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 Cleaner and better transport in cities

DESTINATIONS



D6.2 Implementation report for measures targeted to mobility demand management and increased awareness for sustainable mobility

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Abstract

Innovative sustainable urban mobility demonstrations can only be assured with good planning and sound foundations. In this regard, CIVITAS measures are delivered through a tried and tested approach comprising three stages: Design, Implementation and Operations. This report focuses on the second of these and hence updates on the details of the measure implementation across the six sites.

Project Partners

Organisation	Abbreviation	Country
Horários do Funchal, Transportes Públicos	HF	PT
Agência Regional da Energia e Ambiente da Região Autónoma da Madeira	AREAM	PT
Câmara Municipal Do Funchal	CMF	PT
Secretaria Regional da Economia Turismo e Cultura	SRETC	PT
Agência Regional para o Desenvolvimento da Investigação, Tecnologia e Inovação	ARDITI	PT
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Municipality of Limassol	LIMA	CY
Stratagem Energy Ltd	STRATA	CY
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The Research Committee of the Technical University of Crete	TUC	EL
Comune Di Rio	Rio	IT
Comune Di Portoferraio	PF	IT
MemEx S.R.L.	MEMEX	IT
Authority for Transport in Malta	TM	MT
Valletta Kunsilli Lokali – Valletta Local Council	VLC	MT
Universita ta' Malta	UoM	MT
Ministry of Tourism	MOT	MT
Guaguas Municipales sociedad anonima	Guaguas	ES
CINESI S.L consultoria de transport	CINESI	ES
Ayuntamiento de Las Palmas de Gran Canaria	LPGC	ES
Ingeniería Electrónica Canaria S.L	INELCAN	ES
Sociedad Municipal de Aparcamientos de Las Palmas de Gran Canaria	SAGULPA	ES
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European Integrated Project	EIP	RO

Sustainable Services	GV21	ES
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Site abbreviations:

ELB - Elba

LIM – Limassol

LPA – Las Palmas de Gran Canaria

MAL – Malta

MAD - Madeira

RET – Rethymno

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Executive Summary

The report details the results of the implementation activities, ITS deployment and supporting actions for all the sites as outputs of Task 6.3. It captures how each site has engaged with key stakeholders, set up agreements and marketing strategies, derived success factors and it details the challenges faced, allowing for transfer and adaptation of approaches ahead of measure operations.

1 Introduction

1.1 Overall DESTINATIONS Objectives

DESTINATIONS will demonstrate and evaluate the effectiveness of innovative sustainable mobility solutions in six tourist cities with different characteristics but sharing common challenges. DESTINATIONS will develop an innovative holistic approach to building sustainable urban mobility systems for both residents and tourists. The project impacts will make a positive contribution to demonstrating how this can achieve growth and therefore provide a benchmark for other EU tourist cities.

1.2 WP6

WP6 sees the demonstration of a package of measures comprising mobility management, behaviour change, low emission zones and parking management. They are designed for both the needs of tourists and residents and therefore make better use of transport capacity.

1.3 Task 6.3

Task 6.3 represents the Implementation phase of site measures, following the Design phase and preceding the Operations phase. It comprises the activities required to set up each measure such that effective demonstrations can take place and be evaluated.

1.4 Objectives of Deliverable 6.2

This deliverable presents the activities of the implementation stage of measure deployment. Chapters 2, 3 and 4 present the individual measures, grouped into the three clusters for WP6 (Mobility Management & Travel Plan Implementation, Behaviour Change Through Competition and Low Emission Zones & Parking Management). This structure allows for cross-site comparisons to be made and hence experience and knowledge to be exchanged. It sets out measure highlights so far and innovations that can be replicated in other towns and cities.

2 Mobility Management and Travel Plans Implementation

2.1 MAD 6.3 - Mobility planning for tourism related companies

2.1.1 Implementation

This measure aims to apply different mobility management measures, promotion activities and training sessions to promote sustainable mobility among tourists and residents. With these specific activities tourists will be attracted to sustainable transport modes such public transport.

Public transport's drivers training in English

In January 2017, Horários do Funchal started a new training module in English, as part of the mandatory training for the Certificate of Drivers Ability. It was a two hours training module, dealing mainly with the common questions addressed from tourists to drivers.

The trainees answered a short questionnaire about the training, which resulted in interesting data.

It was noticed that the tourists frequently approach the drivers, especially in the city centre or in the hotel area. Further to asking questions about public transport services, they also ask about interesting touristic points, e.g. Levadas Walks, shopping and traditional market, restaurants and car rental.

The drivers' acceptance rate of this new module was very high. In total, 80% of trained people classified the training between sufficient to excellent, recognizing an improvement in their ability to express themselves in English.

On the other hand, the training duration was raised as a less satisfying factor. Of the trained people, 77% said they are interested in future English training, so HF will consider the possibility of developing and improving this module.



Figure 1: HF drivers answering the questionnaire

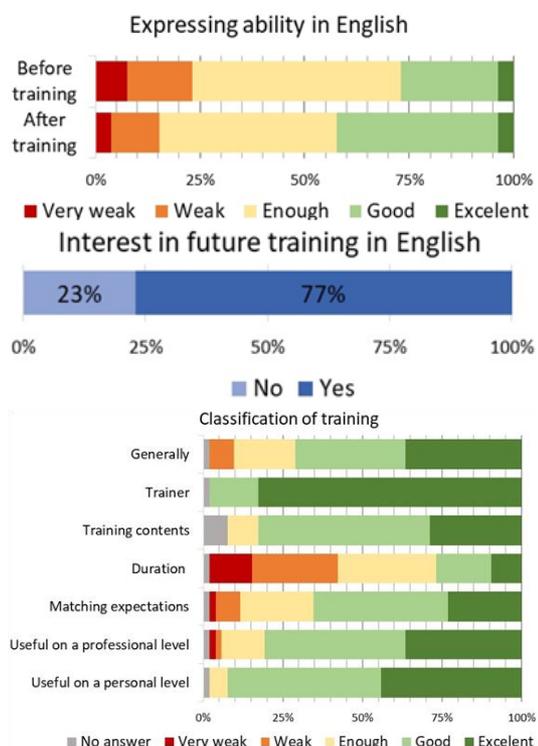


Figure 2: Results of the questionnaires answered by HF' drivers.

Public transport tourist guide and timetables

Following the analysis of both tourism data and feedback received from the Tourism Board front desk employees, it was clear that there was a need for better information aimed at tourists regarding public transport. Considering the high average age of tourists visiting Madeira, using paper-based support was seen as preferential to support delivered via a mobile app or other digital tool. Therefore, paper-based support was chosen as the best option to address tourists' needs for information at the tourist desk. On the basis of the above, the Director for Tourism design a guide with relevant information for passengers and potential users.



Figure 3: Guide Discover Madeira Island by Bus

2.1.2 Support activities

Focus group with hotels and tourism professionals

The Tourism Secretary contacted the relevant stakeholders to be involved in the campaigns to promote sustainable transport modes within tourism. The focus group was essential to train professionals about sustainable transport options, to understand the real needs of tourists regarding mobility options and to encourage the use of public transport by hotel and travel agency professionals. In view of this, tourism professionals can be an example for tourists themselves.

Success factors and challenges faced

During the data collection process, it was clear that the needs of tourists needed to be addressed. Sustainability options remain the main concern for tourists and as a consequence for tourism professionals at all levels. Tourism professionals are more committed to delivering quality services to guests to address their real expectations.

Data collection procedures

Relevant data and figures were collected during these activities to better understand tourists' needs and how to encourage more tourism professionals to use sustainable transport modes, too.

2.2 LIM 6.1 – Awareness on the use of sustainable mobility modes for leisure trips

2.2.1 Implementation

This measure increases awareness on how to travel for leisure trips using sustainable mobility modes. An action plan of promotional campaigns was prepared and competitions were designed.

More specifically, Limassol Tourism Company (LTC) organised two competitions in collaboration with a number of local stakeholders. The aim of these competitions was to attract and inform citizens and tourists about the available sustainable mobility modes regarding their leisure transportation.

The first competition was organised in collaboration with the Troodos Sports and Fun Festival, Troodos Tourism Board, Biking Cyprus and Cyprus from Air. An average of 200 tourists and locals participated and were informed about the CIVITAS project. During the event, a hiking activity at Troodos was organised, with more than 80 participants.

The second competition took place in collaboration with Etalon Etiquette Club and Next Bike Cyprus as part of the Cyprus Russian Festival, aiming to promote cycling as the main mode for commuting around Limassol. The event, “Limassol Lady on Bike” attracted the participation of more than 20 individuals and 400 people that were visiting the Cyprus Russian festival.

For this measure, Limassol Municipality is responsible for organizing a training programme for urban planners. LTC held several meetings with Limassol Municipality to support the organisation and implementation of urban planners’ training.

Regarding dissemination activities the campaigns included publicity, outdoor banners, advertising in local magazines and hotel magazines, radio, events, participation in existing events and distribution of promotional material.



Figure 4: Limassol Lady on Bike (at left). Troodos Sports and Fun Festival 2017 (at right)

2.2.2 Support activities

Implementation of marketing strategies

In Limassol, a meeting was held with the Cyprus Tourist Organisation, Limassol Bus Company and the representative of the Ministry of Communication and Works in order to improve the existing timetable of urban buses that are in high use by tourists, especially during summer.

