

ICT cloud-based platform and mobility services available, universal and safe for all users

D7.1.1 1st Report on the Set-up of MoveUs Living Labs demonstrators, evaluation methodology, plans and materials

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This report collects the activities carried out during the first period of the project: the set-up of the MoveUs Living Labs, the processes to follow in those Living Labs, and the guidelines and materials to use in the first iteration of workshops in the three pilot cities.



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HISTORY

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List of Abreviations

<abbreviation></abbreviation>	<explanation></explanation>
GHG	Greenhouse gas
ICT	Information and Communication Technologies
LL	Living Lab
MS	Milestone
Μ	Month
MS	Milestone
Т	Task
WP	Work Package



Executive Summary

This report collects the Set-up of MoveUs Living Labs demonstrators, the evaluation methodology, plans and materials.

The document provides first a quick review on the Living Labs methodology and the approach chosen in the MoveUs project, as a way to engage experts and users of mobility in the successive phases for the development of the architecture and the deployment of the services.

Then it goes through a description of the **approach for applying the FormIT Living Labs methodology** by matching the corresponding methodological cycles to the different steps for the design, development and deployment of the specific services, according to the so called **"Design for users**" approach from the FormIT method.

After describing that top level approach, a detailed specification of the cycles and iterations where the specific goal-oriented workshops are materialised is provided. The same type of workshops will be deployed in the three pilot cities Living Labs to provide feedback for the **services specifications**, **energy efficiency methodology**, **stakeholder's needs** and the **final systems design and evaluation**. Each iteration workshop provides specific methods to collect feedback from the participants, according to the type of evaluations, i.e. focus groups, usability evaluation and surveys.

As next step, for the **set-up of living labs**, a self-driven process has been followed. According to the guidelines provided to each pilot city, they completed all the required definitions to build the structure for a Living Lab to start their work, including the leaders, participants and roles, description of the environment where the MoveUs services will be deployed, and goals. The selection of participants and the planning of their participation according to their specific profile has been also an important part of the job done for the constitution of the Living Labs communities, by providing the specification of tasks to recruit, motivate and engage them in MoveUs Living Labs life cycle.

Finally, the report includes the **preparation to run the first iteration of workshops** to obtain feedback of the whole Living Labs process and on the services specifications defined in each one of the three pilot cities. This preparation includes the guidelines to run the workshops, to guarantee comparability of the results, and the different materials, to communicate, run, analyse the results and report the events providing feedback.

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1 Introduction

In this document it is reported the first period of activity of the Living Labs in MoveUs, which includes the set-up of the Living Labs themselves, the design of the generic Living Lab processes according to the project needs, and the preparation of the materials and guidelines for the first iteration of workshops.

1.1 Living Labs Concept and Vision

A Living Lab is both a <u>methodology</u> for User Driven Innovation and the <u>community</u> that primarily uses it. A Living Lab is a means of experimenting and <u>co-creating</u> <u>with real users in real life environments</u>, where users, together with researchers, firms and public institutions look for new solutions and new products.

But also Living Labs are about <u>societal change</u>, about promoting innovation in a societal basis, involving SMEs, entrepreneurs and public institutions that together can have immediate impact. In a LL, users/citizens become a community. This community is a group of active actors and not only passive receivers

Living Lab is a means to build the future economy based on knowledge and participation, where **all innovations** (of technical and social character) are **co-created in real-life environment** by all **relevant players** with **active involvement of end-users**

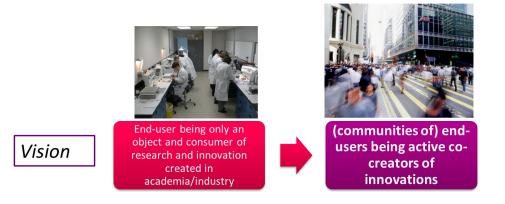


Figure 1 Living Lab Vision

The Living Labs methodology is not only about technology– Living Lab enables users to influence how and which ICT innovations are being developed taking into account social aspects like mobility, environment, green energy, health, digital divide, etc.



Open innovation ecosystem built around users – firms, institutions, academies, cities, citizens - who collaborate on creating, testing and implementing new services and products.

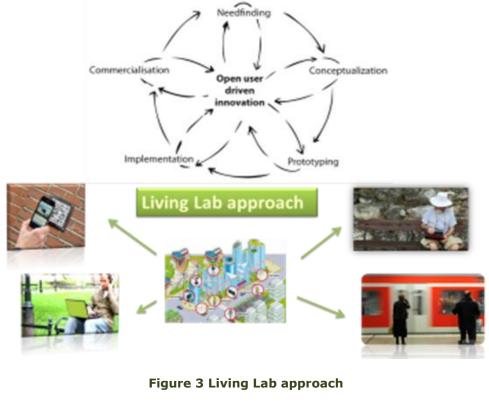
1.2 Living Lab Approach in MoveUs

In MoveUs, technology innovation will be triggered by business drivers coming from the users and not vice versa:

- Involvement of **expert users** from all relevant disciplines and **end-users** together so all contribute, in all phases.
- Living Labs are not physical places, but rather **testing & experimental** environments.
- The user-generated requirements (WP2) and feedback derived from meaningful business cases as proposed in each of the pilots will be transferred into use case specifications and technical requirements (T2.5) for later integration and improvements (WP6) of the applications during the entire life of the project.
- The evaluation phase will be executed for 9 months on the basis of two iterations

As a result the various services will be robust, innovative and with a very high potential in terms of usability and sustainability

The Living Labs are at the core of the basic research and validation/evaluation of the MoveUs services, applications and incentives.



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2 The application of FormIT Living Labs methodology to MoveUs

2.1 General description of the FormIT methodology

Processes to carry on in the Living Labs are based on the Form IT Methodology [1], which is a methodology for user involvement, created and tested at the Centre for Distance-spanning Technology (CDT), Luleå University of Technology.

The user involvement is based on the establishment of the Living Lab framework. This evaluation environment supports the process of understanding if the customer or user has a need for a service and how intense their attraction or repulsion for that service is in the real-world context. Living Labs can support processes by allowing users to use the service in their context and to determine if it provides a value for them. In addition, a Living Lab can also provide insights about how users perceive value.

The three generic cycles in the FormIT process are:

- 1) Concept design
- 2) Prototype design
- 3) Design of Final solution

The methodology proposes three iterative phases within each cycle, repeated as many times as necessary are:

- Identifying/appreciating opportunities
- Design
- Evaluation

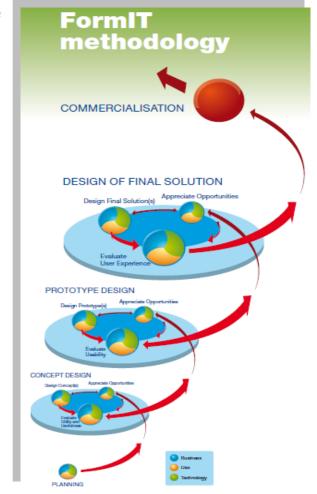


Figure 4 FormIT methodology [1]

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2.2 Approach in MoveUs for applying FormIT Living Labs methodology

The approach used to interact with users in MoveUs project is the one called "**Design for users**", where users are consulted, but do not actively participate in the decision making process [1]. This approach is used to understand the users and their needs, general data, and models. Specific user data and requirements are gathered through interviews, focus groups and observations. The designers (partners of MoveUs project) have the active and controller role, initiating, staging and running the process. The iteration is when user's comment upon the design.

Other user's approaches are the so called "**Design with users**", where the products and services are co-designed with the users, and the "**Design by users**" approach, where the users become the innovators and to some extents the designers.

In the case of MoveUs, up to five iterations are planned for the interaction with the users, and collocated in the corresponding FormIT cycle.

