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Measure Evaluation Results

ELB7.2 - Integrated payment for mobility and other services on Elba

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Executive Summary

Elba Island is characterised by a strong touristic flow, especially during the summer period when the number of incoming tourists dramatically increases the number of people present on the island. The proximity of the island to the mainland encourages many tourists to come with their own vehicles, even for short daily trips. The prevailing use of cars, combined with the morphology of the island, generates chronic traffic congestion issues at peak times.

Thanks to the CIVITAS DESTINATIONS project, specific measures have been implemented to improve the quality of Public Transport (PT) services, in order to provide tourists and residents with services that are more responsive to their needs. The main policy objective of this measure was the reduction of polluting emissions, traffic congestion, and energy consumption derived from private vehicles, while increasing the island's overall accessibility and attractiveness by improving the PT services.

By virtue of a new agreement between the Municipalities of Portoferraio and Rio, and the local PT operator, CTT Nord, the latter committed to develop new solutions to meet users' needs for smarter and more efficient PT services, especially when it came to ticket purchase options. As a consequence, CTT Nord developed a new SMS ticketing system to allow residents and tourists to directly purchase PT tickets wherever they are on the island. This new ticketing method is an advantage for customers, especially for residents and Italian tourists, since the latter most often stay in private accommodation facilities far from ticket selling points, which leads them to use their own car to the detriment of the public transport.

This measure had positive results, as can be seen by the number of SMS tickets purchased during 2018 and 2019 (2,800 tickets), which corresponds to a customer satisfaction rate of 80% (+20% with respect to the ex-ante situation).

A Description

Elba Island has a total population of 31,952 inhabitants (ISTAT, 2018), spread among seven Municipalities. In 2019, over 2 million presences were registered throughout the year, especially during the summer period. Only 14% of tourists use public transport service, which was not attractive for the following reasons: high ticket price; the habit to arrive on the island with a private vehicle due to the proximity to the mainland; non-coordinated and scattered services; and the lack of ticket offices across the territory. Therefore, it was necessary to put into action measures aimed at increasing the use of sustainable modes of transportation, especially public transport, while reducing the use of private cars by residents and tourists. This was intended to generate a beneficial impact on the environment, in terms of reduction of emissions, noise, illegal parking, etc. The issue of high ticket prices for the island's local PT is due to the fact that Elba is considered an extra-urban area, instead of a unique polycentric urban area with corresponding PT tariffs.

In order to improve the quality and convenience of the local public transport and encourage residents and tourists to increasingly use its services, the Municipalities of Portoferraio and Rio signed an agreement with the PT operator CTT Nord aimed at better meeting user needs and enhancing the PT attractiveness and accessibility. This agreement allowed for the realisation of a series of interventions responding to the measure's objectives.



Figure 1: SMS ticketing promotional sticker

One of the main issues of PT in Elba concerns the lack of ticket-selling offices around the island, especially when, during the peak summer season, tourists need to quickly and easily purchase PT tickets. The installation of vendor machines was not considered as a good solution due to the difficulty to find specialised technicians for their maintenance and spare parts on the island.

It is also possible to buy tickets on board, from the driver, but this practice negatively interferes with the service's efficiency, as while issuing tickets, drivers are compelled to wait at bus stops, potentially creating long queues. In addition, buying tickets directly on-board costs about 35% more, so is not convenient for customers. Thanks to the introduction of the SMS ticketing, active 24/7, the difficulty in purchasing tickets due to the lack of vendors has been completely solved.

Additionally, a ticketing parameter was experimented, based not only on the length of the trip but also on the trip's time duration, with the possibility to choose the PT course up to 10 Km within 30 minutes, 20 Km within 50 minutes, 30 Km within 70 minutes, and 40 Km within 90 minutes. The SMS ticketing service was also activated for urban bus courses in Portoferraio, valid for 70 minutes after purchase. This method is really simple to use: customers can send a SMS with the text "ELBA" followed by the number of kilometres for the extra-urban service, or simply "Portoferraio" for the urban courses. Users receive a confirmation message and the ticket they applied for within few minutes. Moreover, it is more convenient for customers, since the SMS ticket is more expensive than the paper ticket purchased by retailers, but cheaper than the one purchased on-board.

A1 Objectives and outputs

City policy level objectives

- Increase the attractiveness and accessibility of PT services
- Discourage people from using private vehicles
- Reduce polluting emissions, traffic congestion, and energy consumption

Specific measure objectives

- Facilitate ticket purchases by residents and tourists

Outputs

- New agreement between Municipalities and local PT operator
- A ticketing payment system via SMS for urban and extra-urban trips
- A promotional campaign to inform stakeholders about the newest PT services, disseminated towards end-users

Supporting activities

Based on the agreement between the PT operator CTT Nord and the Municipalities of Portoferraio and Rio, the entire measure implementation, including planning, agreements with telephone companies and banks, was realised by CTT Nord.