Maps with detailed information about cycling, walking and public transport routes were distributed to hotels and travel agents to promote sustainable mobility modes.

With the implementation of the competition and campaigns and the actions included, such as hiking, cycling and distribution of maps, we raised the interest of tourists and residents to use sustainable modes of transfer.

Key Stakeholder engagement

Limassol has identified the following key stakeholders for their site:

- Hotels;
- Local media;
- Local authorities;
- Urban planners;
- Limassol Bus Company;
- Cyprus Tourism Organisation; and
- Tourist information offices.

LTC held several meetings with hoteliers and representatives of Cyprus Tourist organisations and Tourist Information Office for the distribution of maps and to promote available sustainable modes of transportation options. Competitions and campaigns were promoted through local media. Printed material was disseminated to the general public that participated in competitions/campaigns. Local authorities will be involved in the coordination of the training for urban planners to create awareness on greener planning.

Data collection and procedures to be used in demonstration phase

Five per cent of the population has knowledge of measure LIM 6.1 so far and it is predicted that more than 85% of the population will be aware through the implementation of organized campaigns and competitions.

2.3 LIM 6.2 - Combined tourist and mobility products: Green Label Award and Tourist Mobility Card

2.3.1 Implementation

Measures design highlights

This measure sees an enhancement of tourism and leisure transport through the implementation of a Tourist Mobility Card that will be supported by Green Label partners. The Tourist Mobility Card will assist in increasing the number of leisure trips with the use of sustainable mobility modes among tourists and residents. The Green Label will be awarded to hotels that promote sustainable mobility.

The Tourist Mobility Card enables visitors and residents to buy one ticket for the duration of their stay, for all their public transport transfers (urban and rural) and at the same time be allowed to have discounted entry to museums and other places of interest as well as discounted use of bike sharing. Five self-service ticket machines will be installed in the tourist area and Limassol city.

Site preparation and Implementation activities

For measure LIM 6.2, LTC is the main project leader and is responsible for implementing the activities.

To date, Limassol has determined the criteria and procedure for the Green Label award and has identified companies and hotels that will potentially participate in the Tourist Mobility Card. In terms of this measure LTC visited 25 hotels and 30 companies to present the CIVITAS project and promote the measure. During the meetings, incentives were given to hoteliers and companies to improve their services and promote sustainable mobility modes to their clients.

After the meetings' suggestions were made, most participants agreed to distribute the Tourism Mobility Card or give benefits. In total, 16 out of 25 hotels participated (100% of 5 star hotels, and 50% of other hotels). A total of 22 businesses offered discounts to tourism partners motivating visitors to use ready-made solutions for site seeing around Limassol (museums, archaeological sites, cultural sites etc). For the distribution of the Tourist Mobility Card LTC held several meetings with the Limassol Bus Company and the bike sharing company, in order to include a weekly ticket for public transport and discounts for cyclists. The card includes unlimited use of public transport around the Limassol region and associated discounts. The Tourism Mobility Card is available from the hotels.

2.3.2 Support activities

Stakeholder engagement

Hotels have participated in the Green Label effort by supporting sustainable mobility and promoting the Tourist Mobility Card to guests. The Limassol Bus Company, bike sharing and bike rental companies offered incentives to Tourist Mobility Card users. Tourist attractions, museums and local businesses offered discounts or other incentives to card users. Just a few examples include:

- Next Bike: 20% discount on bike rentals;
- Atlas Rentals Molos: 20% discount on electric tricycles; and
- Pattihion Museum: Free entry.

The Cyprus Tourism Organization and tourist information offices are promoting the Tourist Mobility Card and support this effort by introducing the card to visitors.

Implementation of marketing strategies

The Tourist Mobility Card can be an integrated tool for increasing the number of tourists using sustainable mobility modes for leisure.

Data collection and procedures to be used in demo phase

There is no awareness of this measure yet as it hasn't been implemented yet. It is estimated that after the promotion of the measure through local stakeholders the percentage of the population that will be aware of this measure will be 80%.

2.4 MAL 6.1 Green Mobility Hotel Award

2.4.1 Implementation

The Green Mobility Hotel Award which will be piloted as part of the project will seek to raise awareness about sustainable urban mobility practices amongst tourist operators and related stakeholders. The measure aims to incentivize the hotel industry to adopt practices related to Green Mobility, boost their image by showing corporate social responsibility and encourage efficiency among tourist operators.

The expected outcomes of the measure include:

- Development of the Award Scheme;
- Organization of at least one conference to explain and launch the competition;
- Submission by participating hotels of at least one proposal for a Green Mobility Plan;
- Implementation of the awarded measure during the lifetime of the project making use of the grant; and
- Collection of data relating to the winning measures.

The impacts from this measure are expected to reach beyond the tourism industry by mitigating the carbon footprint resulting from tourism and thus improving the quality of life of residents.

The Green Mobility Hotel Award complements the national eco-certification scheme managed by the Malta Tourism Authority (MTA) which focuses on ensuring the environmental, socio-economic and cultural sustainability of hotels on the Maltese Islands and has been recognized by the Global Sustainable Tourism Council (GSTC) as fully reflecting GSTC criteria. It is a legal requirement for new hotels that within six months from the issue of the license, the property conforms to the requirements of the Eco Certification Scheme. Currently 22 hotels are eco-certified and these represent 16% of hotel accommodation in the Maltese Islands. However, the Eco Certification Scheme currently does not include transport as one of its requirements for certification.

A competition will be launched inviting hotels to propose measures related to sustainable mobility. The submissions will be evaluated and the winning measure monitored for implementation. Such audits will be carried out by an expert who will be engaged following the publication of a tender.

The first tender for this purpose was issued in June 2017 however the lowest priced bid received exceeded the budget by 275%. Following negotiations and changes in the specifications, the second call was published in June 2018 and the evaluation process is expected to begin following the deadline in August 2018.

The publicity for this measure will be coordinated by Transport Malta. A call for quotations was issued earlier in 2018 which engaged a team of marketing experts tasked with preparing a marketing strategy and plan. The same experts will also assist the contracting authority with the drafting of a marketing tender that will procure the required promotional material.

2.4.2 Support Activities

Implementation of marketing strategies

Transport Malta has engaged a team of marketing experts through a call for quotations to design a marketing plan and strategy for the DESTINATIONS measures that will be implemented locally. The experts are currently working on creating a sub-brand for the Green Mobility Hotel Award, taking into consideration the project's corporate image. Figure 3 is a draft design that has been prepared with Transport Malta and the Ministry for Tourism.

The measure also aims to maximize the dissemination of information on sustainable mobility with the hotel industry. Prior to the launch of the competition the educational workshops will have this purpose. Booklets and brochures will be produced in preparation for these workshops and the measure will be advertised in local newspapers and possibly in international magazines.



Figure 5: A draft poster prepared for marketing purposes of the Green Mobility Hotel Award

Stakeholder engagement

The Ministry for Tourism is the lead partner for the Green Mobility Hotel Award measure and will see to the overall design and implementation of the measure. The Ministry will be assisted and guided by the Malta Tourism Authority and Transport Malta each contributing according to their area of expertise. The Ministry for Sustainable Development, Environment and Climate Change, and Ministry for Transport and Infrastructure will also be providing their support.

As part of the design of the measure and the pilot specifications, the Ministry for Tourism (MoT) compiled a list of stakeholders who will be directly/indirectly impacted by the measure as well as those entities who can assist with baseline data collection, baseline analysis and user needs analysis. In consultation with the Malta Tourism Authority, an assessment has also been carried out against the eco-certification scheme implemented by the same authority to see if any of the processes can be adopted within the design and implementation of this pilot. Actions as part of this baseline assessment included the design of draft criteria for hotel award and for the external expertise that will be engaged to implement the hotel audits. Further consultations with Transport Malta refined the specifications to be included in the tender. The second call for tenders is currently at publication stage and will be evaluated following the mid July deadline for submissions.

Commercial agreements

The pilot project has not delved into commercial agreements at this stage.

Success factors and challenges faced

The fact that this pilot initiative will complement the national eco-certification scheme at a time when there is an increased demand for sustainable tourism are expected to make this measure successful.

On the other hand, the higher priced bids received in response to the first tender published for a hotel audit expert and the necessary subsequent discussions have increased the risk of implementation being delayed by some months. This was counteracted by shifting the launch of the competition to the low-season for tourism when hoteliers are able to dedicate more time and attention to other projects.

Data collection procedures

Surveys will be carried out with the hotel operators, before and after the launch of the pilot project. These will measure the level of awareness, acceptance and satisfaction of the award campaign. A 20% awareness level, a 10% acceptance level and a 20% satisfaction level are expected.

2.5 RET 6.1 Sustainable mobility agency for tourists/visitors & new products combining tourism and mobility

2.5.1 Implementation

This measure has two main components which aim to improve mobility options and services for tourists and citizens. The measure is still in the design phase as planned.

Sustainable mobility agency for tourists/visitors

The first component is an integrated mobility service providing accurate information to locals and visitors regarding sustainable transport options, along with new products and services which combine tourism and mobility.

The aim of this agency is to coordinate transport activities and stakeholders, promoting relevant services and therefore raising awareness on the environmental impact of commuting.

