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**Electric City Transport – Ele.C.Tra**

[www.electraproject.eu](http://www.electraproject.eu)

**Operative plan of sustainable  
mobility model application for  
Florence**

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## Electric City Transport – Ele.C.Tra.

### **Abstract:**

The “Operative Plan of sustainable mobility model application” is the main tool to define for the pilot test year of every city:

- activities to do (WHAT?);
- activities to do (WHAT?);
- operative actions to do (HOW?);
- target group who actions are addressed to (FOR WHOM?);
- deadlines (WHEN?);
- PPs in charge (WHO?).



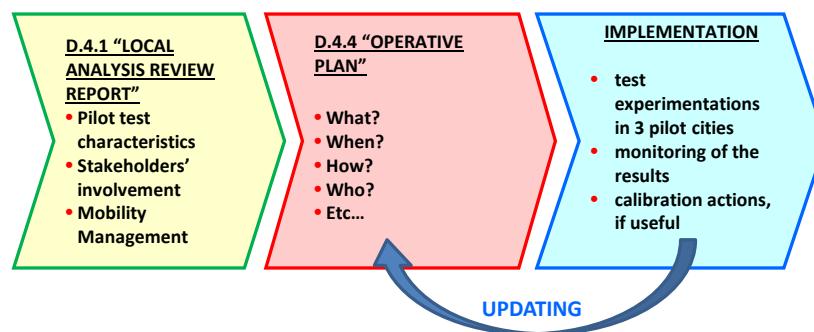
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## 1 Overview of the operative plan

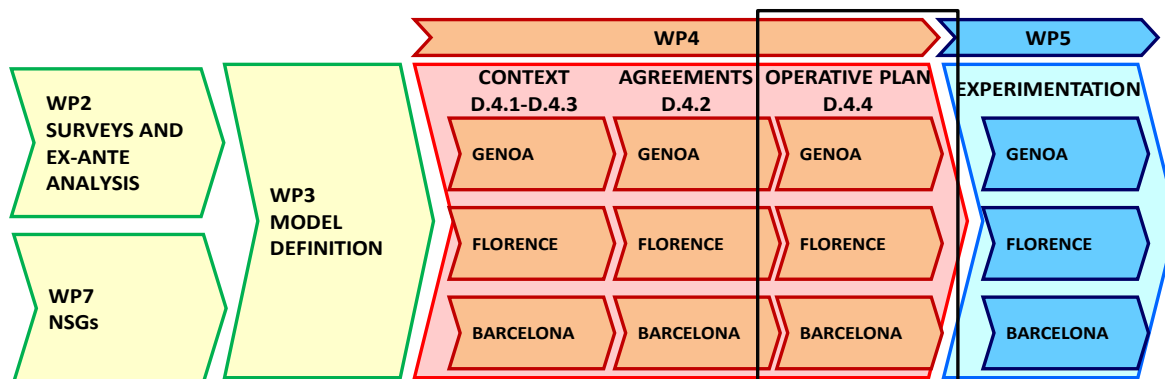
The “Operative Plan of sustainable mobility model application” represents the last step of the Service Executive Planning tasks, having a role of:

- technical document where the local analysis aspects, in terms of contextualization in every pilot city, are translated into operative actions;
- point of reference for the entire duration of the implementation, identifying what and when to do. In this light, this report will be updated and integrated every time changes and new issues come to light, on the basis of the structure of the first final version of this deliverable and for each city involved.



Considering the overall project structure, as summarized in the scheme below, the Operative Plan:

- is the final output of the results of:
  - ✓ the previous reports about ex-ante analysis and model definition;
  - ✓ Service executive planning activities, in terms of context and model and structure agreements for pilot cities;
- represents the set of detailed actions and requirements to be done and followed to start, promote and monitor the test year in each pilot city.



### 1.1 What's the operative plan?

In accordance with what is included in Annex I of the Ele.C.Tra project and what came to light from the previous project actions (mainly “Report on revised/updated performance indicators” and “Local analysis review Report”), the Operative Plan is the main tool to define:

- activities to do in order to prepare (before the start of the pilot test), promote and monitor (during the pilot test year) the experimentation (WHAT?);
- operative actions to do regarding activities identified (HOW?);
- target group actions are addressed to (FOR WHOM?), for example citizens, tourists, stakeholders;
- deadlines for each action (WHEN?);
- PPs in charge of each action (WHO?).

