

## SHARED USE MOBILITY AGENCY - SUMA IN ELBA ISLAND

Country: Italy

### OVERVIEW

#### Short description of the Good Practice Case:

The Shared Use Mobility Agency (SUMA -ElbaSharing) is currently under realization in ELBA Island, the main island of Tuscany archipelago located in the Tyrrhenian sea, 10 km from the coast of Tuscany, Italy. Large parts of the island are rural, with mountains (up to 1000 metres) on the western side, plains in the middle and hills on the eastern side. SUMA allows the management of different ride sharing services integrated with Public/Collective Transport, the centralization of information relates to PT and mobility services provided in Elba, the networking/coordination of different service providers (in particular the operators of bike/scooter/car/boat rent services) and the collection/management of data on mobility (data collection campaign, mobility survey, regulation for use/access to mobility services, data collected during the operation of the service). The SUMA is implemented by the Municipality of Portoferraio which will be in charge of coordinating the other municipalities and to operate it. The design of the SUMA (from needs analysis to feasibility, from the IT requirements to CANVAS) was carried out by MemEx.



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The innovative concept of SUMA 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 (type of services, timetable, tariffs, access modalities, booking, etc.) and its "brokerage" role for aggregating the mobility demand and coordinating the different ridesharing services integrated with conventional public transport services.

#### Main aspect/issue addressed by the good practice

Related to ToR, pag.9, the Good Practice relates to technologies that enable more efficient planning of journeys. The problems affecting the mobility offer which are addressed by SUMA are:

- high seasonal mobility demand, dispersed origins, few concentrated destinations (beaches, discos/bars, etc.);
- the mobility offer is fragmented in terms of information, marketing, accessibility and cooperation;
- the existing PT services are ineffective in providing suitable integrated solutions, in particular in facing the demand increase during the peak season (over 30%) and they are not able to duly respond to the tourists needs;
- the offer of bike-car-moto rentals is increasingly high but it fails for coordination.

## Main objectives of the good practice

The SUMA Agency is able to co-ordinate different transport services (primarily the ride sharing services) in a seamless mobility offer integrated with conventional PT services. The SUMA Agency is based on the networking of the local vehicles (i.e. bike/scooter) operators on the island in order to optimize the available resources and to create a suitable offer to be integrated with PT. Furthermore, the user himself/herself can act as a mobility service provider, contributing to solving the conflicts between the Public Transport services and the individualized mobility. The last service scheme is a managed by SUMA based on the implementation of *"Message boards for sharing trips"*: the user through the specific APP could declare his/her position and the destination he/she wants to reach by sharing the trip with other users/drivers.

The approach of SUMA is developed within the CIVITAS DESTINATIONS project supporting the development of a SUMP covering the whole island (and the demonstration of some supporting measures): one of the main objectives identified during the on-going analysis relating to the SUMP development has been to reconcile and enhance the two parallel axes of urban mobility (collective transport and flexible/ridesharing services). CIVITAS Destinations has identified the Shared Use Mobility Agency (SUMA) as the solution able to integrate different innovative mobility solutions under its *"umbrella"* in the future.

## DESCRIPTION OF THE AREA

Region	Target area	Population	Population density
Elba island, the third biggest in Italy	225 Km <sup>2</sup>	32.000 residents in the whole island. 450.000 visitors/year with a daily presence of about 30.000 people/day in the summer	139 inhab. /km <sup>2</sup>

### Other

Elba island is one of the main tourist destinations in Europe, not only for Italians but also for foreign travellers coming from Central Europe.

Elba territory is divided into 7 Municipalities, which all belong to the Province of Livorno: all the Municipalities have between 4.000 and 3.000 inhabitants except Portoferraio (about 11.000).

## Target user groups and needs

SUMA provides three level of services:

- Services for transport users (Business-to-Consumer (B2C) services) enabling access to information, search for transport options, travel planning, networking of operators (bikes/moto/cars/boats rental, management of ridesharing service. This level, in particular, is addressed to visitors which can largely benefit from these services accessible by a unique point. Anyway, the residents can benefit too from *"sharing the trip"* services;
- Services for the co-ordination of different mobility operators (Business-to-Business (B2B) services).

This level is addressed, in particular, to operators of bike/moto/car/rental services. The platform exposes the related service offers in terms of available resources (i.e. for the bike rental it will be possible to find out the nearest depots, the number of bikes typology availability, the tariffs and services times, etc. through the app/web.);

- Services supporting the interactions among different authorities and entities involved in the mobility planning and control of transport services (Business-to-Administration services). The SUMA will share a repository for all the information and documents supporting the mobility and transport

## Target user groups and needs

services planning for the Elba Island. This information adequately formatted and aggregated is the base of the Observatory component. This allows some service as Mobility Manager for a specific entity (i.e. school) or the database for the development of mobility policies and strategies.