The location and infrastructure of the Agency as well as the qualifications of its staff, have been defined and the recruitment process was completed in October 2017, by contracting and training three engineers for its efficient operation.

Contacts and informal meetings with tourism actors have been made, while the key stakeholders were already actively involved in the initial development of the measure's business model during the business kick off training in March 2018. The development of a business model for the Sustainable Mobility Agency to be operated as an independent service was not considered feasible, thus it was decided to incorporate the agency into the Technical Services Department.

Additionally, initial communication has been conducted regarding the sustainable mobility information hubs at the airport of Heraklion and Chania. Further discussions are being conducted regarding the design of the mobility information hubs and their implementation.

New products combining tourism and mobility

The second component focuses on providing alternative mobility options and new products combining tourism and mobility for locals and visitors, to encourage more sustainable commuting choices and achieve a modal shift from single occupancy car use. It will develop sustainable mobility travel plans, car free routes, demonstrate the travel planner app and evaluate new services through satisfaction surveys for tourists.

2.5.2 Support activities

Marketing the new Sustainable Mobility Agency

Planning work has been conducted determining that the Sustainable Mobility Agency will be widely promoted through various communication channels, including press releases, articles, social media posts during the launching period, along with the active promotion by key tourism stakeholders, especially the Municipal Tourism Board. Further support by tour operators, hoteliers, ferries, charter and “vacation” flights operators will be vital during the promotional activities regarding the Sustainable Mobility Agency operation and the new products and IT services.

Stakeholder engagement

Within this measure, several key stakeholders have been identified and the engagement process was initiated in project and measure level. The main stakeholders involved are:

- Tourism stakeholders /authorities;
- Tour operators / Travel agencies;
- Hoteliers Association;
- Region urban planners;
- Public bus services and taxi association;
- Citizens' Association;
- Volunteering teams (i.e. Initiative of Citizens for Road Accident Prevention and the Promotion of Road Safety); and
- Chamber of Commerce.

The Municipal Tourism Board has been engaged to collaborate with and support the Sustainable Mobility Agency and the promotion of the new mobility products for tourists.

Initial discussions with tourism stakeholders have been conducted and the future implementation will include the training session for hotel staff to promote the travel plans, training sessions for eco-drivers and eco-driving training session for motorists.

Success factors and challenges

The agency will serve a dual function of transport information provision as well as the engagement of hotels and other tourist and mobility stakeholders to develop travel plans and to design appropriate new products and services,

The operation of the agency within the Technical Department Services of the Municipality of Rethymno guarantees its sustainability and its operation after the CIVITAS DESTINATIONS project supported by the amendment of the Organisation of the Internal Services of the

Municipality. Main actions of the measure include the eco and driving training, which will increase safety and improve the urban environment.

Transfer and adaptation of approaches before the demonstration

During March 2018, the Municipality of Rethymno and TUC held a business models development training session, including this measure to examine the viability of the Sustainable Mobility Agency and its sustainability after the completion of the CIVITAS DESTINATIONS project. The key tourist and mobility stakeholders of the measure participated in the training and actively contributed to the draft of the business model and the action plan for the Sustainable Mobility Agency's operation. Best practices and lessons learnt from developing mobility agency business models and tourist mobility products and services will be further exchanged with partners which have already implemented similar schemes in their sites.

Data collection procedures

As planned, the evaluation of the measure will include environmental, social, transport and economy impact indicators with ex-post and ex-ante evaluation. The initial data collection will provide the baseline for most of the impact indicators. During implementation, a monitoring mechanism will be set to follow mobility patterns, tourists' needs and expectations. A targeted satisfaction survey will take place after the pilot implementation.

2.6 ELB 6.1 - Combined products for tourism and mobility: the accommodation and mobility package

2.6.1 Implementation

The aim of this measure is to promote integrated packages for Elba's hoteliers, combining accommodation with sustainable and/or shared mobility services. This will encourage tourists not to use the car for travel on the island thus reducing traffic and improving quality of life.

Electric bikes

The municipalities of Portoferraio and Rio have made a tender between the various bikes suppliers for a long-term rental of 44 e-bikes for two years. The enterprise F.lli Gallo Auto Sas were appointed accordingly. Following this, another tender was launched, this time for interested hotels, which saw 11 coming forward requesting a total of 40 e-bikes. These were subsequently delivered to the hotels in June 2018 which resulted in a successful implementation phase.

The first year of rental will be financed by municipalities under the CIVITAS project, while the second year will see hotels contributing to the operational costs, who will also have the possibility of redeeming the bikes at the end of the rental.

The initiative has been very successful among hoteliers and certainly will be an example and stimulus for other hotels to provide tourists with electric bikes that can easily substitute car journeys for small daily trips to the beach or other local attractions.

In details, here is a summary of what they declared:

- Four hotels will activate agreements with other local bike-rental companies (this will increase income for such businesses);
- Two will activate agreements with transport companies, shops or tourist guides to put in place discounts for customers who will rent the e-bikes;
- Ten will inform customers about touristic routes accessible by bike;
- Five hotels will organize bike excursions for their customers;
- Two hotels will provide a bike-repair laboratory, a laundry service, a shuttle with bike transport (for example in case of emergency) or a free snack when the customers bring back the bike at the end of the rent;
- All the hotels will promote the service using their own website; some of them will promote it also by social networks and by booking websites or touristic information websites; and
- Nine will translate messages in English and/or some other foreign language.



Figure 6: Package accommodation and mobility

Public transport

In order to limit the use of the private car and according to the agreement signed between the municipalities of Portoferraio and Rio with the local public transport operator (CTT Nord), the latter undertook to take specific actions to increase the use of public transport.

CTT has provided information leaflets with a list of all public transport services available and will also offer the possibility for tourists to buy tickets (including specially discounted tickets) directly at hotels / campsites.



Figure 7: CTT public transport of Elba island and CTT leaflet

2.6.2 Support activities

Implementation of marketing strategies

In the summer the main roads on Elba are overcrowded and moreover, the parking lots near the small beaches are full of private cars which are often parked in prohibited natural areas. Public transport is not widely used even in the summer time.

With the DESTINATIONS project, the local operator, CTT Nord, is committed to making a strong promotion of public transport, in particular to tourists. This informative campaign, which started on June 2018, includes promotional activities dedicated to tourists as well as the organization of meetings with hotel managers. This has increased awareness of CTT Nord services and the campaign has asked for hotel cooperation in providing information to customers and in selling tickets directly. In particular, hotels were asked to sell the cheap and very easy to use “Elba Card”, a special season ticket, for 1 day (10€) or 6 days (25€). In addition, a press conference on this topic was held in Portoferraio on 27th June 2018.



Figure 8: Implementation of marketing strategies: informative campaign – meeting in Portoferraio with hotels and Public Transport Company

How Elba site has engaged key stakeholders

The main stakeholders involved in the measure ELB 6.1 are :

- Association of hoteliers on the island of Elba: the largest association of the category;
- Bike (Mountain bike, e-bike) renting companies;
- CTT North public transport operator in Elba;
- Cycling and walking groups;
- Citizens and local interest groups; and
- Hotels (most interested targeted first).

Several meetings were held between the representatives of the participants in the DESTINATIONS project. These were held with the island's hotel association and directly with hotel managers, These meetings illustrated the advantages for them and the entire environment of the island from the adoption of sustainable mobility systems instead of the use of private cars.

Commercial agreements on promotional fare, discounts, combined products for tourist

In July 2017, the Portoferraio and Rio municipalities signed a convention with CTT, to improve the level of public transport and cooperation between the various stakeholders such as the means to buy tickets directly from the hotels, as well as offer discounts for subscriptions.

Success factors and challenges faced

Hotels were obliged via the tender not only to pay for half of the rent service but also to propose and realize some good practices aimed at promoting the use of bicycles and sustainable mobility in general. This proved to be a successful approach for getting long-term stakeholder support.

E-bikes were considered as valid alternatives to the car for short trips meaning that hoteliers saw the rationale of providing integrated packages of accommodation and e-bikes.

The cost of a good electric bike was an obstacle that was surpassed by the low-cost rental system.

Transfer and adaptation of approaches before demonstration

Before the bikes were delivered to the interested hotels, an informative meeting was held with them and the representatives of the Trade Associations and the Hoteliers Association regarding their use and the project background overall.

Data collection procedures to be used in demo phase

Contracts stipulated that hoteliers were expected to conduct satisfaction surveys with tourists after using electric bikes and then suggest improvements. These interviews will be used for the evaluation report.

No data is available at the moment as the measures were implemented during July 2018.