The Operative Plan is a work-in-progress document. In other words, it will be updated and integrated in a continuous way and during the entire duration of the project experimentation, in order to fine-tune actions and deadlines, if useful.

However, the first version of the deliverable already includes all the elements necessary to start the pilot tests and the structure contents about what, how, when to do and what already done.

The realization of the Operative Plan that defines, according to the Servico Operative Planning results and analysis:

- *HOW to contextualize the model for every pilot city, identifying needs, issues and solutions;*
- *WHEN to do every implementation activity;*
- *WHO should be involved for every pilot city (e.g. energy and e-scooter suppliers, transport operators, public bodies, companies) to reach the project targets;*
- *WHAT are the implementation costs, estimating the main types of service costs for the sharing system operator;*
- *WHAT are the Ele.C.Tra benefits for every pilot city, according to the WP4 results and the project indicator (e.g. how many scooters are available? How many charging points have been installed?)”*

It's useful to point out:

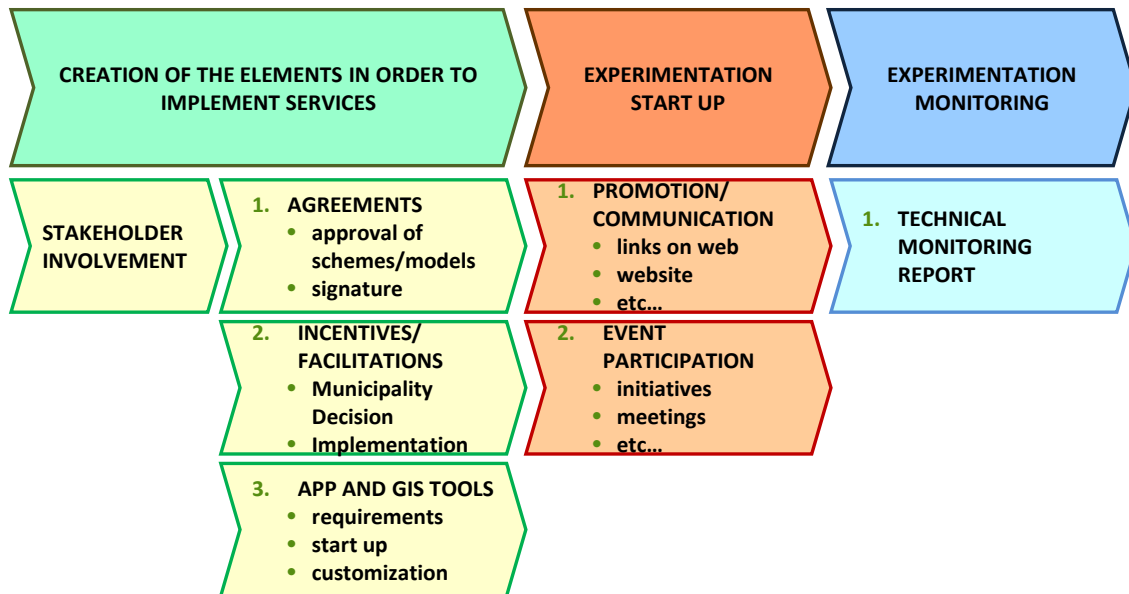
- *“HOW to contextualize the model for every pilot city”* is in local analysisi review report with other aspects and issues about each pilot context;
- *“WHAT are the implementation costs”* is no longer useful because the previous phases of the project have clarified that the EleCTra service will be implemented by e-vehicle suppliers and/or other stakeholders and not by public bodies, as explained during the 1<sup>st</sup> Technical Meeting in Malta. In this light, the cost individuation depends on several aspects chosen by stakeholders in accordance with marketing actions, services already implemented, appeal for citizens and/or tourists, etc.... Finally, the EleCTra project is not only to implement a sharing system but also to promote a wider range of services and meet the users' needs.