Moreover, CTT Nord organised an information campaign in collaboration with the local DESTINATIONS staff and the Hoteliers' Association, in order to promote the new SMS ticketing system, as well as the other PT services, to hoteliers, commercial businesses, and residents. This was intended as part of the overall strategy aimed at involving tourism stakeholders and citizens as 'ambassadors' of the island's mobility strategy, having them provide correct information, sell PT tickets, and promote the local public transport's attractiveness among tourists.

A2 Inter-relationship with other measures

This measure is linked to:

- **ELB 2.1 - Elba SUMP.** Being a SUMP, the policy framework concerning the strategic planning of mobility services on the island, it foresaw the realisation of initiatives aimed at increasing the efficiency and convenience of public transport.
- **ELB 7.1 - Improve public transport service for tourists in Elba.** The measure was part of the overall strategy to promote and facilitate the use of public transport services, by providing tourists with an integrated ticketing system via SMS.

A3 Target groups and/or affected part of the city or region

The target groups influenced by this measure were:

- Residents (workers and students) demanding a smarter and more efficient way to purchase PT tickets for travelling around the island for work/study/leisure purposes
- Tourists demanding a quicker way to buy PT tickets

A4 Stakeholder involvement

Stakeholder name	Activities description
CTT Nord (PTO)	Agreement with the Municipalities on the implementation of the SMS ticketing system
Municipality of Portoferraio	Agreement with PTO on the implementation of the SMS ticketing system
Municipality of Rio	Agreement with PTO on the implementation of the SMS ticketing system

Table 1: Stakeholder involvement

B Measure implementation

B1 Situation before CIVITAS

One of the island's main weaknesses was the presence of very few PT ticket vendors – there was only one official ticket office located in the main port area of Portoferraio and very few retailers around the island, which are also difficult to recognise. In addition, vendor machines could not be considered as a proper solution, due to difficult functioning control. Before the CIVITAS DESTINATIONS project, only paper tickets could be bought for public transport services.

B2 Innovative aspects

The measure's innovative aspect concerns the realisation of a smarter and faster system to purchase PT tickets, on the basis of the trip length's range – up to 10 Km, 20 Km, 30 Km, and 40 Km around the island. The most complex step was related to the negotiations between the PT Operator CTT Nord and the telephone companies and financial institutes, in order to allow the correct functioning of the SMS ticketing service and the different options related to telephone and payment subscriptions.

B3 Research and technology development

Not applicable.

B4 Current implementation of the measure

This measure was realised by the local PT operator CTT Nord as part of the agreement signed with the Municipalities of Portoferraio and Rio, in order to enhance the quality and convenience of PT services to better meet user needs and make it more attractive and accessible. In the framework of this agreement, the whole measure implementation, from the planning process to the agreements with telephone companies and banking institutes, was realised by CTT Nord.

The new SMS ticketing system for 10 Km and 20 Km, which are the most frequently chosen distances in Elba, became operational in June 2017, while the system for 30 Km and 40 Km started in July 2018. This delay was due to the fact that the latter options required a further negotiation with the telephone companies and banking institutes.

In order to promote the new SMS ticketing service, as well as the other PT services already active, CTT Nord, with the collaboration of the DESTINATIONS staff and the Hoteliers Association, organised a promotional campaign, divided across several days, called "Take a bus, leave your car", in the territory of the two municipalities. The promoted services were:

- "Teseo Web" app, which was useful in planning trips, showed PT timetables in real-time, and showed bus lines and routes (see ELB 7.1)
- "Elba Card", allowing travel on any urban and extra-urban bus, at a special price (see ELB 6.1)
- Ticketing services via SMS, allowing users to purchase tickets for a 10 Km, 20 Km, 30 Km, and 40 Km trip range

TAKE A BUS, LEAVE YOUR CAR.

ELBA ISLAND BY BUS
If you can cross the whole island from the city centres to the main places of interest. In bus you can travel along scenic routes, with breathtaking views. By bus you can forget parking problems and you travel respecting the environment.