2.2.1 Cycle 1: Concept Design

The main goal of this cycle is to evaluate utility and usefulness:

- **Iteration #1 (M13-M14):** Workshops with selected technical stakeholders inside the LLs. For evaluating the LL processes and the services specifications (WP3). Co-creation phase. Feedback is transferred to WP5
- **Iteration #2 (M15-M16):** Workshops with selected technical stakeholders inside the LLs. For evaluating the Energy-efficiency methodology and progress in WP4. Co-creation phase. Feedback is transferred to WP4

The first cycle of the methodology at MoveUs, **concept design (Iteration #1 and Iteration #2)**, focuses on appreciating opportunities and on generating the basic needs that different stakeholders have on the services. In these iterations, the evaluation of the LL processes and the evaluation of the services specifications from WP3 (Analysis, Specification and Design of the MoveUs Architecture and City Services) will be performed, providing feedback to WP5 (MoveUs Cloud-Based Platform Implementation). In the Iteration #2 the evaluation of the energy-efficiency methodology from WP4 (Energy efficiency assessment) will be done to provide feedback to the WP itself.

2.2.2 Cycle2: Prototype Design

The main goal of this cycle is to perform usability evaluation:

• **Iteration #3 (M23-M24):** Workshops with selected technical stakeholders inside the LLs. For evaluating the platform modules and integration (WP5). Co-creation phase. Feedback is transferred to WP6.

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Living Labs demonstrators

The second cycle of the methodology at MoveUs, **prototype design (Iteration #3)** focuses on identifying stakeholders' needs in the services and evaluate if these needs are addressed by MoveUs services, appreciating opportunities and generating the basic needs that different stakeholders have on the services. In this iteration, the platform modules and integration will be evaluated, from WP5 (MoveUs Cloud-Based Platform Implementation) and providing feedback to WP6 (Personal services development and platform integration).

2.2.3 Cycle3: Final Systems Design

The main goal of this cycle is to perform user experience evaluation:

This cycle is implemented in WP9 (Multi-disciplinary Workshops in the MoveUs Living Labs), but the activities are mentioned here as they are integral part of the FormIT methodology cycle, even formally in the project are part of another Work package.

- **Iteration #4 (M28-M31):** First iteration for gathering feedback for fine tuning of MoveUs services/architecture
- **Iteration #5 (M32-M35):** Second iteration for gathering feedback for fine tuning of MoveUs services/architecture

The third cycle of the methodology at MoveUs, **final systems design (Iteration #4 and Iteration #5)**, should focus on the usability analysis in order to introduce small changes and adjustments in the services. Therefore, it will evaluate the users' actual experience of the final version of the solution.



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3 Living Labs processes at pilot sites

In the FormIT handbook [1] it is provided a guide to determine the possible motivations, activities, user involvement, methods and tools to be applied in the Living Labs iterations. Below there is a summary of them.

1. Motivation: What would you like to gain from involving users in the innovation process?

- □ To obtain input on already existing products and services.
- □ To obtain input on predefined ideas.
- □ To obtain ideas for products and services.
- □ To reduce the risks involved in product/service development.
- □ To learn more about the user.

2. Activity: In which activity or activities do you want to involve users?

- □ Give their complaints to existing products and/or services.
- □ Verify requirements.
- □ Generate ideas for new products and services.
- □ Evaluate concepts.
- □ Evaluate prototypes.
- □ Evaluate new products or services.
- □ Obtain feedback on business models.
- $\hfill\square$ Respond to market surveys.

3. User involvement: Which target user groups are important to your organisation?

- □ Enquiring customers (give suggestions and critique).
- □ Lead users (are aware of, and can express their needs).
- □ Non-users (have actively chosen not to use the product or service).
- □ First buyer (the first customers who buy the product after market launch).
- 4. Methods and tools when choosing a for users approach

Methods suggested

- Focus-group interviews.
- Usability evaluations.
- Contextual inquiry.
- Why, why, why.
- Cultural probes.
- Social tagging.

Some tools for support

- On-line focus-groups.
- Pop-up site surveys.
- On-line survey tools.
- Blogging.
- Photo blogging / Camera.

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Based on this guide, a profile of motivations, activities, user involvement and methods and tools has been made to be applied to each one of the Living Labs iterations for MoveUs, according to information provided by each Living Lab, the project goals and structure.

3.1 Iteration #1: Evaluation of LL processes and the services specifications

Purposes:

- To obtain input on the LL processes
- To obtain input on the services specifications
- To reduce the risks involved in service development
- To learn more about the stakeholders

Stakeholders involvement:

- Evaluate LL processes
- Verify requirements
- Evaluate new products or services

Duration of the iteration: 2 months (M13-M14)

Stakeholders involved:

Mobility data providers, mobility management bodies and transport operators

Detailed iteration: methods used

This iteration will start with the recruitment of selected stakeholders, as defined by every LL.

The main method to gather feedback for the evaluation will be through focus-group interviews. According to the number of participants to engage in the focus-groups, it could be suitable to run two focus-groups, with no more than 10 participants per focus group. A possibility is to run, for example, a focus-group with mobility data providers and mobility management bodies, and another with transport operators.

The focus-group should first provide enough information of the services to the participants, in order for them to provide feedback to the specifications from their experience. The discussions must be on the mobility functional level, not on the IT level.

Material required:

- MoveUs project presentation
- Living Labs objectives and overall processes presentation, with expected role of Living Labs participants. Detailed presentation for LL processes for iteration #1.

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Living Labs demonstrators

- Presentation with description of the services specifications understandable for the participants involved at the iteration
- Script with questionnaire for interviews for focus-group at iteration #1
- Template to collect responses

3.2 Iteration #2: Evaluation of the energy-efficiency methodology

Purposes:

• To obtain input on the energy-efficiency methodology

Stakeholders involvement:

- Verify methodology
- Evaluate concepts for energy-efficiency

Duration of the iteration: 2 months (M15-M16)

Stakeholders involved:

Mobility management bodies, transport operators and people working with energyefficiency issues (i.e. energy and climate department of the city)

Detailed iteration: methods used

This iteration will start with the recruitment of selected stakeholders, as defined by every LL.

The main method to gather feedback for the evaluation will be through focus-group interviews. According to the number of participants to engage in the focus-groups, it could be suitable to run two focus-groups, with no more than 10 participants per focus group.

Firstly, it should be provided to the focus-group participants enough information on the energy-efficiency methodology, as well as on the concepts of energy efficiency and/or carbon footprint to be used in MoveUs, so the participants can provide contextualized feedback.

Material required:

- MoveUs project presentation
- Living Labs objectives and overall processes presentation, with expected role of Living Labs participants. Detailed presentation for LL processes for iteration #2.
- Presentation with description of the energy-efficiency methodology and energy efficiency and/or carbon footprint concepts considered in MoveUs
- Script with questionnaire for interviews for focus-group at iteration #2
- Template to collect responses

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3.3 Iteration #3: Evaluation of the platform modules and integration

Purposes:

- Identify stakeholders' needs in the services and evaluate if they are addressed by MoveUs platform and services
- To learn more about the participants
- To further develop the prototype

Stakeholders involvement:

- Identification of stakeholders' needs in the platform and services
- Evaluate if stakeholders' needs are addressed by MoveUs platform and services
- Evaluation of MoveUs platform integrated prototype

Duration of the iteration: 2 months (M23-M24)

Stakeholders involved:

Mobility data providers, mobility management bodies and ICT technology providers

Detailed iteration: methods used

This iteration will start with the recruitment of selected stakeholders, as defined by every LL.

The main method to gather feedback for the evaluation will be through focus-group interviews. A moderator will guide a discussion with a group of services stakeholders'.