## **1.2 Contents and methodology of the operative plan**

The Operative Plan includes, as shown in the scheme below, the complete set of actions in order to:

- prepare the implementation in each pilot city involved, taking into account the results of NSGs and stakeholders' involvement and defining the actions about:
  - ✓ agreements;
  - ✓ incentives and facilitations promoted by the public body;
  - ✓ EleCTra app and GIS tools;

- start and continue the experimentation, in terms of promotion tasks and event participation throughout the duration of the tests;
- monitor the EleCTra performances, highlighting the results achieved in the Technical monitoring Reports.



To explain the details of the EleCTra experimentation actions, this report includes for each section (1. Creation of the elements in order to implement services; 2. Experimentation start up; 3. Experimentation monitoring):

- schedule of activities;
- detailed schemes about all actions planned.

Schedule and tables will be updated in accordance with aspects and issues which come to light during the experimentation period.



## 2 Creation of the elements in order to implement services

In order to implement the EleCTra services, it's necessary to define a set of elements which allow starting of the pilot test in every city involved (Genoa, Florence and Barcelona). In other words, they create the main requirements so that the experimentation can start, mainly including agreements and incentives.

In particular, the elements in order to implement the services are included in:

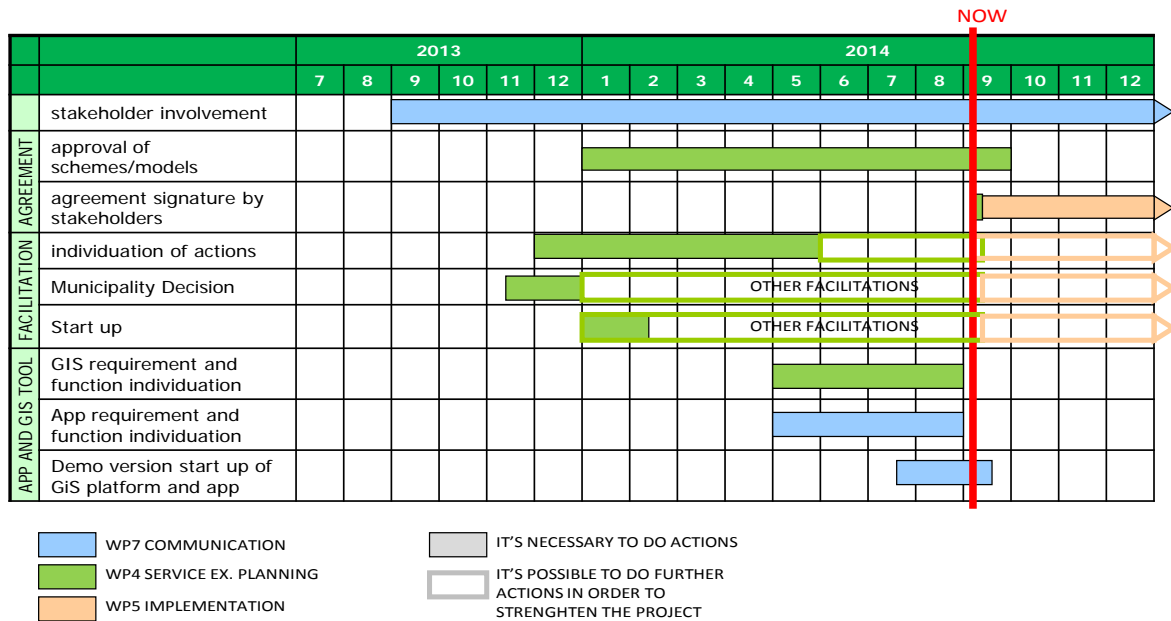
- “Communication”, mainly about the NSGs and the tasks related to the project app;
- “Service executive Planning”, focusing on technical activities such as the creation of agreements and the individuation and implementation of the incentives to increase the e-vehicle use by citizens and tourists. They will finish with the start up of the pilot test;
- “Implementation”, regarding the updating of that already created in the experimentation period (e.g. new agreements and/or incentives that are possible to carry out during the test).

Regarding the incentives and facilitations, details are included in the paragraph 2.1.2.

### 2.1 Schedule of activities

The schedule of the actions to implement the EleCTra services is shown in the table below. Deadlines and further details are also in the tables of the next paragraph.

These actions have already started in the first months of the project, mainly in terms of stakeholders' involvement through the National Support Groups, to improve the project effectiveness and raise citizens and tourists' awareness of sustainable and electric mobility. Most actions will finish in the first months of implementation and others will continue involving the entire duration of the test (e.g. stakeholders' involvement, agreements signature and incentives).