The number of end-users for the B2C service (in point (a) above) estimated in the design phase as targeted to be achieved by the SUMA is the 5% of the yearly visitors (22.000 users). This represents a minimum threshold as the percentage of the residents which can use the services provided by SUMA are not included in this estimation.

In particular, the SUMA is targeted to answer to the mobility needs of a large part of the tourists which reach the Elba searching for outdoor experience (hiking, mountain bike, birdwatching, etc.). It is proven that this segment of tourists is more willing to access the island without using its own car, being used to use the Public Transport and share a ride eventually (as part of their travel experience).

## DETAILED DESCRIPTION OF THE PRACTICE

### Timeframe(s)

The SUMA is one of the mobility measures (targeted to tourists and residents) to be demonstrated within the CIVITAS Destinations project (September 2016 – August 2020), for which Elba is one of the sites. The design phase took place from end 2016 to May 2017. The contract for the implementation of IT platform will be signed in August 2018 and the implementation of the platform will start immediately after the sign of the contract. In parallel, as part of CIVITAS Destinations activities, the first principles of business model (CANVAS) were developed in order to guarantee a financial scenario to support the SUMA operation over time (after the close of the project). This analysis includes the estimation of target segment users (see above), the definition of the positioning of the SUMA in terms of unique value proposition, market competitors and competitive advantages, definition of organizational and operational needs (for operating the Agency), costs/revenues definition, definition of target indicators and identification of promotional channels. The implementation plan of the SUMA includes the realization and launch of a first set of services in March 2019 and the full range of services operated by 12 months from the sign of the contract for the implementation of IT platform. The SUMA implemented in CIVITAS Destinations project can be considered a pilot to be launched in Elba: based on its success and financial sustainability over time, the SUMA could be extended to the integration/coordination of other PT services (for example: Demand Responsive Transport services).

### Bodies involved

The stakeholder include the Municipality of Portoferraio (managing the Agency implementation and operation as coordinator of the other municipalities over the island), the Tuscany Region (as Authority regulating PT in the region, collecting static/dynamic info on PT and mobility in a common centralized database), Local Administrations as Livorno shire and planners who can use the data collected by the Agency for defining PT/mobility policies and plans, mobility (rental services) operators who are networked by the Agency, commercial operators (e.g. discos, restaurants, supermarkets, etc.) to be advertised as main points of departure or arrival of "shared trips"; third-party developers accessing the open data published by SUMA (based on the data collected from different systems/data sources and integrated) to develop new applications (see the description of SUMA services below).

### Mobility services provided/addressed

The SUMA Agency was defined as the centre for the provision of infomobility and ride sharing mobility by the following main defined components aiming to:

- collect, aggregate, make available and accessible in open data modality the mobility and transport data and information;
- provide infomobility services;
- manage the observatory of the mobility and transport services on the Elba isle with the interactions with the province and regional levels;
- manage some specific ride sharing services.

## DETAILED DESCRIPTION OF THE PRACTICE

### Legal Framework

The legal framework related to the contracting of the IT platform supporting the SUMA operation implementation. In June and in July 2017 the technical and functional specifications of the IT platform were detailed as follow up of the design phase of the Agency. The technical documentation was consolidated and enclosed in the tendering package under development at the of 2017. The open procurement for contracting the IT platform supporting the SUMA operation was launched in October 2017, the tender package was published in December 2017 and the bid proposal received in February 2018. The evaluation process goes from March to May and the negotiation took place in June 2018.

### Cost and Financing sources

The implementation and operation of the SUMA “pilot” as the CIVITAS Destinations project is co-financed by H2020 EU grant. Once the project pilot is ended, the operation of the Agency should be self-sustained without any planned subsidies considering the revenues generated by the Agency itself.

A business model for the long-term financial viability of SUMA must be detailed on the basis of the first CANVAS concept (see above). The costs of the management (staff operation, software maintenance of the platform, etc.) could be covered by the external revenues deriving from these first hypothesis:

- a. annual fee (to be established on the basis of the performance of the first 2 years of activity), to be requested at the time of registration to users (both users and commercial activities/operators);
- b. annual contribution from renting operators (bikes, cars, scooters, boats, etc.);
- c. contribution from interested commercial operators (e.g. discos, restaurants, shopping centres, etc.) as main points of departure or arrival of “shared trips”, in order to increase their attractiveness and safety level;
- d. possible contributions from local administrations or consultancy companies interested in the documentation and data on mobility and transport accessible through the appropriate “Open Data Layer” of the technological platform;
- e. services / studies realised by the Agency of mobility

- and transport, over the time (such as collecting and analysing traffic conditions, advertising on the portal, mobility management analysis etc.);
- f. management, in the future, of shared mobility services as part of the PT service contract.

