure 2 - Shared Use Mobility Agency in DESTINATIONS Project (Source: Elba Sharing, 2019)

SUMA main functionalities are summarised as:

- collection of data coming from the different systems/services/procedures active on the network and make accessible as an Open Data Layer;
- provision of multimodal infomobility services (through APP/web portal);
- networking of car/scooters/bike/boats rent operators exposing the available resources.
- ride sharing services management based on "Notice board" approach: i) **Sharing a trip** to Elba localities when the



Sharing the trip when the user is in a specific location (including "certified" hitchhiking); iv) Sharing a taxi trip/call meeting at the same taxi station/ time or sharing the taxi call; v) User certification (driver and passenger connected and geolocated); vi) Security trip tracking.

user is on the **ferry**; ii) **Planning** the shared trip; iii)

Figure 3 - Sharing a trip to Elba localities when the user is on the ferry (Source: Elba Sharing, 2019)

The SUMA Platform

SUMA is based on a technological platform that allows the "dialogue", through APP and/or WEB channel, between potential users/clients in order to put them in contact with each other to share a ride or a taxi ride.

The physical architecture is based on in-house HW structure or in "cloud".

The architecture is developed with the SOA and based on different standards as W3C (web services) and XML formats for the data exchange among the different applications. Moreover, for interfacing the systems and services, standards like DATEXII, SIRI, etc. are used, depending on the system to be interfaced.

Finally, for the security aspects and crypto format for the privacy issues, specific protocols and standards have been used (e.g HTTP).

The GTFS standards for data modelling/transferring and for API have been used for accessing and interfacing the platform.

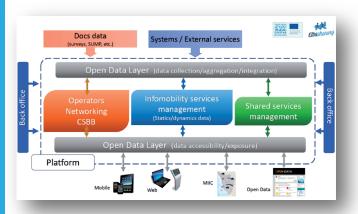


Figure 4 – SUMA Platform structure Source: Elba Sharing, 2019

SUMA in operation

The definition of the specifications for IT platform of the Agency runs in parallel with the definition of operational/management procedures and related business model. In particular a CANVAS model is under development in order to prove the economical sustainability of the Agency after the end of demo action funded by CIVITAS DESTINATIONS project.

The first result achieved has been the stakeholder identification and engagement. The stakeholder includes the Municipalities, the Tuscany Region (as Authority regulating LPT), Local Administrations as Livorno shire, mobility operators, planners, etc.

Secondly the end-users segmentation of the services provided by the Elba SUMA has been defined starting

from the early adopters (pioneers). The value proposition of the services provided by the Agency will enable to identify the channels to reach the end-users and to define the most effective promotional activities. The operational procedures for the management of the Agency have been defined. The procedures include:

- Monitoring of data gathering processes from connected sources;
- Updating/management of data repository for SUMP;
- Updating/management of static contents used to provide infomobility service;
- Assistance to the networked operators of vehicle sharing services;
- Assistance to end-user related to the management of ridesharing services.

Then the following cost category have been considered: internal staff (two operators are estimated to be required to operate the Agency), sw maintenance, utilities and promotion.

The revenues will come from the end-users registered to access ridesharing services, networked operators and involved private stakeholders.

Learn more on this topic www.elbasharing.com www.memexitaly.it

Contacts:

Giorgio Ambrosino, MemEx Srl (Italy) Email: giorgio.ambrosino@memexitaly.it

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