## 2.2 Action details

The following table shows the details of the actions to do for the implementation of the pilot test year in Florence, during both the final part of Service Executive Planning and Implementation periods.



ACTIVITIES WHAT?	ACTIONS HOW?	TARGET GROUPS FOR WHOM?	PP IN CHARGE WHO?
Stakeholder involvement	Letter preparation to send to stakeholders	e-vehicle providers; electric charging services provide; local stakeholders; project promotion supporters	Florence
	Letter sending to stakeholders	see above	Florence
	Face-to-face contacts with the strategic stakeholders (meetings, event participation...)	subjects already involved ENEL, Mobility Managers, Speedy Florence, Rugi, Giappichelli, Selfaip	Florence
	Collection and coordination of the stakeholders' replies	Stakeholders interested in the project	Florence
Agreements	Definition of the schemes/models for agreements	All stakeholders interested	Florence
	Approval of the schemes/models for agreements by a Municipal Decision	All stakeholders interested	Florence
	Agreement signing	Stakeholders interested in the project	Florence
Incentives/ facilitations	Financial incentives to acquire e_vehicles	e-vehicle users	Florence
	replacement and deployment of charging	e-vehicle users	Florence



	stations for a total of 147 new charging points		
	Purchase of 53 e_quadricycles	employee of Municipality	Florence
Map digitizing	Collection and coordination of data about public transport, underground, bus stops (to add layers) of all pilot partners	EleCTra e-vehicle users (citizens and tourists)	AVMap with the support of Murcia
	Fulfillment of a document on the Technical requirements, such as standards for DTS via WS, and on the functional requirements	Coordinator and PPs	AVMap with the support of Murcia
	Implementation of a demo version available on the project website	Coordinator and PPs	AVMap with the support of Murcia
	Implementation of the final version available on the project website	EleCTra e-vehicle users (citizens and tourists)	AVMap with the support of Murcia
EleCTra app	Collection and coordination of data about public transport, underground, bus stops (to add layers) of all pilot partners	EleCTra e-vehicle users (citizens and tourists)	Murcia with the support of AVMap
	Fulfillment of a document on the Technical requirements, such as standards for DTS via WS, and on the functional requirements	Coordinator and PPs	Murcia with the support of AVMap
	Implementation of a demo version available on the project website	Coordinator and PPs	Murcia with the support of AVMap
	Implementation of the final version available on mobile devices	EleCTra e-vehicle users (citizens and tourists)	Murcia with the support of AVMap

## 2.2.1 Stakeholder involvement

In order to stimulate the market of electric vehicles in accordance with the actual needs of the people mobility, it is important to involve all stakeholders - public and private (those who produce, sell or rent e-scooters; those who creates points or charging services; those who want to experiment new forms of sustainable mobility, etc.).

The project planned to sign agreements with the different types of stakeholders involved. Florence, similarly with the other pilot partners, has identified four types of stakeholders:

- **"Traders"**, who manufacture, sell and/or hire electric scooters;
- **"Managers of infrastructure"**, ie entities that provide the charging infrastructure for electric vehicles;
- **"Demand generators"**, ie those who may be service users, such as schools or companies;
- **"Operators of Communication"**, ie the stakeholders in the dissemination and disclosure of actions taken and results obtained;

In order to ensure the achievement of the project objectives, it have been necessary to proceed to the preparation of schemes of agreements, one for each type of stakeholders above indicated.

### Stakeholders already involved (by face-to-face contacts)

We met Florence Ecorent and Speedy Florence that would be interested in testing a service of rental of quadricycle of their properties (five Birò for Florence EcoRent and ten Twizy for Speedy Florence) using a parking area made available by the City.

Among the retailers of electric scooters (Piaggio-Maurizio Rugi; Selfaip - Angelo Proeti) there is the availability to create special conditions of sale to Ele.C.Tra customers.