2.7 Collaboration among DESTINATIONS Sites/partners

Measure Title	Best Practice description in the implementation of the measure	Description of a specific expertise needed for the demonstration phase	Identified Synergies (please indicate measure/s)
MAD 6.3	Share formula used to inform visitors how to get to events sustainably	Unspecified	LIM 6.1
LIM 6.1	LIM can share BP ideas on how to engage people at festivals / major events to raise awareness of sustainable mobility.	Unspecified	MAD 6.3
LIM 6.2	Share principles used to define Green Label award criteria.	Unspecified	MAL 6.1
MAL 6.1	Share the principles and specifications used to define the award criteria.	Expertise with knowledge of sustainable mobility and the local tourist industry.	LIM 6.2
RET 6.1a & 6.1b	The operation of a dedicated agency to coordinate all transport activities and stakeholders in order to enhance accessibility for tourists and residents and their overall travelling experience.	Best practices and business models for the sustainable operation of the mobility agency. A holistic approach for B2B and B2C. Examples of successful campaigns and promotional material for new mobility products/services targeting tourists.	ELB 6.1
ELB 6.1	Possibility of obtaining a low monthly cost of hire (including maintenance) in the long term (two years) of electric bikes.	Unspecified	LIM 6.1

Table 1: Cross Site Collaborations, regarding Mobility Management and Travel Plans Implementation

3 Behaviour Change Through Competition

3.1 MAD 6.1 - Gamification as a way to induce behavioural change in Mobility & MAD 6.2 - Green credits: A Business Model for Mobility, Sustainability and Tourism.

3.1.1 Implementation

Following work on Task 6.1.2 (Existing Solutions and Requirements Analysis) and Task 6.1.3 (Design, Specification & Integration of Proposed Gamification Approaches – 1st Iteration), three possible approaches have been considered:

- **Gamified tracking system:** Solutions to track users (strictly linked with the MAD 6.2: Green Loyalty System) in order to apply gamification techniques exploiting external motivation (gain points, badges, vouchers) to engage users in using sustainable means of transportation;
- **Location-based games and pastimes:** Ideas that use short-range wireless communication technologies (e.g. iBeacon, near-field communication), at the bus stops, together with a mobile app, so as to engage users during their wait time or to encourage people to walk further to another bus stop. Moreover, games or activities could also be provided inside the bus, exploiting a local network; and
- **Augmented objects:** Proposals that use physical objects and augmented reality to enhance the functionalities of the object and enrich the user's experience.

Detailed testing of possible solutions have been conducted including Positive Drive and BetterPoints and reported to partners.



Figure 9: Some statistics in Positive Drive

The decision was made to use a location-based game approach that can be initially implemented and tested without requiring complex resources, equipment or integrations (e.g. integration with Green Credits systems should be made after). Mobile phone app, iBeacons and dedicated back office “platform” (software + database) will be used.

Design, Specification & Integration of proposed gamification approaches were concluded in July 2018 and the implementation phase started in August 2018.

Two target audiences will be targeted using location-based games:

- Tourists, exploiting the 1, 3, 5, and 7 day tickets; and
- Children/teenagers (young-adults), exploiting the summer pass.

In this way the impact of the location-based game campaigns can be quantified by checking the tickets or passes sold.

Location-based Games for Children

The idea is to provide children with virtual “objects” the more they use the bus. It envisions two different contexts:

- A garden, in this way the child collects flowers and plants at each bus stop; and
- An aquarium, in this case the child collects fish at each bus stop.

A virtual element will be added to include environmental conditions and air quality to pass on sustainable transport messaging. To collect the virtual element, the child needs to be at the bus stop:

- Short-range communication technologies (such as iBeacon, NFC or RFID) or QR-codes to allow to the child to collect the element will be exploited; and
- So that the system is not circumnavigated, a low-cost solution will be included to validate the fact that the children is really on the bus. Alternatively, the child who bought the summer pass could receive a code to use to register in the system.

Location-based Games for Tourists

Discussions have been held to plan the concept which is to provide tourists with challenges related to the place that they are visiting (a kind of “Escape Madeira”). The popular locations will be exploited that are reachable using buses (see for example the destinations presented here: <http://www.horariosdofunchal.pt/guia-pt>).

Involvement will be sought from local historical/cultural associations to collect “secret” information about the locations. The tourist needs to find the real element following the hints provided by the mobile application. The real element will be provided with Wi-Fi short range communication technologies. As a reward, he/she can obtain a virtual “gift” related to the specific location to collect/share.

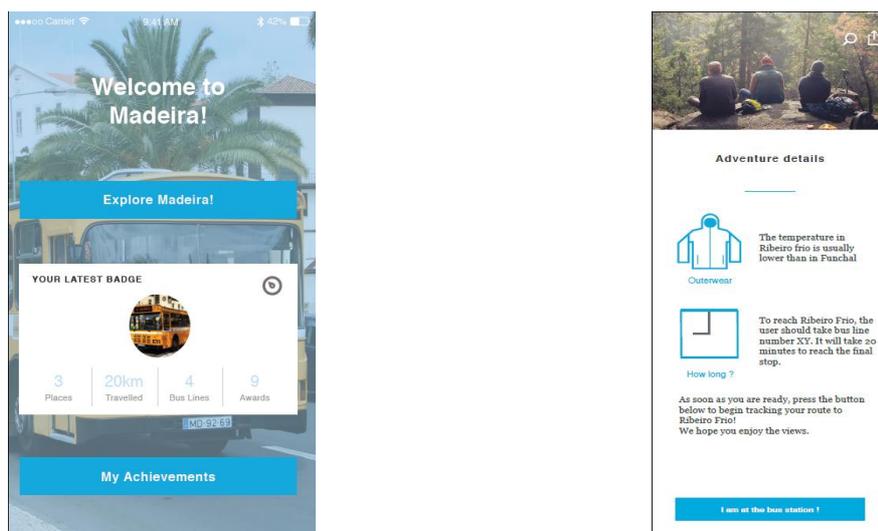


Figure 10: Early stage mock-ups for the Tourists mobile app

Architecture

Both the games need a specific mobile application that will communicate with the iBeacon (for example) and will provide the user with the game. The registration for the user (and the management) can be done using the mobile app (a web-based application for user is not required). To register the user, it needs an online DB service that will store data and visualize them to the admins. A back-end service will perform as server to provide contents to the mobile app, when needed.

3.1.2 Support activities

ARDITI has commenced work on the specification of the different applications, so as to work on the implementation of the prototypes during the next six months. The plan has two initial campaigns to measure the effects of gamification strategies. One campaign targeted to tourists, exploiting the Horários do Funchal day tickets (from 1 day to 7 days), and the touristic routes. One campaign targeted to young (aged 25 years or younger), exploiting the Horários do Funchal summer pass (main season from June to September 2019).

Current Planning / Phases are planned as follows

The design is to be concluded by the end of July 2018. This will include a better understanding of the requirements and the creation of mock-ups for every final aspect of the App. Development will take place during August, September and October. Testing is planned for November and December 2018 with additional phases to integrate improvements.

Key stakeholders are the public transport operator and its clients, both locals and tourists. They will be involved as soon as testing of the measure begins. Aspects such as implementation of marketing strategies; set up of commercial agreements on promotional fares, discounts, combined products for tourists; success factors and challenges faced; transfer and adaptation of approaches before demonstration will be defined. Data collection procedures to be used in the demo phase will be carefully taken into consideration.

3.2 LIM 6.3 - Bicycle challenge: competition between employees of companies

3.2.1 Implementation

This measure aims to change the habits of locals and support them to become actors in their own town by promoting cycling in their daily life. A campaign, 'Bicycle Challenge', took place to promote cycling in everyday life and particularly from home to work.

Initially, a strategic plan was prepared to identify the companies participating, the number of employees from each company and the schedule timelines for the meetings. Additionally, a cooperation plan was created between key actors. *KMeaters* cycling team supported the whole action. Once identified, several meetings took place with ten companies to inform them about the campaign, resulting in five which agreed to participate. Presentations on the benefits of cycling were delivered followed by discussions with management and employees. During the meetings, ideas and suggestions were exchanged about the typical routes that were followed from home to work as well as safety issues.

For three months (mid-September 2017 to mid-December 2017) employees cycled to work. The participants used mobile applications to record the distance travelled each day, the cycling time and the route. After the completion of the ride, participants had to send their daily information by email. Upon completion of the campaign, information was collected and each participant received a certificate and report stating the amount of km travelled as well as the total cycling time for the period of three months. After the analysis of data, each of the six companies (BSM Cyprus, Polyclinic Ygeia, KEO Ltd, MAM Baby, Marlaw Navigation and Kanali 6) got a prize depending on the longest distance covered (BSM Cyprus: 164 km, Polyclinic Ygeia: 230 km, KEO Ltd: 611 km, MAM Baby: 200 km, Marlaw Navigation: 75 km – Kanali 6 did not submit the results) during this period. The prize was a box with gifts that included bicycle lights, lockers, bottle cases and oil for bike chain maintenance.

The latter two gifts were issued to all employees participating in the campaign as were certificates of participation. Most of the employees participating in the bicycle challenge had a positive experience and became more aware of using cycling as a mode of transportation.



Figure 11: Participants of the campaign Bicycle Challenge (at left). Meetings with Companies (at right).

3.2.2 Support activities

Implementation of marketing strategies

Marketing actions included the justification of changing travel behaviour from the perspective of improved health and environmental benefits, as well as opportunities for employees to save money by cycling to work.

Marketing strategies also included advice and discussions about issues related to safety, weather, suggested routes from home to work and technical workshops on basic cycling gear.

Stakeholder engagement

For the bicycle challenge, the Limassol Chamber of Commerce and the KMeaters Cycling Team (instead of Limassol Cycling Club) promoted the campaign and motivated employees to use bicycles to commute to work. The companies that participated in the campaign included KEO, BSM CY: Bernhard Shculte Ship Management, MAM Baby Cyprus, Marlow Navigations and Ygeia Polyclinic Private Hospital.