Appropriate business agreements between the SUMA and the networked mobility (rental services) operators must be established in order to implement the business model defined. The agreements must be generalized to all the commercial operators identified as actors in the business model (see above).

### Organizational set-up

The responsible/coordinator of the implementation of the SUMA Agency is the Municipality of Portoferraio.

The SUMA will require an appropriate staff to be operated/managed. Basically, the structure consists of: a supervisor, two operators for daily management (working in turns), a technician for network management and first-level interventions. The operational procedures are defined in order to allow the following activities: update/management of the static contents of the information channels (web portal, APPs, etc.), monitoring of connectivity and data exchange between the SUMA platform and external ITS/databases, update/management of documents to be manually uploaded on the repository of mobility observatory, interactions with mobility (rental services) operators networked by the SUMA, supervision of ride sharing service management component.

### Supporting technologies

SUMA is based on an ICT platform (software environment, software procedures and hardware components) allowing the aggregation of the different type of mobility demand and the management of related ride sharing services, infomobility and operators networking.

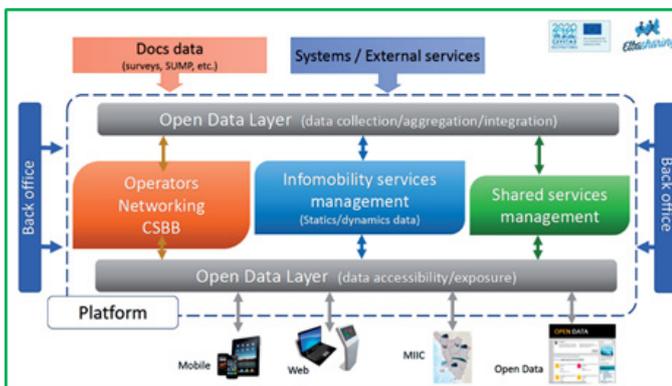
The main components of the platform are the following:

- a. Middleware Data Layer: The Data Layer collect and integrate the data coming/transmitted from/by different data sources under a centralized and standardized data format. The data are available to the other components and exposed as open data.

## DETAILED DESCRIPTION OF THE PRACTICE

- b. Provision of the infomobility services: This component provides specific multimodal infomobility services (i.e. multimodal journey planner, real time arrival of the buses at each stop, etc.) through the elaboration of the data integrated by the Open Data Layer component. The services are provided on a mobile app and webportal.
- c. Management of the service operators networking and support to mobility observatory. This component networks the rental service offer exposing info and availability. This component aims also to realize and share a repository for all the information and documents supporting the mobility and transport services planning for Elba. These data and information should be collected by at least two modalities: automated (i.e. using online questions, implementation of collection campaign, crowdsourcing initiative, etc.) or manually (i.e. acquisition in the repository of mobility documents by the input of a specific operator).

Moreover, two main support functions for supporting the above ride sharing schemes have been detailed regarding the tracking of a shared trip and the certification of the reliability of the users capital city of each prefecture and one for any other transport connection of the capital city of the prefecture with other cities and settlements.



Booklet "Shared Use Mobility Agency in Elba island: from the concept to the IT Platform"

- d. Provision and management of ride sharing services. This component manages some "Message board for sharing trips" have been defined: the user through the specific APP could declare his/her position and the destination he/she wants to reach by sharing the trip with other users/drivers. The "Message board for ride sharing" has been instantiated to answer to different use cases: to share a trip on private vehicle (in the short time, planning it in advance according to holiday dates), hitchhiking, to share a taxi trip.

## INNOVATION ASPECTS

### ORGANISATIONAL RESPONSIBILITIES AND PARTNERSHIP WORKING ARRANGEMENTS

The operation of the SUMA Agency is in charge of the Municipality of Portoferraio which act as coordinator of the other ELBA Municipalities.

A close cooperation among Public Administrations, Mobility and Transport Agencies and Operators is required to set the enabling framework for SUMA operation.

### LEVEL OF PUBLIC SECTOR FINANCIAL SUPPORT

CANVAS model defined to allow financial viability of the Agency after the use of EU contribution for start up and piloting.

A business model will be specified.

### INTERCONNECTIONS BETWEEN SHARED AND PUBLIC TRANSPORT SERVICES

SUMA allows the take up of ridesharing services as mobility solution to be integrated with conventional Public Transport services where the last one has been demonstrated to be ineffective.