CHECK THE TIMETABLES ON
www.livorno.cttnord.it
Or download the free apps
teseo CTT Nord app B On Time

Ticket price from Portoferraio to the main destinations for an adult (discounted rates reserved)

	Normal ticket	ticket on board	ticket via SMS
Marina di Campo	2,50	4,00	2,50
Manciana Marina	2,50	4,00	2,50
Manciana	3,50	4,00	3,50
Pomonte	2,50	4,00	2,50
Capoliveri	2,50	4,00	2,50
Porto Azzurro	2,50	4,00	2,50
Rio	1,50	4,00	1,50
Cavo	4,50	7,00	4,50
Bagnola	2,50	4,00	2,50
Lacina	2,50	4,00	2,50

NETWORK OF EXTRA-URBAN LINES

Portoferraio - Manciana Marina
Pomonte - Marina di Campo (destination to Capoliveri, destination to S. Ilario)

Portoferraio - Bagnola - Lacina
Portoferraio - Rio Azzurro
Rio Elba - Rio Marina
Cavo (con diramazione Capoliveri)

Portoferraio - Porto Azzurro
Rio Elba - Rio Marina
Cavo (con diramazione Capoliveri)

Portoferraio Bus Station - Viale Elba, 20 - Tel. 050 884000 - www.livorno.cttnord.it

Figure 2: Information leaflet

BIGLIETTO SMS SERVIZIO EXTRAURBANO ISOLA D'ELBA

INVA UN SMS E SALI A BORDO!

- INVA UN SMS CON TESTO ELBA 10 OPPURE ELBA 20 AL NUMERO 4850306**
- ATTENDI IL MESSAGGIO DI RISPOSTA**
- SALI A BORDO CON IL TUO BIGLIETTO EXTRAURBANO ELETTRONICO**

Il servizio è disponibile per i clienti di TIM, VODAFONE, WIND e 3 Italia. NON RICHIEDE REGISTRAZIONE

Il BIGLIETTO EXTRAURBANO ELETTRONICO per il servizio extraurbano dell'Isola d'Elba è disponibile in due opzioni:

- valida fino a 10 km o 30 minuti dalla richiesta (digitare ELBA 10) al prezzo di € 1,40
- valida fino a 20 km o 50 minuti dalla richiesta (digitare ELBA 20) al prezzo di € 2,50

a cui si aggiunge il costo dell'SMS di richiesta che varia a seconda del proprio Operatore telefonico. Termini & Condizioni del servizio e Info Privacy sul sito www.cttnordapp.it/ticketing

INFORMAZIONI: Ufficio URP CTT Nord LIVORNO
Livorno, Via di Franco, 13 - tel. 0586.376950
e-mail: urp.livorno@cttnord.it www.livorno.cttnord.it

Figure 3: Paper leaflet distributed onboard

C Impact evaluation

C1 Evaluation approach

Expected impacts and indicators

Impact category	Impact indicator	Unit of measure
Society	1- Citizens and tourists' satisfaction with SMS ticketing	%

Table 2: Expected impacts and indicators

Method of measurement

Impact indicator	Method*	Frequency			Target Group	Domain (demonstration area or city)
		Bef.	Dur.	Aft.		
1- Citizens and tourists' satisfaction with SMS ticketing	S	-	-	M35	Citizens Tourists	Elba island

* Data collection (DC), Estimation (E), Survey (S)

Table 3: Method of measurement

Detailed description of the indicator methodologies:

1- Citizens and tourists' satisfaction with SMS ticketing – This indicator was evaluated through surveys. The interviews were carried out during July 2019 by staff from the municipality of Rio and of Portoferraio. Over 50 citizens and tourists were interviewed. Interviews were carried out at bus stops along the route and not at the station in the centre of Portoferraio where it is possible to buy tickets directly. The following questions were asked:

- "Are you aware that it is possible to buy the bus ticket by SMS?"
- "Are you satisfied with this service?"

The answer options were: VS: very satisfied; s: satisfied; n: not satisfied

The low number of respondents is due to interviews with people who did not know about the service or from those who knew about it but had not yet used it being chosen to not be reported.

The Business-as-Usual scenario

Before this measure, PT users complained about the difficulty of finding paper tickets, the high cost of purchasing the ticket on board, and the fact that the ticket purchase on board was not always available and sometimes forced passengers to travel without a ticket. This situation would not have changed in the next few years as the commercial convenience of reselling PT service tickets on board for the PT operator would have remained not convenient for passengers.

The service was fully activated in early summer 2018. The BAU analysis could be carried out by estimating the number of tickets sold in 2018 based on the trend in the number of PT tickets sold in previous years. This result could be compared with the real number of tickets sold in 2018. But as mentioned for the ELB 7.1 measure, the number of tickets sold is closely linked to the number of tourists present in the year, and therefore this analysis would not lead to a correct interpretation of the validity of the measure.