The mobility manager of some big companies in the metropolitan area of Florence have detailed their involvement in the project as follows:

NAME OF STAKEHOLDER	TYPE OF ACTIVITIES	N. OF EMPLOYEES	WHERE IS?
<b>RFI+TRENITALIA</b>	Public rail infrastructure manager+railway operator	2.554	Florence
<b>TELECOM ITALIA</b>	Telecommunication	1.300	Florence
<b>CAREGGI HOSPITAL</b>	Public health service	5.700	Florence
<b>MEYER HOSPITAL</b>	Public health service	1.100	Florence
<b>MONTE DEI PASCHI DI SIENA</b>	Bank	1.308	Florence
<b>ENEL</b>	Electricity supplier	700	Florence
<b>UNIVERSITY OF FLORENCE</b>	University	6.000	Florence
<b>POSTE ITALIANE</b>	Postal services	2.071	Florence

MM ACTIONS FOR EMPLOYEES/ CUSTOMERS/ USERS ALREADY IMPLEMENTED	E-MOBILITY AS-IS SITUATION	MOBILITY MANAGEMENT ACTIONS PLANNED	HOW INVOLVE THEM IN THE ELE.C.TRA. PROJECT?
<b>RFI+TRENITALIA</b>			
Home-work mobility plan		Facilities with public transport subscription	Promotional communication to employees
Promotion of sustainable mobility		Car pooling with reserved parking	Charging points for e-scooters
Free business subscription		To promote pedestrian-cycle mobility	Facilities for employees to buy, share,rent e-scooters
		Car sharing parking	Free public charging points
<b>TELECOM ITALIA</b>			
Home-work mobility plan		Maintenance	Estimate use of rent scooter from Headquarters to railways station (Rifredi and Campo di Marte)

Car pooling parking reserved		Maintenance of policy and authorization	
Free access to company parking for bike		Maintenance of policy and authorization	
Free access to company parking for e_vehicles	Actually for headquarter of viale Guidoni	Increase in headquarter of Via de Bruni	encourage employees to buy e-scooters
Promotional		Communication to employees in intranet	encourage employees to buy e-scooters
<b>CAREGGI HOSPITAL</b>			
Home-work mobility plan	Facilities with ATAF subscription for employees	Purchase and installation of bicycle racks in hospital	Promotional communications to employees and users
n. 13 electric vehicles for mail service and biological transport	E-scooter charging points for these e_vehicles		identifying areas for the installation of new public charging stations
	E-scooter charging points for employees		Users of a service scooter sharing between Rifredi station and the hospital area
<b>MEYER HOSPITAL</b>			
Home-work mobility plan	ENEL charging points		Promotional communications to employees
Facilities with Ataf e Pegaso subscription	Bike rack into Meyer		E-scooter charging points for employees use
Bus SITA nursery dedicated home-work			Facilities for employees to buy, share,rent e-scooters
<b>MONTE DEI PASCHI DI SIENA</b>			
Home-work mobility plan	ENEL charging point	Car pooling promotion	Promotional communication to employees
Promotion of sustainable mobility			Free public charging points
n. 1 electric car			



Facilities with public transport subscription			
Economic agreement with e-bike seller			
<b>ENEL</b>			
Home-work mobility plan	charging points	Facilities with public transport subscription	Promotional communication to employees
Promotion of sustainable mobility		Car pooling with reserved parking	Charging points for e-scooters
Free business subscription		To promote pedestrian-cycle mobility	Facilities for employees to buy, share, rent e-scooters
		Car sharing parking	Free public charging points
		agreements with CAR2GO to promote the use of the rental car among employees	
<b>UNIVERSITY OF FLORENCE</b>			
Home-work mobility plan			Promotional communications to employees
Facilities with ATAF subscription			
			Space for free public charging points
			purchase electric vehicles for the movement of employees between offices
<b>POSTE ITALIANE</b>			
Home-work mobility plan			Promotional communication to employees
			Facilities for employees to buy, share, rent e-scooters
n. 40 electric vehicles (Free Duck) for mail service	3 ENEL charging point		Purchase of different kind of electric vehicles for the mail service



## 2.2.2 Incentives/facilitations

The Municipality of Florence has already implemented a financial incentive system for citizens in order to acquire e-vehicles. Thanks to a previous loan of the Tuscany Region, in December 2013, 51.000 euro have been allocated for the purchase of electric vehicles (Decision n. 11242/2013 and Decision to pay n. 765/2014). The money allocated was completed in just two days.