The focus-group should first provide enough information on the implementation of the platform modules and integration.

Material required:

- MoveUs project presentation
- Living Labs objectives presentation, with expected role of Living Labs participants, general and for iteration #3.
- Presentation with description of the implementation of the platform modules and integration
- Script with questionnaire for interviews for focus-group at iteration #3
- Template to collect responses



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3.4 Iteration #4 and #5: Final systems design and evaluation

As indicated in section 2.2.3 Cycle3: Final Systems Design, these iterations are implemented in WP9 (Multi-disciplinary Workshops in the MoveUs Living Labs), however, as these activities are integral part of the FormIT methodology cycle they are outlined here, even the details will be provided in the corresponding activities and reports of WP9.

Purposes:

- Users' usability evaluation for service adjustments
- Maximize stakeholders engagement
- Evaluation for the sustainability of the MoveUs platform

User involvement:

- Evaluation of users' actual experience
- Provide feedback for fine tuning of MoveUs services/architecture
- Evaluation of energy savings, including GHG reductions
- Provide specifications for sustainable business development of MoveUs platform

Duration of the iteration: 4 months (M28-M31) for iteration #4, and 4 month (M32-M36) for iteration #5

Stakeholders and end users involved:

Mobility management bodies, transport operators and end users. There will be specific activities, workshops, focused on stakeholders and others focused on end users.

Detailed iteration: methods used

This iteration will start with the recruitment of selected end users and stakeholders, as defined by every LL.

The main methods to gather feedback for the evaluation will be through:

- Usability evaluation methods for the evaluation of users' actual experience and fine tuning of the platform.
- Focus-group interviews to provide specifications for sustainable business development of MoveUs platform
- Survey for energy saving evaluation and GHG reduction through the use of MoveUs Services

Material required:

• MoveUs project presentation

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Living Labs demonstrators

- Living Labs objectives presentation, with expected role of Living Labs participants, general and for iterations #4 and #5.
- Description of the MoveUs platform and services implemented at each pilot site.
- Script with activities to perform the usability evaluation. For example, using the mobility application performing certain activities and a questionnaire to gather feedback on the usability experience.
- The LL feedback-collecting application implemented (in T7.1) and replicated (in T6.5) at each test site
- Script with questionnaire for interviews for focus-group at iterations #4 and #5
- Template to collect responses
- Questionnaire for energy saving survey evaluation

3.5 Summary of methods at each iteration

Summary of methods used at all iterations with description of corresponding types of stakeholders involved by iteration and method.

		ITERATION				
		Work package 7			Work package 9	
		CONCEPT	DESIGN	PROTOTYPE DESIGN	FINAL SYST	EMS DESIGN
		Iteration #1: Evaluation of the services specifications	Iteration #2: Evaluation of the Energy- efficiency methodology	Iteration #3: Evaluation of the platform modules and integration	Iteration #4: Gathering feedback for fine tuning of MoveUs services/archi tecture	Iteration #5: Gathering feedback for fine tuning of MoveUs services/archi tecture
dOF	Focus-group	With mobility data providers and mobility management bodies With transport operators	With mobility management bodies and transport operators	With mobility data providers, mobility management bodies and ICT providers	With mobility management bodies and transport operators for evaluation of sustainable business development	With mobility management bodies and transport operators for evaluation of sustainable business development
METHOD	Usability evaluation				With end users With mobility management bodies	With end users With mobility management bodies
	Survey for energy saving evaluation				With transport operators	With transport operators





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4 Living Lab Set Up

4.1 Leaders of the Living Labs

City partners Madrid, Genoa and Tampere (MAD, CDG, TRE) are the leaders of their respective LLs, they provide the users, access to the ICT and human resources in their cities, conduct the interactions with their user base (for gathering requirements, feedback etc), and provide visibility and facilitate information for the Exploitation tasks

Pilot partners are responsible for:

- creating the users data base
- engaging the users
- working with them
- contacting them
- organising the workshops
- colleting the feedback

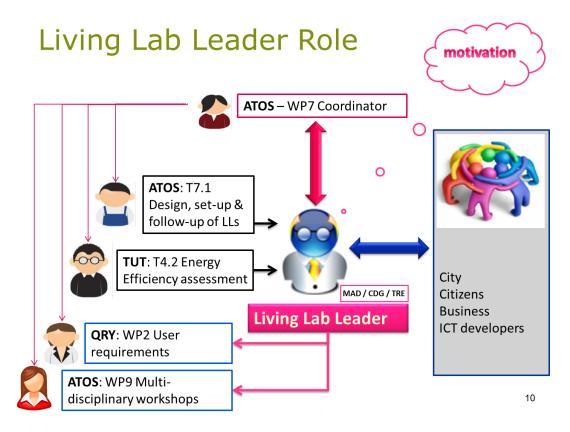


Figure 5 Living Lab Leader Role

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4.2 City of Madrid

4.2.1 Establishment of LL Leaders and description of participants roles

Living Lab Leading Partner: MAD

Living Lab leader:

- Madrid Living Lab Leader: MAD Mr. Ramón Barrio Andrés
- Madrid Living Lab Partner: EMT Sergio Fernández Balaguer
- Madrid Living Lab Partner: SICE Cristina Beltrán

Living Lab participant's partners and roles:

- Madrid LL, MAD will be the LL leader, supported by EMT and SICE:
 - MAD will coordinate the definition and adaptation of LL methodology to be applied to Madrid pilot.
 - MAD will organize the workshops for the LL as planed in the DoW, and will contribute to localize the materials to be used in T7.3 workshops so as to gather feedback about the MoveUs services.
 - MAD will contribute with the provision of LL stakeholders/users/participants
- EMT's role as public transport company in Madrid pilot:
 - EMT will contribute to the definition and adaptation of LL methodology to Madrid pilot in relation to services including public bus transport, including the processes, materials and scheduling of the piloting plans for the public transport services.
 - EMT will contribute to the supervision of the piloting execution plans with the LL stakeholders/users/participants.
 - EMT will also contribute to the design of web tools to support Madrid living lab in their testing exercises, and will contribute to analyze the response of the users of the services related to the public bus transport.
 - EMT will contribute to localize the materials to be used in T7.3 workshops so as to gather feedback about the MoveUs services.
 - EMT will contribute with the provision and management of LL stakeholders/users/participants in relation to public transport mobility services.
- SICE's role as technical partner and service developer in Madrid pilot:
 - SICE will lead the establishment of the adaptation of LL methodology to be applied to Madrid pilot, including the processes and schedule by which the MoveUs user's response during the pilots' execution will be received and analysed for the improvement and MoveUs platform and services.

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- SICE will contribute to the supervision of the piloting execution plans with the LL stakeholders/users/participants.
- SICE will also contribute to the design of web tools to support Madrid living lab in their testing exercises, and will contribute to analyse the response of the users of the services.
- SICE will contribute to localize the materials to be used in T7.3 workshops so as to gather feedback about the MoveUs services.
- SICE will contribute with the provision of LL stakeholders/users/participants in Madrid pilot.

4.2.2 Description of the Living Lab environment and goals

4.2.2.1 Snapshot about the living lab environment:

Madrid is the capital and largest city of Spain. The population of the city is roughly 3.3 million and the entire population of the Madrid metropolitan area is calculated to be 6.571 million. It is the third largest city in the European Union, after London and Berlin, and its metropolitan area is the third largest in the European Union after London and Paris. The city spans a total of 604.3 km2. The city is located in the centre of both the country and the Community of Madrid (which comprises the city of Madrid, its conurbation and extended suburbs and villages); as the capital city of Spain, seat of government, and residence of the Spanish monarch, Madrid is also the political centre of Spain [2].