Success factors and challenges faced

The campaign generated a high level of awareness of the bicycle as a valid mode of transport with acknowledgement especially of the health benefits, hence shifting traditional cultural values.

Data collection procedures to be used in demo phase

After the completion of the campaign most participants expressed that they would like to keep cycling to work. Following our communication, 60% of the participants are cycling to work.

3.3 LPA 6.1 - Green Credits Scheme

3.3.1 Implementation

Guaguas Municipales is working to introduce a green credit scheme to encourage citizens to adopt more sustainable lifestyle patterns by providing tangible economic rewards. Points are accumulated as rewards for using public transport, and then, accumulated points can be changed to acquire products or services at a variety of places, such as shops, museums and theatres.

The scheme is an innovative approach to attract citizens towards sustainable modes of transport at the same time as boosting the local economy by pushing users to purchase products and services. The development of this measure took part within the CANVAS business model workshops, where technical, commercial and financial issues were discussed.

The measure pursues a win-win strategy among the urban public transport company and local commerce and business that leads to a better, cleaner and friendlier city.



Figure 12: Scheme of Loyalty system

Technical solutions

Today, Las Palmas de Gran Canaria benefits from a contactless smart card system that allows customers to pay for urban public transport trips. There are also several kinds of other bus cards and tickets that offer prepayment as well as concessionary fares (students, elder people, unemployed). However, a loyalty system does not exist yet.

The data about the number of trips validated with each kind of ticket is currently stored in a database that can be easily consulted.

As a first stage, it was decided that this system will be based on the most used urban public transport tickets (BonoGuagua), which is used by 54% of urban public transport network trips in Las Palmas de Gran Canaria. BonoGuagua is a contactless and rechargeable smartcard where each trip costs €0.85 and allows free transfer between different bus lines. It has some other very interesting features as it can be also used to access the public bike service, Sitycleta, and to pay for regulated on-street parking. To sum up, it is a card that can be used as an integrated mobility tool all around the city. A process diagram to set up the loyalty system in Guaguas Municipales that is shown below.

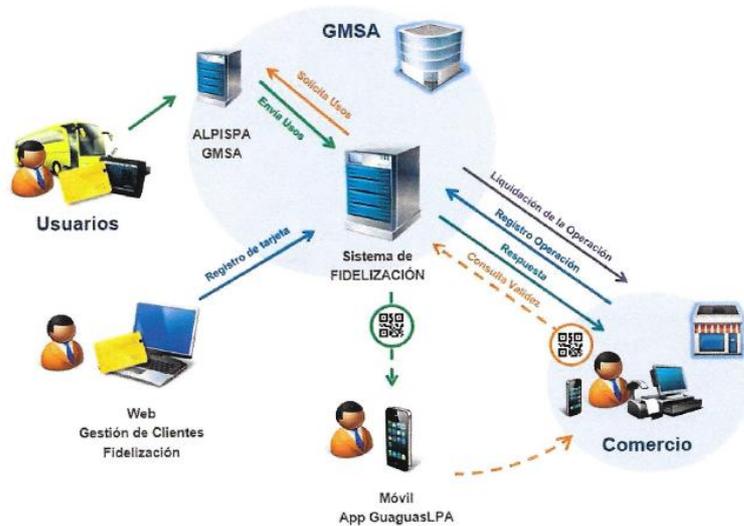


Figure 13: Guaguas Municipales loyalty system diagram process

The sequence of the system has been identified as follows

1. Each Guaguas Municipales trip is collected in the database of Guaguas Municipales (ALPISPA).
2. Each urban public transport user who wants to take part in this initiative needs to register to the Guaguas Municipales loyalty system in order to link his/her BonoGuagua card with the loyalty system (a similar procedure with this contactless smartcard has already been carried out to register the users of Sitycleta system).
3. Periodically, the loyalty system will check the number of trips of each registered card to estimate the number of points earned by each user.
4. In the current Guaguas Municipales App, a new section will be created for registered users, where they can check how many points have been earned and a PDF417 barcode will be generated to exchange these points in local shops.
5. Each business taking part in this measure, will have a PDF417 reader integrated in a PDA machine that:
 - a. Will collect information regarding the number of points that each BonoGuagua card has earned;
 - b. Will discount the number of points of the BonoGuagua card to be used in that place (if it has enough points); and
 - c. Will register the transaction in the central database, decreasing the customer's points balance and registering the business data.

For that reason, it was identified that it is necessary to develop the next packages:

- Management system for the loyalty system;
- A new section within the current Guaguas Municipales App;
- A new process to collect data from the current database (ALPISPA); and
- App for the PDA to exchange points at commerce and business.

The green credit scheme will be supported by the urban public transport company website and smartphone app. This improved app will provide real time information about main events and shopping discounts, act as a tool to change mobility behaviour and act as a catalyst for local business.

3.3.2 Support activities

Commercial issues

In order to define the commercial issues and since this is the first time a loyalty system is developed for an urban public transport company in Las Palmas de Gran Canaria, Guaguas Municipales has made the most of the annual customer survey to ask customers to give their suggestions and ideas of what kind of discount or promotion would be of interest to them.

Among other categories, customers were asked about promotions and discounts in clothes, shoes and sports shops as well as cinema, theatre and restaurants.

As a first stage, Guaguas Municipales expects to collaborate with companies and stakeholders that already work with the urban public transport company by offering promotions and discounts to its employees and customers and incorporating these offers as part of the loyalty system.

The system will provide Guaguas Municipales with a lot of information related to its customer profile that will help to design the service to better adapt to their needs (the management of this data will be carried out with respect to Spanish and European data protection law).

The idea is also to increase the number of customers that pay with contactless smartcards in advance instead of by cash to the driver. This improves the commercial speed of the service.

3.4 MAL 6.3 - Promoting sustainable mobility among tourists

3.4.1 Implementation

The University of Malta is developing a mobile application with the aim of promoting sustainable mobility among tourists by providing useful information related to public transport and tourist attractions. Currently there is one app (Tallinja) which provides travellers with information about the bus services, routes and schedules. However, no app exists which integrates different intermodal transport including information on scheduled bus services and the ferry network. The new app will make this information accessible.

Apart from encouraging a change in the travel behaviour of tourists, the app will also be used to gather valuable data on tourist mobility which will in the future be used to plan long term transport infrastructure. Such data is lacking for Malta and the only information on the travel patterns of tourists is obtained through surveys conducted by the MTA which provide only generic information on the tourists' stay.

A developer was engaged in 2017. As the measure matures, additional hardware and software to host the new system might need to be purchased, in which case a tender/call for quotations will need to be issued.

A credit system is also being considered for incorporation and this possibility was studied and shared during a work placement attended by the University of Malta developer in Madeira. Throughout the work placement, HCI Design methodologies were used to identify different ways in which the problems identified in each respective island could be tackled. The HCI methodology used included identifying (insight) the initial problem, identifying the intent of the project, acknowledging the target audience, developing the context and finally framing the solution. This was brought forward through the use of a process used in HCI where ideas and keywords are first generated to identify key concepts and then cohesively mapped to identify the final solution that can be adopted in the project.

This measure is being led by the University of Malta and supported by Transport Malta and the Ministry for Tourism.



Figure 14: The app developers during the work placement in Madeira

3.4.2 Support Activities

Implementation of marketing strategies

The developer is currently developing the app with the beta version intended to be launched around September 2018. A testing and verification period will follow in order to fix any issues flagged. Following this, the final version will be launched together with a marketing campaign targeting tourists. A critical success factor for this app is the uptake by tourists, ideally prior to their arrival in Malta when they are still planning their itinerary. The project team has therefore been studying the possibilities of how the app can be promoted abroad to decrease the possibility of tourists having booked a rented vehicle in advance of their trip to Malta. Despite many options being available, extending the promotion to overseas media is heavily limited by the marketing budget available for this measure.

Transport Malta, as the local measure leader, has issued a call for quotations to engage a team of experts to design and compile a marketing campaign strategy and plan for the DESTINATIONS measures being implemented locally, including MAL 6.3.

Stakeholder engagement

Immediately following the appointment of the developer, meetings were organised in order to introduce the developer to the project and the measure to the stakeholders. Further meetings with the stakeholders were then held to identify user needs and compile the baseline scenario with data about current tourist transport. This initial phase assisted the developer in designing the specifications of the app taking into consideration how the tourists will access it, how it will gather data without infringing data protection laws and the software which will need to be installed at Transport Malta to host the app.

Commercial agreements

An exercise was carried out for this measure as part of WP8 business development. The app was analysed from a business perspective and a sample survey was carried out with tourists to understand their needs and their receptiveness to such an initiative. The study and the outcome proved to be very valuable to the developer at design stage, in order to prioritise the functions of the App. The possibility of entering into a commercial agreement, especially should a credit system be adopted, was studied in depth however no such agreement has been finalised at this stage.

Success factors and challenges faced

The surveys conducted at Malta International Airport as part of the WP8 exercise mentioned above helped to identify what the potential users expect to have from this app and the fee that they are willing to pay for such a service. This information is being used for the development of the App. The survey responses also indicated that there exists a niche for such a service and this makes it likely to be a success. Despite this, other Apps offering similar services might be developed in the meantime and these may override the success of the DESTINATIONS App, especially if there is private investment or a larger available budget.