Furthermore, the Municipality of Florence has approved two Decisions about the strengthen of the e-column network for the recharging of the e-scooters by a substitution of some charging points already existed and the implementation of new ones in the city of Florence both for cars and motorcycles (Decision n. 463 - 30/12/2013 and Decision n. 216 – 25/07/2014). Currently, it is possible to point out that the upgrading project can be implemented by the month of March 2015. In this case, results and goals will be included in Florence Technical monitoring report.

SUMMARY	
Name of the tool	<b>Interoperable network of public charging station</b>
Category (select as applicable)	Energy benefits and Urban facilities
Geographical Coverage (select as applicable)	Local
Start date	2000
Nature of Promoters (select as applicable)	Public
Name of Promoter(s)	Municipality of Florence – Italy

### SHORT SUMMARY OF THE PRACTICE

The Municipality of Florence, with regional co-financing Regional Decision n. 5815, has decided to expand the existing infrastructure composed by n. 126 public charging stations with additional 147 stations with two sockets each one, for a total supply of 273 electric charging stalls.

### BENEFITS AND ADVANTAGES RELATED TO A SCOOTER SHARING SERVICE

The users of the scooter sharing service may use the public network of charging stations

### SOURCES OF INFORMATION

<http://www.silfi.it/IT/index.php?id=63&label=Mappa%20colonnine%20ricarica%20veicoli%20elettrici%22>

SUMMARY	
Name of the tool	<b>Limited Traffic Zones free of charge for e-vehicles</b>
Category (select as applicable)	Urban facilities
Geographical Coverage (select as applicable)	Local
Start date	1997
Nature of Promoters (select as applicable)	Public
Name of Promoter(s)	Municipality of Florence – Italy

### SHORT SUMMARY OF THE PRACTICE

In July 2011, the Municipality of Florence has decided for a new policy of access concerning the restricted traffic zones (ZTL), strongly in favor of the electric vehicles, whereby a non-resident can systematically access to the city centre only with an electric vehicle.

### BENEFITS AND ADVANTAGES RELATED TO A SCOOTER SHARING SERVICE

The measure “Limited Traffic Zones free of charge for e-vehicles” (as e-scooters) is a “smart” action in a Smart city that encourages the use of eco-mobility. It can be evaluated in terms of following benefits:

- Congestion reduction shifting vehicle travel to alternatives modes (i.e. scooter sharing)
- Consumer savings
- Environmental protection
- Efficient land use
- Energy savings
- Carbon Footprint reduction.

### IMPROVEMENT SUGGESTION

Public transport reserved lanes use by e-vehicles, that allow e-vehicle users to decrease the day-trip time avoiding traffic jam issues and without to create constraints for buses.

### SOURCES OF INFORMATION

<http://imobi.fi.it/it/trasporto-privato/orari-e-mappa-ztl/orari-e-mappa-ztl-firenze>

#### SUMMARY

Name of the tool	<b>Financial incentives for citizens</b>
Category (select as applicable)	subsidy
Geographical Coverage (select as applicable)	Local
Start and end date	December 2013
Nature of Promoters (select as applicable)	Public
Name of Promoter(s)	Municipality of Florence – Italy

### SHORT SUMMARY OF THE PRACTICE

In December 2013, the Municipality of Florence decided to allocate grants for the purchase of electric vehicles around 50.000 euro recovered from a previous loan of the Tuscany Region. The requests to obtain the contribution have been so many that the money available are sold out in two days.

**BENEFITS AND ADVANTAGES RELATED TO A SCOOTER SHARING SERVICE**

None

**IMPROVEMENT SUGGESTION**

New appropriations for grants would be required for the purchase of electric vehicles

**SOURCES OF INFORMATION**

None

**SUMMARY**

Name of the tool	<b>Pedestrian Area accessible for e-vehicles</b>
Category (select as applicable)	Urban facilities
Geographical Coverage (select as applicable)	Local
Start date	August 27, 2002
Nature of Promoters (select as applicable)	Public
Name of Promoter(s)	Municipality of Florence – Italy

**SHORT SUMMARY OF THE PRACTICE**

Municipality of Florence has decided to give access to electric vehicles even to the B part of pedestrian Area, whereby a non-resident can systematically access to the very city centre only with an electric vehicle. About 2/3 of the entire pedestrian area is accessible. The e-vehicle cannot be a freight vehicle but just dedicated to people transport.