4.2.2.1.1 Madrid Smart City

Madrid is fourth of the top five Smart Cities in Spain [3]: according to IDC's Smart Cities Index Ranking, Madrid is the third "smartest" city in Spain. Madrid has very strong enabling forces in comparison with other Spanish cities specifically with regards to its economy and its ICT base. Besides being the most economically powerful city in Spain, Madrid was also identified by the Global Economic Power Index as the 14th most economically powerful city in the world in 2011, with an economic output of \$188 billion.

Madrid outstands in the **smart government** solutions that clearly benefits all of Spain, not just Madrid, the nation's capital, and is also heavily focused on improving its mobility and traffic situation.

Concerning **smart mobility**, different examples of smart initiatives in Madrid City are herein listed and described:

• <u>Integral management of urban public buses fleet</u> operated by EMT. This project started in 2007 and enables the continuous, real time and automatic

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localization of 2100 buses of EMT from the Central Control. Additionally, EMT offers the possibility to look for recommended routes, timetables or points of interest through easy to use systems like SMS.

- <u>Air quality information and surveillance network</u>. It offers real time information about the quality of the air of Madrid. Since 1999 air quality data measured are published on the municipal web, and since 2010 such data are accessible to the citizen for information from many different channels, ranging from SMS to the most modern smartphone apps. The information from all the 24 measurement stations is offered updated in quasi real time –hourly basis.
- <u>Mobility Management Control Centre</u>. It is the first contribution to the 'smart' functioning of Madrid City, as it started its operation in 1968. The 'smart' improvements of this facility during the past years have enabled today to know the traffic flow state in real time and to reduce traffic congestions.
- Madrid also outstands on the smart mobility smartness dimension due to its successful <u>car sharing program</u>. The program does not have fixed costs for program subscribers and only charges for actual car-use time. There are three major operators of the program in Madrid: Respiro "Breathe" Car Sharing (www.respiromadrid.es), Connect by Hertz (www.connectbyhertz.com), and Hello Bye Cars (www.hellobyecars.com). Besides being an eco-friendly solution to transportation, Madrid's car sharing program was also a success during the recession, becoming a popular option for occasional car users.
- In addition, Madrid was chosen by Spain's Institute for Energy Diversification and Savings (IDEA — Institute for the Energy Diversification and Saving) as the testing bed for its <u>Movele (electric mobility) project</u>. The project is also testing electric vehicle deployment in Barcelona and Sevilla. As well as IDEA, the Movele project also includes Spain's largest utility companies Endesa, gasNatural Fenosa, and Iberdrola. Madrid aims to have a network of 280 charging points for electric vehicles around the city, located on both public roads and outside (parking, etc.).

Other **smart services** in relation to energy efficiency have also been deployed in the city:

- The <u>Plan for the sustainable use of the energy</u> in public buildings is aimed at contributing to energy saving and efficiency in the facilities of the City Council. In June 2010 the professional role of energy manager was created in order to manage the plan, and an specific application called Madrid Energy and Water Management was launched, that enables to consult the consumption and associated cost of electricity, gas, fuel and water from all of the municipal buildings.
- <u>Public lighting, tunnels and service galleries Control Centre</u>. It centralizes the management of the public lighting network of the city, of the 15 longer road tunnels of Madrid –except of M30 road network- and of the 100km-length service galleries. It comprises the surveillance of 4600 km of wire and piping network in total for the provision of services (water, telephone and electricity). This service started operating from the beginning of 2011.



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• Concerning other smart services, Madrid has <u>fully integrated its emergency</u> <u>management systems</u> under the "Emergency Services Integrated Centre (CISEM)," allowing coordination between fire, police, and medical emergency (SAMUR) departments, optimizing their actions.

The main Project for the future of the city of Madrid is the new General Plan; the main objective of this plan is to have a 'Smart' Madrid at urban level, with the support of the following basic principles:

- Becoming Madrid a city with economic opportunities able to attract and generate talent, creativity, innovation, investment and thus creating employment.
- Becoming Madrid a sustainable city, configured with environmental sensitivity, and considered as a model of responsible energy consumption behaviour.
- Becoming Madrid a city with quality of life, that has an integrative mobility system and that includes the culture and the nature in the urban space.
- Becoming Madrid a unite city, balanced and without territorial barriers.

4.2.2.1.2 Living Lab goals:

Madrid LL aims to:

- Enhance the mobility of citizen and visitors of Madrid City by facilitating different and personalized mobility information in a handy way: quick (real time), personalized (different modes of transport), and at hand (on their personal devices).
- To foster the use of greener transport modes: public bus, car-pooling, bike hiring, and walking modes.
- To integrate the user –pedestrians, travellers, drivers, etc.- into the cooperative mobility architecture as a new source of information.

To comply with those objectives, the pilot of Madrid considers the following cases of use of the MoveUs solution:

- Multimodal real-time information
- Travel time information in real time
- Smart prioritization to vehicles (public buses, car-pooling, etc.)
- Smart routing for pedestrian
- Smart crossing for pedestrian

Specific Goals for Madrid LL in the use cases:

• Contribution to the definition of requirements from the final users' viewpoint; requirements of usability, functionality, adaptability to personal characteristics/limitations/abilities, etc. of the mobility and information applications developed.

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- Contribution to the definitions of requirements from the professionals on mobility (bus drivers, mobility agents, mobility control centre operators, etc.) in terms of operation and integration with the MoveUs solution.
- Use of the mobility services developed in controlled tests, and contribution to the evaluation of the services through the provision of feedback, in terms of functionality, operation and usability, appealing of the services, acceptance of the technology, etc.
- Contribution to definition of business cases for the MoveUs services: willingness to pay per use, combination of MoveUs services with other kind of services in the urban environment, etc.

4.2.3 LL participants and planning for their incorporation

Following, it is provided a classification of possible participants for Madrid Living Lab:

ТҮРЕ	POSSIBLE PARTICIPANT
Open Data Department	IAM
ICT technology providers	ATOS, AMETIC association of ICT providers
Urban Road Infrastructure Operator	SICE, other operators in Madrid
Urban Road Infrastructure Manager	MAD
Public bus operator	EMT, UITP
Car sharing transport Operators	Respiro, Bluemove, other operators
Bike sharing transport Operator	Bicicum
Taxi Operators	
Urban Traffic Operator	SICE, other operators in Madrid
Urban Traffic Manager	MAD
Mobility Department at urban level	MAD
Tourism (city department)	Madrid Convention Bureau
Professional Drivers	Public bus drivers from EMT
Pedestrians	Madrid a pie Association
Bikers	Pedalibre Association

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Commuters and Public transport users	Public Transport Users Association
Private Drivers	RACE, RACC, ACE.

Table 2 Participants in Madrid Living Lab

4.2.4 Project Milestones

Project Milestone: MS6. Ends M14.

- What: Workshops with selected technical stakeholders inside the LLs. For evaluating the LL processes and the services specifications (WP3). Cocreation phase. Feedback to be transferred to WP5.
- Type/profile of LL participants:
 - Open Data Department: this profile can contribute in the evaluation of the specification of the data to be published and uploaded to MoveUs platform from the mobility information providers; such data will be made available in MoveUs platform and open to mobility services and applications providers for their commercial use or exploitation.
 - Urban Road Infrastructure Operator and Manager: these profiles can contribute in the evaluation of the specifications related to the communication processes between the road infrastructure and MoveUs platform, for the provision of the services.
 - Public bus operator: this profile can contribute in the evaluation of the functional specifications of the public bus prioritization service and the smart routing service, in order to assure that the services will comply with their needs as final users, and with the needs of the public bus users.
 - Car and bike sharing transport Operators / Taxi Operators: these profiles can contribute in the evaluation of functional specification of the smart routing service, in order to assure that the provision of this service is compatible with the operation of their own services.
 - Urban Traffic Operator and Manager: these profiles can contribute in the evaluation of the functional specifications of all the services in order to assure that the functional requirements of the services are met and that the operation of the services will not affect the traffic operation.
 - Mobility Department at urban level: this profile can contribute in the evaluation of the specification of all the use cases in the pilot site, to assure that mobility services to be provided in the city are aligned with the mobility plans and objectives of the city.
 - <u>Tourism (city department)</u>: this profile can contribute in the evaluation of the specification of the web services to be developed in order to publish touristic information in MoveUs solution.