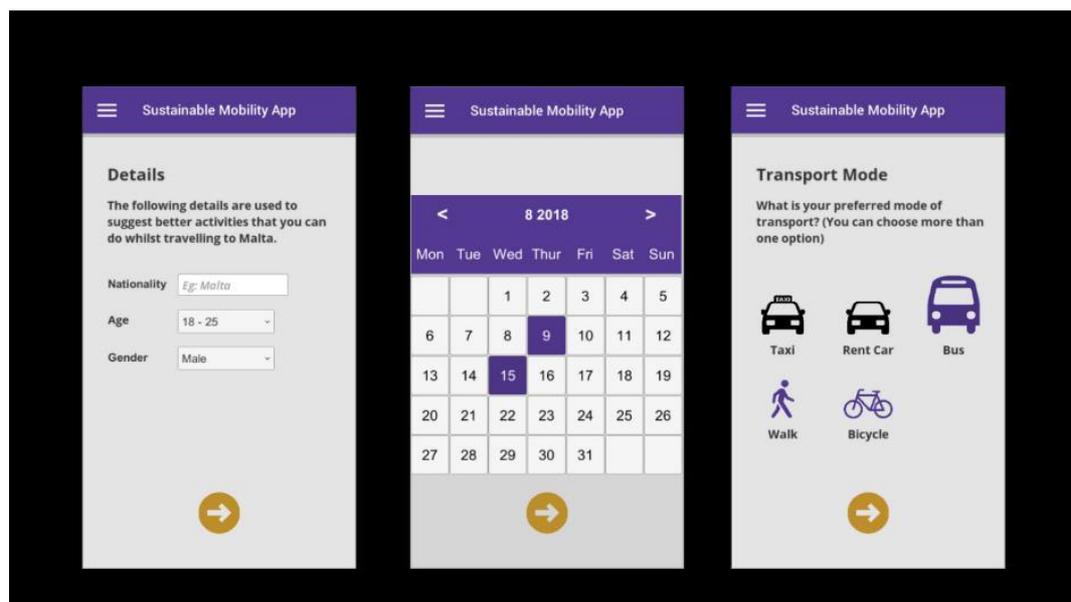


Figure 15: Screens for the initial sections of the App

Data collection procedures

Surveys will be carried out with tourists to gauge the shift in modal split and their awareness of the existence of the app developed as part of the DESTINATIONS project.

Baseline surveys will be carried out prior to the launch of the app to determine tourists' awareness of available transport options and the modes of transport utilised during their stay. Face-to-face surveys are repeated following the launch to ascertain tourists' awareness of the existence of the App, its perceived effectiveness, awareness of transport modes available and modes of transport utilised during their stay. This modal split will be compared to that collected as part of the baseline surveys in order to determine the modal shift as a result of the App. The target is to reach a 5% modal shift from the baseline.

3.5 RET 6.3 - Green mobility card

3.5.1 Implementation

Starting in April 2019, RET 6.3 aims to design an attractive, self-sustained Green Mobility award scheme at the regional level, promoting sustainable modes of transportation and providing benefits to visitors and tourists as well as local and regional businesses.

This measure aims to address the lack of an integrated credit system for mobility services and products that could increase the attractiveness of the provided services for users and improve mobility demand management.

Therefore, within this measure, a feasibility study will be conducted for a Green Mobility Award scheme, through a Green Mobility Card for payment and incentives to reward tourists and residents for choosing sustainable mobility options. Users will be able to collect green credits/points when using PT, public bike stations, the sharing platform, parking facilities at the city limits or other sustainable mobility services in the area/region. Therefore, locals and visitors will be encouraged to use alternative mobility options, reduce the use of private cars and manage their everyday trips in an environmentally friendly way.

According to the measures timeline, the development of the feasibility study will start in April 2019. As a result of the preparatory activities, the following outcomes will be completed:

- Feasibility study of setting up and maintaining a Green Mobility awarding scheme at the regional level;
- Exchanges with stakeholders and potential sponsors; and
- Business plan for a self-sustained green mobility card.

The measure commences later in the project and will draw on experiences from MAD 6.2 and LPA 6.1. As a preparatory activity, the measure was included in the business kick off training in March 2018, and the potential setup and operation of a Green Credit Scheme were examined with the participation of relevant stakeholders.

3.5.2 Support activities

Stakeholder engagement

Within this measure, a number of key stakeholders have been identified and the engagement process was initiated at project and measure level.

The main stakeholders involved in measure RET 6.3 are the following:

- Mobility providers: Public transport operator “KTEL”, bike renting companies, bike sharing system operators;
- Local authorities and associations: Region of Crete Directorate of Tourism, Chamber of Commerce and Industry, Traders Association of Rethymno, Association of Restaurants, Association of Travel and Tourist Agencies, Hoteliers Association; and
- Commercial sector: Local shops and restaurants, travel agents, leisure and tourism attractions/other sponsors.

The contribution of the above stakeholders in the measure implementation will be significant. The public transport operator will contribute to the definition of tickets and points systems and all stakeholders will collaborate offering discounts, gifts to promote the use of the green credits scheme. The engagement activities of the project will include the organised meetings with the stakeholder representatives to be informed and discuss the foreseen activities and benefits of the measure.

Transfer and adaptation of approaches

The exchange with partners that will implement green credit schemes in their sites will be essential support in order to draw from lessons learned and best practices during the development of the study.

Data collection procedures

The measure will not have measurable impacts. The evaluation process and impact indicators are not applicable in this case.

3.6 Collaboration among DESTINATIONS Sites/partners

Measure Title	Best Practice description in the implementation of the measure	Description of a specific expertise needed for the demonstration phase	Identified Synergies (please indicate measure/s)
MAD 6.1 / MAD 6.2	Share details of recently completed study of existing mobility apps in the market	None identified	MAL 6.3, LPA 6.1, RET 6.3
LIM 6.3	Limassol can share BP on how to raise awareness for employees and companies to use bicycle as a mode of transport.	None identified	
LPA 6.1	Loyalty system where the user will be able to change points for promotions in shops is being implemented.	None identified	MAD 6.2 RET 6.3
MAL 6.3	Madeira will share details of a completed study on existing mobility apps in the market.	Expertise is required to share knowledge on the integration of gamification.	MAD 6.1
RET 6.3	None identified	Experience and lessons learned from the other sites regarding the implementation of a Green Credits scheme. The evaluation of the processes followed, and the results achieved will be taken into account.	MAD 6.2 LPA 6.1

Table 2: Cross Site Collaborations, regarding Behaviour Change Through Competition

4 Low Emission Zones and Parking Management

4.1 MAD 6.4 - Low emission zones and smart parking management

4.1.1 Implementation

Summary and strategic vision

The measure is focused on delivering several actions to improve and optimize the traffic light system in the city and assess the feasibility of attributing priority to public transport in the main axis of the city. This will set the local strategy to renew the traffic light system towards autonomous and adaptive controllers, tailored to real time traffic.

Setting up the methodology

The development process within comprises several tasks, divided in three main stages, namely the design and specifications (stage 1), definition of strategic actions (stage 2) and implementation/evaluation (stage 3). The implementation so far is limited to several dissemination campaigns to raise awareness, although it is expected that in the next months, activities related to both the tendering processes (traffic modelling for bus corridors and strategic actions) will further lead to the implementation of more actions. The diagram below resumes the process that was undertaken. The development process included the support of local partners through meetings.

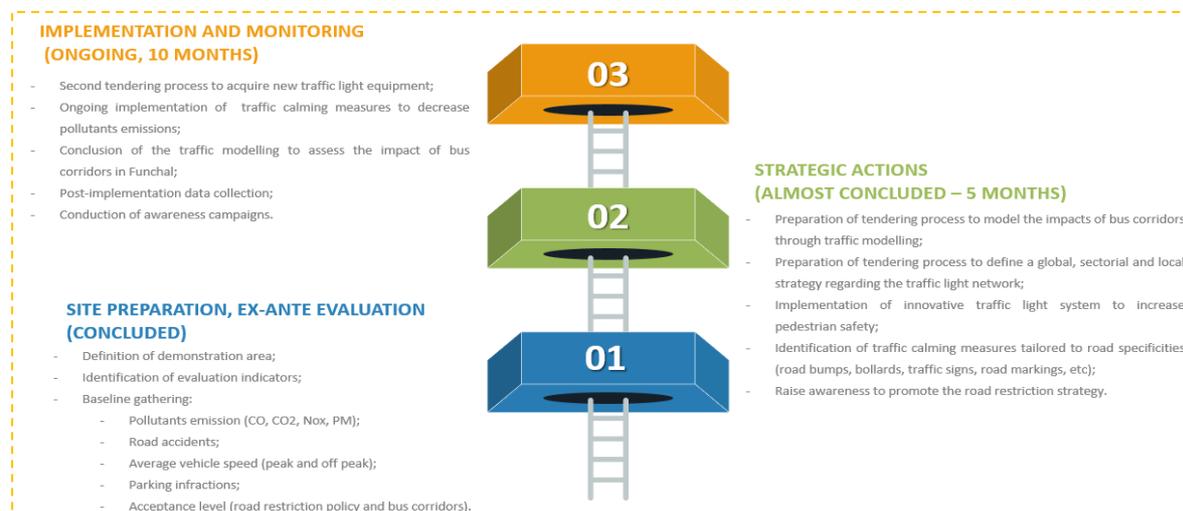


Figure 16: Measure development process

Implementation Plan

I - Bus corridor feasibility, reversible circulation and traffic light priority to buses

A tendering process has been enabled in which the outputs will be the following:

- Analysis of the current performance of collective public transport;
- Estimation of pollutant emissions according to the TRANSYT 7-F methodology;

- Realization of a macro model of the current road situation, considering two periods, namely morning and afternoon;
- Micro-modelling of the area as well and pedestrian situation; and
- Impact of bus corridors upon the public transport with estimated commercial speed.