**BENEFITS AND ADVANTAGES RELATED TO A SCOOTER SHARING SERVICE**

The measure “Pedestrian Area accessible for e-vehicles” (as e-scooters) is a “smart” action in a Smart city that encourages the use of eco-mobility. It can be evaluated in terms of following benefits:

- Congestion reduction shifting vehicle travel to alternatives modes (i.e. scooter sharing)
- Consumer savings
- Environmental protection
- Efficient land use
- Energy savings
- Carbon Footprint reduction.



**IMPROVEMENT SUGGESTION**

**SOURCES OF INFORMATION**

Municipal Ordinance 6002 – August 27, 2002

**2.2.3 App and gis tools**

Details and deadlines are included in Communication Plan.

### 3 Experimentation start up

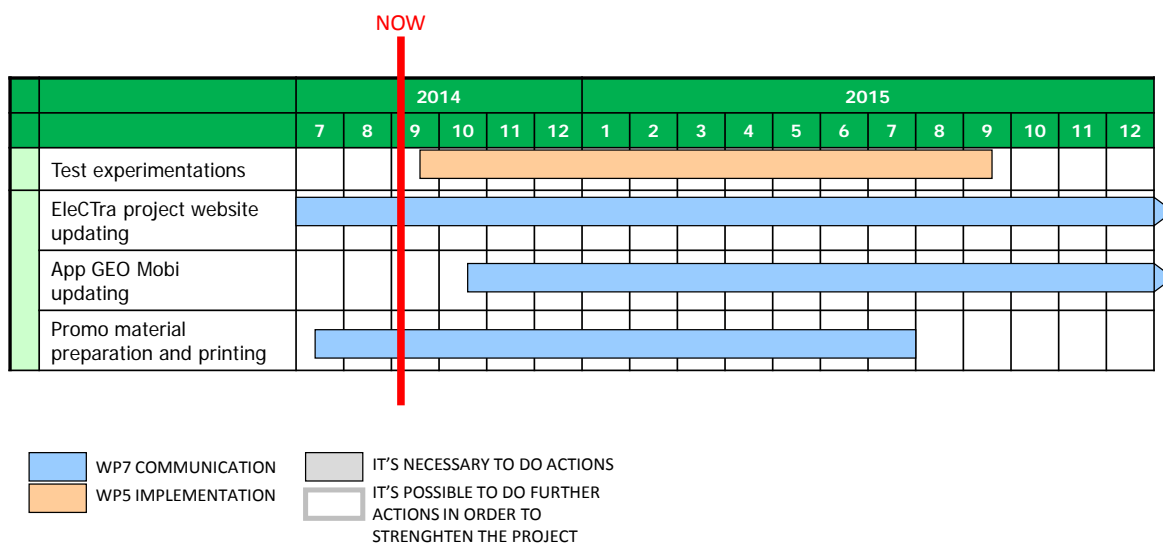
The experimentation start up actions for Florence represent what it's necessary to do in order to allow the pilot test implementation in its own background, updating and to improve the project effectiveness throughout the entire duration of the test.

GEOmobi, app completely free, was created as an evolution of *Togo!*, service georeferencing information resources in the field of mobility, experimentally developed in 2011 by the Linea Comune Spa. Thanks to GEOmobi every road user can access to a family of related services to the mobility and know in real time the traffic situation of Florence and four other Municipalities in the metropolitan area (Bagno a Ripoli, Pontassieve, Scandicci, Sesto Fiorentino).

Currently in GEOmobi can see the work in progress, accidents, speed cameras, detours, etc.

#### 3.1 Schedule of activities

The schedule of the actions to start the EleCTra experimentation is shown in the table below. Deadlines and further details are also in the tables of the next paragraph.



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### 3.2 *Action details*

The following table shows the details of the actions to do for the implementation of the pilot test year in Florence, during both the final part of Service Executive Planning and Implementation periods.