C2 Measure result

Impact category	Impact indicator	Unit of measure	Baseline	Ex-Ante	Ex-Post
Society	1 - Citizens and tourists' satisfaction with SMS ticketing	%	N/A	60% Vs 10% s 30% n	80%Vs 20% s

Table 4: Measure result

C2.1 Society

1 - Citizens and tourists' satisfaction with SMS ticketing

Out of 52 people interviewed who were aware of the service and who had used it at least once, 42 (81%) said they were Very Satisfied by being able to buy a ticket via SMS, mainly as there are no single ticket sales on the island except at the Portoferraio main bus station. Some people were Satisfied (19%), but still complained about the higher price compared to the paper ticket.

User satisfaction with the service is also confirmed by the 2,800 SMS tickets registered during 2018-2019.

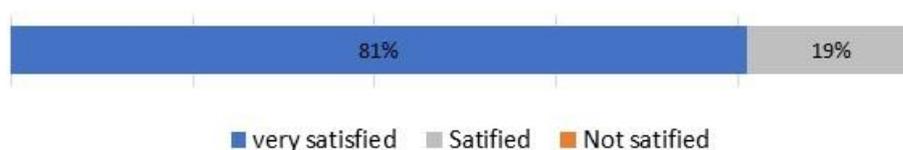


Figure 4: Citizens and tourists' satisfaction with SMS ticketing

C3 Quantifiable targets

No	Target	Rating
1	Better accessibility and convenience to use integrated PT, bike sharing, car sharing, and parking services on the island	NA
2	* At least 60% of citizens and tourists have declared themselves satisfied with being able to purchase the ticket for the PT via SMS	**
NA = Not Assessed O = Not Achieved * = Substantially achieved (at least 50%) ** = Achieved in full *** = Exceeded		

*New target, not in GA

Table 5: Quantifiable targets

Target 1 was Not Assessed. In the municipality of Portoferraio, the plan was to create integrated car parks using a digital management system with the possibility of paying with a portfolio card. The PT ticketing service would also have been integrated into this system, always with a portfolio card payment. Unfortunately, the digital integration of the car parks was not implemented, so it was decided to resort to ticketing via SMS. The analysis of PT users' satisfaction with the SMS ticketing service was the only service to be evaluated.

Target 2 was Achieved in Full, with more than 80% of the passengers interviewed declaring their satisfaction about this kind of ticketing. The local partners agree this measure was achieved, by improving the quality of the PT services, and providing tourists and residents with services more responsive to their needs.

C4 Up-scaling of results

Not Applicable.

D Process Evaluation Findings

The ticket was differentiated according to the length of the route. This has involved a major commitment of CTT Nord, whose decisive involvement has been made possible thanks to the convention signed in the framework of the DESTINATIONS project between the company and the Municipalities of Rio and Portoferraio. The user satisfaction of this service is also confirmed by the 2,800 SMS tickets registered during 2018-2019.

D1 Drivers

The pressing demand of residents and tourists to have a greater chance of purchasing bus tickets was an important enabler for the implementation of this measure. Additionally, the great willingness of the public transport company to solve the problem also worked as a relevant driver to boost the implementation of the measure.

D2 Barriers

During the implementation of the measure, the local partners dealt with the difficulty of the public transport company to establish agreements with telephone companies and banks for the creation of SMS tickets with differentiated costs for various kilometeric lengths.

D3 Lessons learned

Telephone companies have great difficulty in making changes to their business standards and a strong commitment from the requester is required to obtain customised variations.

E Evaluation Conclusion

The possibility to purchase PT tickets via SMS has a significant advantage for citizens and especially for Italian tourists. The latter often stay in places where there are no paper ticket purchase points – a situation that pushes them to use their own car to the detriment of public transport.

The evaluation of this measure was only made on the ticket purchase service via SMS, as there are no other mobility services (e.g., parking, bike sharing, etc.) integrated with public transport on the island.

F Additional information

F1 Appraisal of evaluation approach

The user satisfaction index was obtained from a survey conducted in 2019 by the staff of the municipalities of Portoferraio and Rio. The number of interviewees reported was limited, as only the responses of people who had used the SMS ticket purchase service were examined. Despite the promotional campaign, it takes time for people to get used to paying for a service using a smartphone. The results obtained by the interviews gave clear indications about the usefulness of the service, as the majority of interviewed people were satisfied and, even if the number of interviewees had been larger, these results are unlikely to have been different.

F2 Future activities relating to the measure

The possibility to purchase bus ticket via SMS will remain active beyond the DESTINATIONS project.