The final report will determine whether the mobility strategy related to bus corridor is worth following.

II – Global, sectorial and local strategy to renew traffic light network

The current system requires significant updating to function in a way that supports the vision of the municipality. For instance, it is not currently possible to introduce light phasing which prioritises buses or active travel.

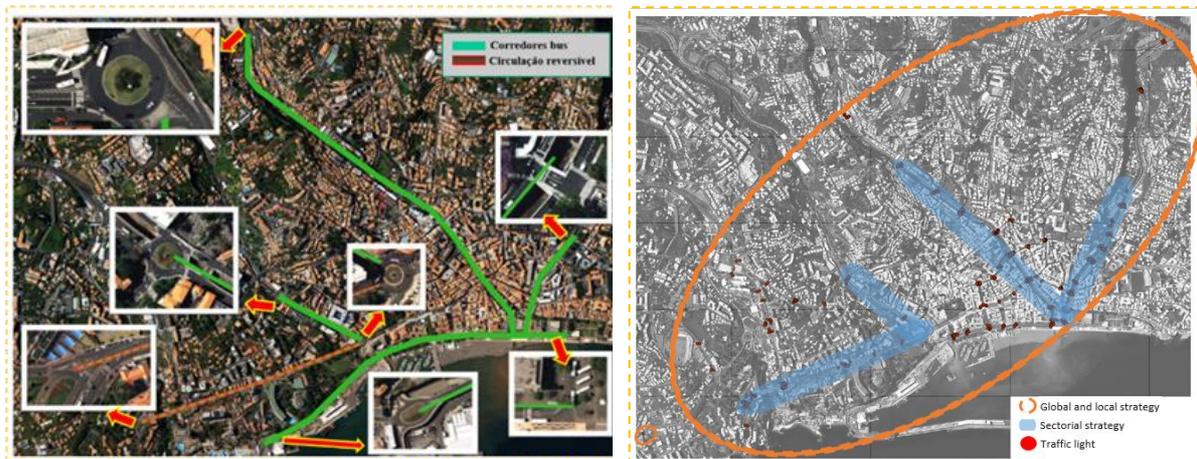


Figure 17: Proposed bus corridors (at left). Traffic light locations (at right).

The tendering process will appoint experts to understand the operational problems, their effects on road traffic and to analyse the majority of intersections, in the context of the SUMP.

III – Testing of innovative solution - In-pavement traffic light for pedestrians

In order to strengthen road safety, this innovative measure sees a traffic light introduced into the pavement for pedestrians in a sought area of Funchal.

4.1.2 Support activities

Dissemination strategies

Considering that the strategies envisioned within this measure covers, not only several mobility fields, such as traffic light system, bus corridor and mobility management, but also dissemination campaigns to raise awareness, it was necessary to carry out several communication events among several target groups to promote the strategic vision. To amplify the impact of the dissemination campaigns, several partnerships were established among local authorities, associations and the regional press, including European Mobility Week. During last year's edition, a supplement was drafted focussing on sustainable mobility, road safety and the CIVITAS DESTINATIONS project; this was included inside the main newspaper of the Region.

Data Collection procedures and expected results

As planned, in addition to the data that will be gathered to evaluate MAD 6.4 in general, specific data will be gathered to support the strategic stage. For instance, the traffic modelling to assess the impact of the bus corridors will be based on traffic counts, modal split, the number of public transport passengers among others factors.

4.2 LIM 6.4 - Smart parking guidance system

4.2.1 Implementation

Measures design highlights

Parking in the city of Limassol is a challenging issue. Excessive traffic congestion is a major disadvantage not only for tourists travelling by car but also for tourists visiting the city centre due to extensive noise, high CO₂ emissions as well as comfort and safety issues. LIM 6.4 will allow the Municipality of Limassol to significantly reduce unnecessary traffic congestion in the city centre. Smart sensors and further smart electronic devices will be made available to car drivers, through mobile applications and variable message systems, crucial information regarding parking space availability. The measure will improve the whole mobility system, not only for tourists travelling by car but it will also improve the level of tourists visiting city centre due to lower traffic, noise, CO₂ emissions and higher safety levels.

Parking guidance will be made available to drivers by providing real time information for parking availability, which will be visually displayed on mobile phones and computer devices through a smart application as well as on variable message systems that will be located around the city center. Smart sensors will be installed in seven municipality-owned parking spaces, which will allow for real time data to be transferred regarding parking space availability.

Site preparation

Limassol Municipality performed a site visit to determine the parking spaces which would be included for the implementation of the measure.

Procurement process

The procurement process started on 8/8/2017, tenders were received on 22/9/2017 for the implementation of the parking guidance system and it has since been awarded to VIP Technologies Ltd.

4.2.2 Support activities

Stakeholder engagement

During this period Limassol Municipality held several meetings with the Police Traffic Department and Electricity Authority of Cyprus to provide information and services for the implementation of the measure.

Data collection

For measure 6.4, we do not have a baseline since the implementation hasn't started yet. The expected outcome concerning the capital cost indicator in terms of economy is 0% since there is no previous investment for this measure. In terms of Transport, the "use of space for parking"

indicator data collection will be collected after the implementation and it is estimated that the success rate of real time counting and monitoring will be 90%. In the category of “Society”, there is an expectation that 75% of the population will be aware of the measure and 45% will accept and approve the measure.

4.3 MAL 6.2 Testing a Low Emission Zone and Introducing Emissions Alert App

4.3.1 Implementation

This measure is technically subdivided between two main outputs: testing the Low Emission Zone (LEZ) Concept and developing and launching an Emissions Alert App.

The LEZ feasibility pilot will be implemented in conjunction with the company which operates the Controlled Vehicular Access in Valletta where the existing infrastructure on the approach roads leading to Valletta will monitor vehicles entering and leaving the identified zone. This company which operates the CVA system is preparing to launch the pilot in September 2018. Stakeholder consultations have been ongoing to fine tune the variables that will be tested. The system shall be modified so as to test how vehicles can be charged depending on their emissions rather than for the duration of stay, thus essentially transferring a road toll system to a LEZ.

The second part of the measure empowers the general public to curb vehicles with high-emissions by launching an app to report such vehicles. This will replace the current system where users report highly-polluting vehicles on the road by sending an SMS. Back office operators manually sift through the received messages for the vehicle details and when three reports are received on the same registration number, the said vehicle is called for testing which consists of a roadworthiness test performed by the Authority. Should the vehicle be found faulty, the owner is given a time span in which he/she is allowed to fix the fault and then report back to Transport Malta to assess whether the vehicle is roadworthy or not. If the vehicle is found not to be roadworthy, the vehicle is scrapped. The app that will be launched as part of DESTINATIONS will automate the whole back-office process. The aim is to reduce the current system’s inefficiencies and thus regain the public’s trust and engagement with the system.

Transport Malta is the measure leader and will co-ordinate consultations and see to the overall implementation of the Emissions Alert app and the testing of the LEZ. The University of Malta will develop the app.

4.3.2 Support Activities

Implementation of Marketing Strategies

Through a call for quotations, Transport Malta engaged a team of experts to design and compile a marketing campaign strategy and plan for the DESTINATIONS measures being implemented locally. This expertise will also be used to prepare the specifications of a tender that will procure the marketing material and placements.

The app to report high polluting vehicles will be promoted with the general public. The marketing campaign envisions the creation of an animated video to highlight the functionality

of the app being implemented and to encourage public engagement. This video will be used for TV adverts on national television. An animated banner will be created for use on all the major local news portals and for a social media campaign, targeting a specific audience.

Stakeholder Engagement

In terms of the LEZ pilot, Transport Malta was involved in an exercise to identify the key stakeholders who would be directly involved with the design of the measure to test the LEZ. This measure will be building on a system which is already in operation – the CVA System. This was followed by consultations with the CVA Operator to assess the current status of the system and how this can be modified into a LEZ system. Consultations so far have determined the number, type and cost of the equipment required as well as the exact location where the additional equipment is to be installed. Basically, additional cameras are necessary in order to capture the entrance and exit of vehicles at the identified access and egress points.

The testing scenario will consist of a system of phantom billing that would hypothetically charge vehicles on their entry to Valletta between 8:00 and 18:00. The charge will be calculated based on vehicle emissions, as per the table below and there will be no grace period and maximum daily capping.

Vehicle Class	Euro Standard	Fee
Class A	Euro 0 to Euro 3	€2.00
Class B	Euro 4	€1.00
Class C	Euro 5, Euro 6, LPG & Hybrid	€0.50
Class D	Non-chargeable vehicles	€0.00

Table 3: The fees that will be charged based on vehicle emissions

Consultations with the stakeholders also helped to disseminate information about the measure, gather feedback as to the current needs and assist in baseline data collection. The output from these meetings was valuable to the design of the system specifications including the modifications necessary in order to extend the CVA operating system to include the LEZ as well as the identification of boundaries.