ACTIVITIES WHAT?	ACTIONS HOW?	TARGET GROUPS FOR WHOM?	PP IN CHARGE WHO?
GEO Mobi app updating	updating	Florence Mobility Manager and technical team	Florence
Brochures	Printing of the project brochure	EleCTra e-vehicle users (citizens and tourists); stakeholders	Firenze
	Spread of the project brochures	EleCTra e-vehicle users (citizens and tourists); stakeholders	Firenze
	Creation and printing of the leaflet dedicated to promote the project in Florence and the activity of stakeholders	EleCTra stakeholders EleCTra e-vehicle users (citizens and tourists);	Firenze
Posters	Printing	EleCTra e-vehicle users (citizens and tourists); stakeholders	Firenze
	Posters in public places and strategic hot spots	EleCTra e-vehicle users (citizens and tourists); stakeholders	Firenze
Further Information/ promotion material creation	See Communication Plan		



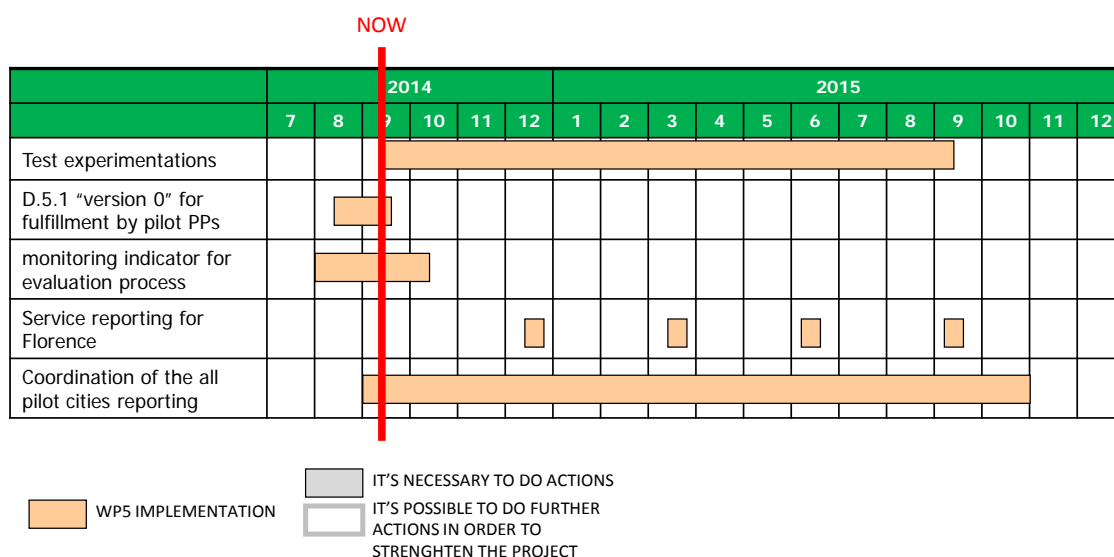
## 4 Experimentation monitoring

In accordance with the technical tasks indicated in Annex I and with what to come to light thanks to the previous phases, the experimentation monitoring is finalized to obtain a set of indicators in order to check and monitor the results of every facilitation and incentive implemented. At the end of the experimentation (summer period of 2015) and during the WP6 (“Post-operam”) actions it will be identify the best way in order to evaluate the project effectiveness with all indicators analyzed.

The main output of the activities will be represented by “Technical monitoring Report”, which be carried out every 3 months and during the pilot test year.

### 4.1 Schedule of activities

The schedule of the actions to start the EleCTra experimentation is shown in the table below. Deadlines and further details are also in the tables of the next paragraph.



### 4.2 Action details

The following table shows the details of the actions to do for the monitoring of the pilot test year in Florence, on the basis of the facilitations and incentives implemented.



ACTIVITIES WHAT?	ACTIONS HOW?	TARGET GROUPS FOR WHOM?	PP IN CHARGE WHO?
Project monitoring and service evaluation	Coordination of the monitoring of the pilot tests	All pilot partners	Firenze
	Individuation of the project monitoring indicators for Florence	All pilot partners	Firenze
	Definition of the information flow about the service evaluation	All pilot partners	Firenze and TB
Service reporting	Definition of the structure of D.5.1 ("version 0")	All pilot partners	Firenze, with the support of TB
	Fulfillment of D.5.1s for Florence	Partners and the Florence stakeholders	Firenze
Coordination of the service for all pilot PPs	Collection of all D.5.1s of pilot contexts	All PPs	Firenze
	Feedback to all pilot cities in terms of activity effectiveness and calibration actions, if useful	All pilot and then other PPs	Firenze