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Project Milestone: MS12. Ends M16.

- What: Workshops with selected technical stakeholders inside the LLs. For evaluating the Energy-efficiency methodology and progress in WP4. Co-creation phase. Feedback is transferred to WP4.
- Type/profile of LL participants:
 - <u>Public bus operator</u>: this profile can contribute with information on energy consumption of the public buses in the operating bus lines, useful to define indicators of energy efficiency (average fuel consumption of the bus lane per route, etc.)
 - <u>Car sharing transport Operator</u>: this profile can contribute to evaluate the energy efficiency and emissions indicators proposed in relation to the use of shared vehicles as alternative transport mode.
 - <u>Bike sharing transport Operator</u>: this profile can contribute to evaluate the energy efficiency gains in comparison to other modes of transport in relation to the use of bikes by the users.
 - <u>Urban Traffic Manager</u>: this profile can contribute to evaluate the traffic conditions and its forecasting in order to relate it with the provision of smart routes – shorter in time and/ or in distance, average speed more constant, etc.
 - <u>Mobility Department at urban level</u>: this profile can contribute to evaluate the implications of different mobility transportation modes in the global performance of mobility: road congestion at different zones and times a day, use of shared mobility options (daily, monthly, etc.), use of public transportation (daily, monthly, etc.).
 - <u>Taxi operator</u>: this profile can contribute to evaluate the energy efficiency and emissions indicators proposed in relation to the use of taxi as alternative transport mode.

Project Milestone: MS14. Ends M24.

- What: Workshops with selected technical stakeholders inside the LLs. For evaluating the platform modules and integration (WP5). Co-creation phase. Feedback is transferred to WP6.
- Type/profile of LL participants:
 - <u>Open Data Department</u>: this profile can contribute to evaluate that the process to upload information from the information providers to the open data repository of the platform is smooth and clear, especially for new coming information providers.
 - <u>ICT technology providers</u>: this profile can contribute to evaluate the communication processes among the modules of the platform.
 - <u>Mobility Department at urban level</u>: this profile can contribute to evaluate the performance of the overall platform so that mobility service providers would easily exploit the open information on mobility that is uploaded to the platform.

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Project Milestone: MS20. M28-M31 / MS22. M32-M35.

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- What: Multi-disciplinary Workshops in the MoveUs Living Labs: 1st and 2nd iteration with users for evaluating the MoveUs services
 - User-experience with the MoveUs platform and service to fine-tune the technological solutions
 - Energy savings, including GHG reductions
 - Joint Evaluation-Exploitation workshops to:
 - ✓ Maximise stakeholders engagements;
 - ✓ Assess how results from Evaluation impact willingness to pay, cost effectiveness and sustainability of the MoveUs Platform
 - Habit-change and satisfaction

• Type/profile of LL participants:

- <u>Urban Traffic Manager, Mobility Department at urban level</u>: both participants are key information providers for the services to be piloted and are also partners of the project.
- <u>Public bus operator</u>: this participant is the main end user of the vehicle prioritization service to be piloted in Madrid, and it is also partner of MoveUs.
- <u>Pedestrians, Bikers, Commuters and Public transport users, Private</u> <u>Drivers</u>: these participants are key end-users of the services to be piloted in Madrid (smart routing service, smart crossing services and eco-routing and traffic prediction service).
- <u>Professional Drivers public bus drivers</u>: these participants are end users of the use case for the prioritization of vehicles to be piloted in Madrid.

4.2.5 Specification of tasks to recruit users (motivation strategies) and engage in the whole MoveUs LL life

USER	ACT	ION TO ENROL IN LL
Open Data Department	The Open Data Department of Madrid City is already collaborating with the Mobility Department of Madrid City (MAD) that is partner of MoveUs; MAD will enrol this participant into MoveUs LLs as its client.	Action 1: MAD to introduce the project MoveUs to the Open Data Department Action 2: MAD to enrol the Open Data Department into the LL so as to align the work done in the City Council about the publication of mobility data with the objectives of the project.
ICT technology providers	ATOS as ICT technology provider will be enrolled as LL participant. Associations of ICT technology providers like AMETIC, and other ICT technology providers will be enrolled as LL participants too.	Action 1: ATOS as consortium beneficiary will be enrolled as LL participant. Action 2: actions to enrol ICT technology providers external to MoveUs
Road	SICE as road infrastructure	Action 1: SICE as consortium beneficiary will

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Infrastructure Operator (urban)	operator will be enrolled as LL participant. Other road infrastructure operators in Madrid will be enrolled by MAD, being the client of them. The Spanish Association of the Road (AEC) will be enrolled by SICE as member of the Association	Action 2: road infrastructure operators Madrid will be enrolled by MAD as participant, being the client of them. Action 3: AEC will be enrolled by SICE as participant, being SICE a member of the Association.		
Road Infrastructure Manager (urban)	MAD as road infrastructure manager will be enrolled as LL participant.	Action 1: MAD as consortium beneficiary will be enrolled as LL participant.		
Public bus operator	EMT as public bus operator will be enrolled as LL participant. UITP is the International Association of Public Transport, and will be enrolled as LL participant through EMT as associate member.	Action 1: EMT as consortium beneficiary will be enrolled as LL participant. Action 2: UITP will be contacted by EMT as associate member.		
Car and bike sharing transport Operators	Car sharing and bike sharing operators in the city of Madrid will be enrolled as LL participants through the close contact existent between them and EMT as public mobility operator company in Madrid.	Action 1: Car sharing operators in Madrid will be contacted and enrolled as LL participants by EMT that has direct contact with them. Action 2: Bike sharing operator in Madrid will be contacted and enrolled as LL participants by EMT that has direct contact with it.		
Taxi Operators	Taxi operators in Madrid will be enrolled as LL participants	Action 1: Taxi operators in Madrid will be enrolled as LL participants		
Urban Traffic Operator		Action 1: SICE as consortium beneficiary will be enrolled as LL participant. Action 2: Other urban traffic operators working for MAD will be enrolled as LL participant by MAD. Action 3: AEC will be enrolled by SICE as LL participant, being SICE a member of the Association.		
Urban Traffic Manager	MAD as urban traffic manager will be enrolled as LL participant	Action 1: MAD as consortium beneficiary will be enrolled as LL participant.		
Mobility Department at urban level	MAD as mobility department in Madrid will be enrolled as LL participant	Action 1: MAD as consortium beneficiary will be enrolled as LL participant		
Tourism (city department)	Madrid Convention Bureau is the convention office of Madrid City, and will be contacted by MAD and	Action 1: Madrid Convention Bureau will be enrolled as LL participant by MAD.		