In terms of the Emissions Alert App, consultations have started with all the relevant departments within Transport Malta, especially the ones which are currently involved in the SMS alert system. A gap analysis is currently being performed to assess what is lacking in the current system and how this can be improved in the new system to be launched through the App.

The design of the Emissions Alert App will greatly rely on these stakeholder meetings and the gap analysis which will assess the current system's failures and find solutions on how the app can overcome these failures.

Commercial agreements

During consultations with the stakeholders, the possibility of rewarding users has been discussed. This would involve incentivising the public to download and more importantly use the app by giving rewards. The concept is still at the early stages of discussions and the rewards are still to be identified. Should the idea be implemented, agreements with commercial companies for the provision of these rewards are envisioned.

Success factors and challenges faced

The SMS alert has been in operation for a number of years and despite the inefficiencies the public still uses it to report highly polluting vehicles. Providing an alternative, easier interface for such reports should be welcomed by current and new users and thus the system is expected to be successful.

On the other hand, the lack of feedback to users and available data showing a low number of cars being scrapped following reports from the SMS Alert system, have resulted in people losing trust in the said system. This should be counteracted by a more efficient system and a robust marketing campaign, highlighting the new features in order to win back the general public's trust of this reporting tool.

Data collection

For the Emissions Alert App a survey targeting citizens will be carried out before and after the launch of the app to measure the awareness and acceptance levels with the general public. Data on the number of polluting vehicles reported through the app will also be collected at three time intervals throughout the project.

The new system, together with the transition from the old system, will be monitored in order to collect data which will be used to assess its success, public perception and to improve it in any way for continued implementation post-DESTINATIONS.

4.4 MAL 6.4 Smart parking management system for Valletta

4.4.1 Implementation

This measure involves the installation of sensors in specific off-street and on-street parking areas in the city of Valletta to manage the demand and supply of parking in the city. A parking management plan for the city will also be compiled as part of this measure which includes the software and infrastructure necessary to implement the smart parking management system.

Valletta is a walled city. Access to the city by car is therefore limited physically, and limited further through road pricing, extensive pedestrianisation and relatively few parking spaces. Car drivers today access the city and cruise for a long time to try and find an available space. This causes congestion, pollution and excessive waste of resources and time. This innovative parking management solution has the potential to inform the driving public of available parking, thus reducing journey times in the city and hence improving the air quality. This will be achieved through the piloting of sensor and mobile technologies and telematics to provide drivers with further information on available parking as they approach the city.

The measure also seeks to solve the lack of parking availability within Valletta which is at saturation point. With an approximate total of 5,000 residents, Valletta sees ten times the number of visitors daily: these include tourists, workers and shoppers. Rat running by visitors

in search of parking within the city is highly common with this negatively impacting the air quality of the city.

The Valletta Local Council published a call for tenders for the parking management system and the associated infrastructure. The tender was evaluated however the cheapest priced, compliant bid exceeds the available budget. An amendment note has been prepared in this regard and as soon as the transfer of funds is approved, the contract with the winning bidder can be signed and the preparations initiated. The tender specifies twelve weeks for the installation of the parking management system. This will be followed by testing and verification prior to the launch of the system.

This measure is being led by the Valletta Local Council with support from the University of Malta and Transport Malta. The University of Malta will be assisting in the evaluation of data while Transport Malta will be assisting in the Information and Dissemination.

4.4.2 Support activities

Implementation of marketing strategies

The Valletta Local Council will embark on a promotion campaign which will be launched in parallel with the implementation of the pilot. This will target commuters to the city throughout Malta hence publicity should focus on social media and national television; two very significant marketing channels.

Stakeholder engagement

In the months preceding the tender publication, meetings with stakeholders were held in order to refine the measure. Parking in Valletta was analysed with the aim of identifying the areas where the installation of sensors should be prioritised and thus included in the DESTINATIONS project considering the fact that the budget available does not allow the system to be implemented throughout Valletta. The results from the on-site parking surveys were presented during these stakeholder meetings where, with the support of experts, the various parking management options for Valletta were presented. The outputs from these meetings were invaluable in the preparation of the tender specifications.

Commercial agreements

No commercial agreements are being envisaged at this stage.

Success factors and challenges faced

This measure is expected to be very welcomed by commuters to Valletta who very often complain of the time wasted in search of parking. Rather than going around the narrow streets of Valletta at slow speed, with the hope of finding an available parking spot, drivers will now have real-time parking information available saving them time and fuel costs and thus making the measure very likely to be successful.

Data collection

Data on parking, where sensors are planned to be installed, will be collected remotely through the new infrastructure.

Towards the end of the project a survey will be carried out with local citizens to measure the level of satisfaction of the smart parking system. The target is to have 20% of respondents who are completely satisfied.

4.5 RET 6.2 - Low Emission Zone

4.5.1 Implementation

Starting in August 2019, Rethymno will examine the introduction of a Low Emission Zone (LEZ) in the historic city centre and assess its social and economic impacts. The increase of car use from locals and car rentals from visitors cause high environmental pollution, congestion, unregulated parking and noise pollution in the centre of Rethymno. The historic centre with the most popular attractions and limited entry and exit points should be a protected zone allowing pedestrians to move safely and improving air quality.

A strategic study for a car-free zone in the historic city centre and LEZ around the centre will be developed as the main outcome of this measure. The restriction of access impacts will also be assessed along with the possibility of alternative transport modes, parking regulations revision and new regulations to enhance the accessibility, safety and tackle environmental pollution.

The specific actions of the measure are:

- Development of a strategic study for a car-free zone in the historic city centre and LEZ around;
- Assessment of the social and economic impacts of LEZ;
- Parking regulations assessment and revision; and
- Involvement of citizens and stakeholders in the decision-making process through focus groups.

The measure will be developed in conjunction with the development of the SUMP. So far, no actions have been implemented.

4.5.2 Support activities

Marketing strategies

The findings of the study will be widely disseminated through a series of press releases and informative articles through channels and social media.

Stakeholder engagement

Within this measure, a number of key stakeholders have been identified and the engagement process was initiated in project and measure level. The main stakeholders involved in measure RET 6.2 are:

- Local Authorities and Associations: Region of Crete Directorate of Environment and Spatial Planning Traffic Police department, Hotels and Restaurants Associations, Tourism Authority, Traders Association of Rethymno, Chamber of Commerce;
- Citizens Volunteering Groups and Associations: Union of Rethymno Old Town residents, SYNPOLIS Association of Active Citizens, Streetpanthers, Voluntary Groups Network of Rethymno, ATLAS Cycling Union;
- Retailers operating in the area, suppliers, restaurants; and

- Mobility providers: Public transport operator KTEL, bike rental companies, bike sharing system operator, Association of Taxi drivers.

Stakeholders and citizens will be engaged to participate actively in public consultation events, where good practices and successful examples will be presented along with tailor-made solutions to provide efficient alternatives and ensure acceptance. The participatory approach will increase the efficiency of the design and the acceptance by both stakeholders and citizens.

Individual workshops will also be conducted with the mobility providers to provide data and insights relevant to the study and contribute to its development.

Success factors and challenges

The success factors will be based on the increased know-how achieved locally in their technical characteristics, implementation standards, applied policies, provision of car alternatives and regulatory aspects. Rethymno will be supported by NTUA and TUC for identifying the LEZ best practices for future implementation and access all crucial parameters, in collaboration with key stakeholders. Public consultation through various sessions will assist with LEZ acceptance and the measure's success.

Transfer and adaptation of approaches

The exchange with partners that will implement LEZ in their sites will facilitate the development of the study by exploiting lessons-learnt and best practices.

Data collection procedures

Although this measure's outcome will be only a study, it is directly linked to the SUMP development and some specific data related with RET 6.2 has already been collected as part of the SUMP data collection. Therefore, parking regulations data and the current location of taxi stations have already been identified. Additionally, the measure will be ex-ante evaluated as an impact estimation of future implementation of a potential LEZ in the area and any further data collection for the needs and analysis of focus groups will be taken into account along with estimations of the impacts on air pollution: CO₂, CO, NO_x, VOC and small particulate emissions.

4.6 Collaboration among DESTINATIONS Sites/partners

Measure Title	Best Practice description in the implementation of the measure	Description of a specific expertise needed for the demonstration phase	Identified Synergies (please indicate measure/s)
MAD 6.4	As of M22, the best practice undertaken so far is related to the dissemination campaigns and the conduction of the European Mobility Week '18. A supplement focusing on the mobility policy was drafted and delivered along with the newspaper to thousands of people.	None identified	Synergies will be established with several entities
LIM 6.4	Limassol can exchange BP regarding the specification of parking guidance system		
MAL 6.2	None identified	None identified	N/A
MAL 6.4	Sharing of BP with regards to public consultation with RETH 6.2	Expertise in traffic management, parking management plans and related infrastructure	RETH 6.2 LIM 6.4 MAD 6.4
RET 6.2	None identified	Experience and lessons learned from the other sites on the efficient design and implementation of LEZ.	LIM 6.4 MAD 6.4 MAL 6.4

Table 4: Cross Site Collaborations, regarding Low Emission Zones and Parking Management