Its solution for ridesharing services' operation which can be managed directly by Public Administrations.

### ICT CONNECTIONS AND IMPACTS OF THE TECHNOLOGICAL SOLUTIONS IMPLEMENTED

SUMA provides aggregated *"added-value"* infoservices to end-users which are now dispersed in various applications.

On the same way the Networking component enables the end-users to have a unique *"one window"* point aggregating the info related to mobility operators.

Finally, the SUMA allows the user to share ridesharing services.

### OTHER (E.G. SOCIAL INNOVATION, ETC.)

The adoption of the ridesharing scheme allows the user of the SUMA to act as *"service provider"*.

## ASSESSMENT

### Ridership and other key metrics/results (through key-indicators, where applicable)

The metrics available relates to the design phase of SUMA (in particular, estimation of target users to fee the CANVAS model). Data on the real number of users (number of APP downloaded), level of use of different services provided, acceptance by the users and quality perceived by the users will be available after the implementation (at least, the launch of first “*bundle of services*” in June 2019).

#### Scalability and future extension in Elba

The future scalability potential of SUMA relates to add-on functionalities and mobility service schemes which can be networked/brokered by the Agency (rather than on geographical scale up at Elba island level). For example, Demand Responsive Transport schemes (eventually operated as dynamic DRT supported by IT platform and APP) could be included in the collective transport services managed by the Agency (and operated as integration of the conventional transport service).

#### Transferability

The transferability potential of the Shared Mobility Agency model in other rural/remote areas is very high as the Agency concepts is very flexible and it can be easily adapted to a wide range of service schemes, territorial contexts and background conditions. Case by case, the functionalities provided by the Shared Mobility Agency can be different including, for example, some which are not provided in SUMA – Elbasharing: payment, booking, “*brokerage*” of PT operators, etc.

### Good Governance

As already indicated the definition of a business model is required to allow the financial sustainability of SUMA over the time (after the closing of funding under CIVITAS Destinations project).

A pervasive and effective promotional campaign is required to make the SUMA initiative recognizable:

- at local level, among the mobility stakeholder and the commercial operators to be networked/engaged for SUMA operation;
- among the target users, in particular the tourists.

To do that, a strong effort is required to engage the other actors (i.e. Tourism Associations, hoteliers association, Chamber of Commerce, etc.).

### Success factors/strengths

The design phase of the SUMA has identified that the strengths of the initiative should lie on: a) the possibility to provide a wide range of services on PT and mobility through a “*unique*” point, b) to provide ridesharing services which can be targeted to a segment of the tourists reaching Elba for holidays.

### Difficulties encountered/weakness

The weakness of the future operation of SUMA are identified in the following:

- a. financial viability to be proven (over time)
- b. need for maintaining good cooperation among the involved stakeholder
- c. the number of rental operators networked (as follow up of the set of agreement to expose their services on the Agency
- d. the supporting IT platform of SUMA should be demonstrated to allow an easy operation by the involved staff.

## FEATURES THAT ARE CONSIDERED TO BE GOOD PRACTICE (LESSON(S) LEARNT)

SUMA provides the citizens and tourists with a unique point of access to all information on the overall mobility offer in a consistent and efficient way (type of services, timetable, tariffs, access modalities, booking, etc.) and its “brokerage” role for aggregating the mobility demand, coordinating the different ridesharing services integrated with conventional public transport services.

SUMA works on three interrelated levels (collective transport, ride sharing and connected systems) in order to provide on-demand and shared services to the different citizens, users groups and/or mobility demand areas.

SUMA provides B2C, B2B and B2A services allowing the coordination/interaction of the different mobility stakeholder in Elba.

## REFERENCES FOR FURTHER DETAILS

### *Contact of the operator and of relevant stakeholders*

**Organization:** MemEx

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**Organization:** Municipality of Portaferraio

**Person contact:** Federica Andreucci

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### Key references

- S.Gini, E.Genitsaris, G.Ambrosino et al *“CIPTec toolbox for the promotion of Public Transport Innovation”* [www.toobox.ciptec.eu](http://www.toobox.ciptec.eu)
- G.Ambrosino - The Agency for shared mobility implemented in Elba within the Elba sharing project of CIVITAS DESTINATIONS (ITS Passenger Transportation Systems and Services Sponsored by ITS America and American Public Transportation Association Committee Meeting) - Washington, January 2018

### Websites

- [www.memexitaly.it/en/european-project-news/the-elba-sharing-mobility-agency-in-the-intelligent-transport-magazine/](http://www.memexitaly.it/en/european-project-news/the-elba-sharing-mobility-agency-in-the-intelligent-transport-magazine/)