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	enrolled as LL participant.	
Professional Drivers – Bus drivers	Representatives of bus drivers in EMT and other public bus operators from UITP will be contacted and enrolled as LL participant by EMT	Action 1: EMT as consortium beneficiary will be enrolled as LL participant. Action 2: Representatives of Bus Drivers from UITP will be contacted and enrolled as LL participants by EMT, which is member of UITP association.
Pedestrians	Madrid a pie' association of pedestrian from Madrid will be enrolled as LL participant by EMT, which is in close contacts with such organizations in the city.	Action 1: Pedestrian association 'Madrid a pie' will be enrolled by EMT which has close contacts with such organization
Bikers	Pedalibre association of bikers in Madrid will be enrolled as LL participant by EMT, which is in close contacts with such organizations in the city.	Action 1: Bikers association 'Pedalibre' will be enrolled by EMT which has close contacts with such organization
Commuters and Public transport users	Associations of commuters in Madrid will be enrolled as LL participants by EMT, which is in close contacts with such organizations in the city.	Action 1: Commuters associations will be enrolled by EMT which has close contacts with such organization
Private Drivers	Private drivers associations will be enrolled as LL partners by SICE and by EMT that have contacts with representatives of private drivers associations (like RACE, RACC, ACE, etc.) from previous experiences and collaborations.	Action 1: Private drivers associations to be enrolled as LL partners by SICE, regarding its contacts from previous collaborations. Action 2: Private drivers associations to be enrolled as LL partners by EMT, regarding its contacts from previous collaborations

Table 3 Tasks to recruit users for Madrid Living Labs

4.2.6 Validation Stage Participation

Participant Organization	Type of participant	MS6 : Evaluation of processes and services	MS12: Evaluation of energy efficiency methodology	MS14: Evaluation platform modules and integration	MS20 & MS22: Workshops for evaluating MoveUs services
Informática del Ayuntamiento de	Open Data Department	Х		Х	

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Madrid (IAM)					
AMETIC	ICT technology			Х	
	providers				
ATOS	ICT technology providers			Х	
SICE	Urban Road Infrastructure Operator	Х			
Other road infrastructure operators in Madrid	Urban Road Infrastructure Operator	х			
AEC- Asociación Española de la Carretera	Urban Road Infrastructure Operator	Х			
MAD	Urban Road Infrastructure Manager	Х			
EMT	Public bus operator	Х	Х		Х
UITP	Public bus operator	Х	Х		Х
Operator 1 - Respiro	Car sharing transport operator	Х	Х		
Operator 2 - Bluemove	Car sharing transport operator	х	Х		
Operator 3	Car sharing transport operator	Х	Х		
Operator 4	Car sharing transport operator	Х	Х		
Bicicum	Bike sharing transport operator	Х	Х		
SICE	Urban Traffic Operator	Х			
MAD	Urban Traffic Manager	Х	Х		Х
MAD	Mobility Department at urban level	х	Х	Х	Х
Madrid Convention Bureau	Tourism (city department)	Х			

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ЕМТ	Professional Drivers- Bus drivers			Х
UITP	Professional Drivers- Bus drivers			Х
Operator 1	Taxi operators	Х	Х	
Madrid a Pie Association	Pedestrians			Х
Pedalibre Association	Bikers			Х
PT Users Association	Commuters and Public transport users			Х
Ecomovilidad - Mobility Forum	Commuters and Public transport users			Х
RACE	Private Drivers			Х
RACC	Private Drivers			Х
ACE	Private Drivers			Х

Table 4 Participation in Madrid Living Labs

4.3 City of Genoa

4.3.1 Establishment of LL Leaders and description of participants roles

Living Lab Leading Partner: CDG

Living Lab leader:

- Genoa Living Lab Leader: CDG Main contact: Dr. Maria Grazia De Rose
- Support contacts: Eng. Antonio Rossa; Eng. Annalisa Nordio
- Genoa Living Lab Partner: QRY Marco Troglia
- Genoa Living Lab Partner: SOF Michele Masnata

Living Lab participant's partners and roles:

- CDG will lead the LL in GENOVA city, supported by QRY and SOF.
 - o CDG will coordinate the definition and adaptation of LL methodology to be applied to Genoa pilot.
 - o CDG will contribute for the appropriate Public Authorities recommendations on the development of Living Lab methodologies for Smart Mobility.
 - o CDG will contribute to implement tasks related to the direct P2P processes inside the Genoa LL

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- CDG will support stakeholders/users/participants involved in the LL, giving all the necessary information in order to the MoveUs project.
- CDG will organize the workshops for the LL as planed in the DoW, and will contribute to localize the materials to be used in T7.3 workshops so as to gather feedback about the MoveUs services.
- QRY's role as consulting management company based in Milano (Italy):
 - \circ $\;$ QRY will contribute to the plans and materials to be used in WP2.
 - QRY will contribute to gather feedback about requirements and to customization of incentives based model.
- SOF's role as a leading innovation company in the Information, Communication and Technology in Genoa pilot:
 - SOF will contribute in localizing materials for the Genoa LL processes.
 - SOF will contribute to the design of web tools to be used in the site of Genoa.

4.3.2 Description of the Living Lab environment and goals

4.3.2.1 Snapshot about the living lab environment:

Genoa (http://www.comune.genova.it) is the capital of the Ligurian Region in north-west Italy.The urban area of the city of Genoa is placed in a narrow area between the Apennines mountains and the Ligurian sea, along a seaside of about 40 km from the West (Voltri/Crevari) and the East part (Nervi/Capolungo) and two main valley expansions in the Bisagno and Polcevera valleys.

The whole city has got 603.560 inhabitants with a density of about 2.500 inhabitants per square kilometer and it's the sixth biggest city in Italy for population (after Rome, Milan, Naples, Turin and Palermo).

About 50% of the urban population is concentrated in the central part of the city and in its historical centre.

The general data of the Genoa context is:

- land area: 257,39 square kilometres;
- urban area: 102,91 square kilometres.(40%);
- total number of dwelling: 301.898, of which 273.807 occupied (90%);
- total number of families: 277.627.

Genoa has the main Italian port and it is the most important attractor area for the whole Ligurian Region (except for some peripheral areas in the West by the France and Piedmont border lines).

Genoa has been a leader in Italian industrial development, hosting steel and other heavy industries. After the almost complete dismantling of the heavy industry, the city has started a transformation process moving towards Hi-Tech industry and hosting several research institutions and companies, among them IIT.

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Genoa's peculiar geographical position and shape, and its being at the same time an industrial, commercial, cultural city and the main Italian port, is promoting a new vision on urban, energy and development planning by integrating different needs and tools.

4.3.2.1.1 Genoa Smart City

In 2010 the "*Strategic Energy Action Plan*" (called SEAP), foreseeing over 23% reduction of CO2 emissions by 2020 through eighty listed actions, was approved in the context of the Covenant of Mayors.

Genoa has also approved the "Urban mobility Plan" (PUM).

In 2010 Genoa created the "*Genova Smart City Association*" aiming at having the goal of turning Genoa into a smart city, including the integration and implementation of planning instruments. Cofounders are Enel, the national electric energy company, and the University of Genoa. There are more than sixty members of the Association, including other institutions (Region, Province, Chamber of Commerce, Port Authority), small and big companies, research institutes, associations, all working together towards the shared goal.

The process towards a smart city has been inserted in the Municipality's internal planning, rereading directors' goals in a smart key and in other initiatives capable of inducing behavioural changes. The Municipality is also signing "*Memorandums of Understanding*" with member companies have been signed in which specific topics are agreed upon for the companies to carry out feasibility studies on specific topics. Among these topics are: smart buildings (historical, hospitals, institutional, museums), green port and airport, waterways energy efficiency, vertical farms, study of mobility through mobile phones, city command center, technologies open lab, safe zones through smart and participative control

Concerning **smart mobility**, at urban level the most important planning tool is the Mobility Urban Plan (PUM), approved in 2010 by the Genoa Municipality, that is the result of a profound interaction of experiences between different professional skills, coupled with an intense process of stakeholder involvement. In this context the *Civitas Caravel* project made a great contribution to defining mobility strategies in Genoa. All activities planned within this European project (*Civitas Initiative*) became an integral part of the strategic PUM framework.

The PUM general objectives can be synthesized by:

1) internal and external travel costs decrease, through:

- atmospheric pollution decrease, taking into account the sustainable transport means;
- road safety level increase, trying to promote new and modern vehicles;
- urban vehicle congestion and then day trip time decrease;

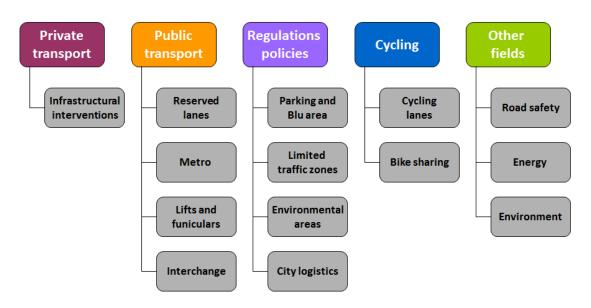
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2) life quality increase, enhancing what already done and planned by local stakeholders, such as districts committees (named Centri Integrati di Via-CIV).

In terms of concrete actions, PUM promotes:

- collective transport enhance, identifying different levels of the transport services (frequency, day timetable, etc) and then verifying the effectiveness of every area/line of the urban network;
- infrastructural actions achievement, involving urban railways, underground line and port;
- local urban districts development;
- management parking system, in order to enhance the public transport use;
- sustainable mobility growth, mainly in terms of pedestrians and bikers safety;
- urban freight flows system enhance, creating where possible different routes for freight and passenger vehicles (e.g. port and motorway accessibility, through city traffic).



The PUM actions are based on 5 areas of activities:

Figure 6 PUM actions - 5 areas of activities

In conclusion the Municipality of Genoa, using the PUM as planning tool, is implementing an integrated policy in these fields:

- energy-efficient, cost-effective and clean public and/or private vehicle fleets;
- demand management strategies based upon access restrictions;
- demand management and revenue raising strategies based upon integrated pricing strategies;
- stimulation of collective passenger transport and its quality of service;
- new forms of vehicle use and/or ownership and less car-intensive lifestyle;

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- new concepts for the distribution of goods;
- innovative 'soft' measures for managing mobility demand;
- transport management systems and traveller services.

The main expected results by this type of measures, is a healthier and more sustainable life in urban area.

4.3.2.1.2 Living Lab goals:

Genoa LL aims to:

- Establish an interactive process between the planning, development and testing of services in the field of smart mobility and energy efficiency.
- Set up feedback mechanisms to identify the functionality, operation, and usability of offered services.

To comply with those objectives, the pilot of Genoa considers the following use cases of the MoveUs solutions:

- Multimodal journey planner with feedback from users; the multimodal journey planner is the "standard" function allowing to give the user indications how to go from an origin to a destination according to different modes of transport (PT, car, walking), Time to destination, Costs while receiving information on traffic congestion. The service will provide results in terms of criteria chosen such as time of travel, cost, energy consumption, carbon footprint, incentives, personal needs, etc.
- Integration of crowd sourced data into the Genoa traffic supervisor, with the aim to share info and real-time and historical data, provided by users through mobile devices. Crowd Sourcing is a new form of computing that is facing with several research challenges, from the social incentives to share info and data, to the technical issues of collecting and analysing a huge amount of real-time and historical data, till the most important issue in security and privacy for end users. This service is built over the integration of crowd sourced (sensor data) provided by users through mobile devices (smartphone, phablet, tablet) with Traffic Supervisor. Thanks to MoveUs this service will make users to become both consumers and producers of data, a mixed role, referred to as prosumer.

These services are bundled into a mobile application able to allow users to fulfil all personal mobility needs in an urban environment. "Personal mobility needs" are to be understood in a broad sense, and include not only aspects related to the travels themselves but also to personal needs such as point of interests, shops, hobbies, externalities, incentives, etc.

Specific Goals for Genoa LL in the use cases:

• Contribution to the definition of requirements from the final users' viewpoint; requirements of usability, functionality, learnability, adaptability



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to personal characteristics/limitations/abilities, etc. of the mobility and information applications developed.

- Contribution to the definitions of requirements from the professionals on mobility (services operators, mobility control centre operators, smart cities department, etc.) in terms of operation and integration with the MoveUs solution.
- Use of the mobility services developed in controlled tests, and contribution to the evaluation of the services through the provision of feedback, in terms of functionality, operation and usability, appealing of the services, acceptance of the technology, etc.
- Contribution to definition of business cases for the MoveUs services.

4.3.3 LL participants and planning for their incorporation

It is provided a classification of possible participants for Genoa LL.

See the following two lists of LL participants (main and additional participants).

In some cases specific people have been identified and will be contacted to confirm their presence.

ТҮРЕ	POSSIBLE PARTICIPANT			
Smart Cities Department/Agency	Genova Smart Cities Association			
Open Data Department	Technological Planning and European Projects Office - Municipality of Genoa			
Public (PT) and private transport operators	AMT S.p.A. (Urban Public Transport operator – a shared company of the Municipality of Genoa) Genova Parcheggi S.P.A., (Urban Parking operator – a shared company of the Municipality of Genoa) TreniItalia S.p.A. (railway operator)			
Traffic Managers	Mobility Department of the Municipality of Genoa			
Transport/Mobility Department at urban and/or regional level	Mobility Department of the Municipality of Genoa Transport Department – Liguria Region			

Main LL Participants

Tourism (city department)	Culture and Tourism Department of the Municipality of Genoa
Parking Operators	Genova Parcheggi S.p.A. (public parking) Aipark Genova (private parking at public use in Genoa)
Energy Utilities	Environment, Health, Energy Department of the Municipality of Genoa
Civil Protection(*)	Civil Protection of the Municipality of Genoa
Service Providers in Smart city solutions	Genova Smart Cities Association
Event Organizers	Porto Antico S.p.a. or Fiera di Genova S.p.A.
Pedestrians/Bikers	FIAB (Bicycle friends Italian league) Pedestrian friends Association of Genoa
Commuters/Public transport users	Commuters within Consumers Association
Private Drivers/Consumers	Consumers Association

Table 5 Participants in Genoa Living Lab

Additional LL Participants

ТҮРЕ	POSSIBLE PARTICIPANT			
Private transport operators	Taxi Operators Association			
Telco Operators	Telecom S.p.A.			
Local Research Centers and Academies	University of Genoa – Faculty of Economics			
Energy Utilities	Energy Manager of the Municipality of Genoa			
Political Representatives	Municipal Counsellors			

Table 6 Additional participants in Genoa Living Lab

The main participants will be engaged since the set-up of the LL.

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The participation of the additional stakeholders will be eventually considered in the future according to the development of the project. So this structure guarantees a flexible and comprehensive management of the LL composition.

The LL of Genoa pilot will be composed of 8-12 participants. It was agreed that, for the LL management, there will be the following staff: a moderator, a rapporteur and a secretary with tasks of contacts organization and drawing up the minutes.

Before the first workshop it foresees a kick-off meeting with the aim to present the objectives about the experimentation in the Genoa pilot site.

4.3.4 Project Milestones

Project Milestone: MS6. Ends M14.

- What: Workshops with selected technical stakeholders inside the LLs. For evaluating the LL processes and the services specifications (WP3). Co-creation phase. Feedback to be transferred to WP5.
- Type/profile of LL participants:
 - <u>Smart Cities Department/Agency</u>: this profile can contribute to identify the priority in the foreseen mobility services (*multimodal journey planner and integration of crowd sourced data into the Genoa traffic supervisor*). Moreover this profile can contribute in the provision of functional specifications of the mobility services to be provided in the Genoa Pilot.
 - <u>Open Data Department/Agency</u>: this profile can contribute in the evaluation of the specification of the data to be published and uploaded to MoveUs platform from the mobility information providers; such data will be made available in MoveUs platform and open to mobility services and applications providers.
 - <u>Civil Protection</u>: this profile can contribute to define the data and ontologies and to provide detailed specifications and design for the MoveUs platform's weather module.
 - <u>Public (PT) and private transport operators</u>: this profile can contribute to provide the functional requirements of the services and the data related to same services for the MoveUs platform.
 - <u>Transport/Mobility Department at urban and/or regional level</u>: this profile can contribute in the evaluation of the specification of all the use cases in the pilot site, to assure that mobility services to be provided in the city are aligned with the mobility plans and objectives of the city. Moreover this profile will contribute to identify the data security and privacy issues to be taken into account in the definition of the MoveUs platform and services.
 - <u>Tourism (city department/tour operators)</u>: this profile can contribute in the evaluation of the specification of the web services to be developed in MoveUs solution.

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 <u>Parking Operator</u>: this profile can contribute to provide the functional requirements of the services and the data related to same services for the MoveUs platform

Project Milestone: MS12. Ends M16.

- What: Workshops with selected technical stakeholders inside the LLs. For evaluating the Energy-efficiency methodology and progress in WP4. Co-creation phase. Feedback is transferred to WP4.
- Type/profile of LL participants:
 - <u>Smart Cities Department/Agency</u>: these profiles can contribute to evaluate the use of alternative urban transport modes in view of a sustainable mobility and to appraise the energy efficiency gains of the ICT solutions in Genoa pilot.
 - <u>Transport/Mobility Department at urban and/or regional level</u>: this profile can contribute to engage the implications of different mobility transportation modes in order to evaluate the energy efficiency / carbon footprint in relation to use of alternative transport modes. In addition this profile can contribute to foster the citizens by means of bonus to use sustainable mobility solutions.
 - <u>Energy Utilities:</u> this profile can contribute to evaluate the use of alternative urban transport modes in view of a sustainable mobility.
 - <u>Public (PT) transport operators</u>: this profile can contribute to provide information on energy consumption of the public transport means, useful to define indicators of energy efficiency, as for example average fuel consumption of the vehicles in the urban area. Car/bike sharing management, included in the PT transport operators work, can contribute to evaluate the energy efficiency in relation to the use of shared vehicles and bikes as alternative mode of transport.

Project Milestone: MS14. Ends M24.

- What: Workshops with selected technical stakeholders inside the LLs. For evaluating the platform modules and integration (WP5). Co-creation phase. Feedback is transferred to WP6.
- Type/profile of LL participants:
 - <u>Open Data Department/Agency</u>: this profile can contribute to define metadata for ICT solutions and to provide useful feedback during the evolution of the services.
 - <u>Transport/Mobility Department at urban and/or regional level</u>: this profile can contribute to identify infrastructures (IoT) and datasets and to define sub modules for MoveUs to be a cloud-compliant platform.
 - <u>Service providers in Smart City solutions</u>: ICT technology units of private transport companies included in Smart Cities Association can

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contribute to design, analyse and test in real environment the services in Genoa pilot.

Project Milestone: MS20. M28-M31 / MS22. M32-M35.

- What: Multi-disciplinary Workshops in the MoveUs Living Labs: 1st and 2nd iteration with users for evaluating the MoveUs services
 - User-experience with the MoveUs platform and service to fine-tune the technological solutions
 - Energy savings, including GHG reductions
 - Joint Evaluation-Exploitation workshops to:
 - ✓ Maximise stakeholders engagements;
 - ✓ Assess how results from Evaluation impact willingness to pay, cost effectiveness and sustainability of the MoveUs Platform
 - Habit-change and satisfaction
- Type/profile of LL participants:
 - <u>Transport/Mobility Department at urban and/or regional level</u>: this profile is a leading figure to provide and collect information of end-users (around 60 citizens, 20 representatives of tourists, 5 representatives of transport operators, 5 representatives of cities authorities and 10 representatives of local businesses). The end-users will be involved by the Mobility Department in the use and testing of technology applications and services.
 - <u>Public (PT) and private (car/bike sharing) transport operators</u>: these participants are end-users of the Genoa pilot and provide information for the services to be piloted and tested in the local site.
 - <u>Parking Operators</u>: these participants are end-users of the Genoa pilot and provide information for the services to be piloted and tested in the local site.
 - <u>Pedestrians/Bikers</u>: the representatives of FIAB (Bicycle friends Italian league) and Pedestrian friends Association of Genoa will be end-users of the services to be piloted in the site.
 - <u>Commuters/Public transport users</u>: the commuters within Consumers Association will be end-users of the services to be piloted in Genoa; particularly they will contribute to assess the satisfaction and willingness to pay for the uptake of MoveUs services.
 - <u>Private Drivers/Consumers</u>: they will be end-users of the services to be piloted in Genoa; particularly they will contribute to assess the satisfaction and willingness to pay for the uptake of MoveUs services.
 - <u>Service Providers in smart cities solutions</u>: they are representative of local businesses and will be end-users of the services to be piloted in Genoa.
 - <u>Tourism (city department)</u>: the tourists are represented by the Culture and Tourism Department of the Municipality of Genoa; they will be end-users of the services to be piloted in the local site.

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 <u>Event's Organizer</u>: this profile can contribute to support the development of innovative business models determining the users' willingness to pay for the uptake of MoveUs services.

4.3.5 Specification of tasks to recruit users (motivation strategies) and engage in the whole MoveUs LL life

USER	ACTIO	ON TO ENROL IN LL
Genova Smart Cities Association	The Genoa Smart Cities Association involves more than sixty members, including institutions (Municipality, Region, Province, Chamber of Commerce, Port Authority), small and big companies, research institutes, associations.	Action 1: CDG to introduce the project MoveUs to Genova Smart Cities Association Action 2: CDG to enrol the Genova Smart Cities Association into the LL with the aim to direct goals in a smart key and in other initiatives capable of inducing behavioural changes.
Technological Planning and European Projects Office - Municipality of Genoa	The Technological Planning and European Projects Office is the technological reference of the Municipality of Genoa. It is already collaborating with the Mobility Department of Genoa.	Action 1: CDG to introduce the project MoveUs to the Open Data Department. Action 2: CDG to enrol the Open Data Department into the LL.
AMT S.p.A. (Urban Public Transport operator)	AMT S.p.A. is the public transport operator of Genoa.	
Genova Parcheggi S.p.A.	Genova Parcheggi S.p.A. is the parking, car sharing and bike sharing manager in Genoa	Action 1: Genova Parcheggi in Genoa will be contacted and enrolled as LL participants by the Municipality of Genoa that has direct contact with them (they are 100% shared company of the Municipality)
Trenitalia S.p.A.	Trenitalia S.p.A. is the railway operator in Italy that, at regional level, works in a narrow contact with the Transport Department of Liguria Region.	Action 1: Trenitalia will be contacted and enrolled as LL participants.
Mobility Department of the Municipality of Genoa	The Mobility Department of the Municipality of Genoa, as MoveUs partner, is the LL leader in the pilot city.	MoveUs to all participants. Action 2: CDG to enrol the participants
Department of	the Transports	Action 1: CDG to introduce the project

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Liguria Region	Department of Liguria	MoveUs to all participants.
	Region coordinates and manages the regional transport.	Action 2: CDG to enrol the participants into the LL.
Culture and Tourism" Department of the Municipality of Genoa	"Culture and Tourism" is the Department of the Municipality of Genoa that manages all tourist information.	Action 1: Mobility Department - CDG - to introduce the project MoveUs to "Culture and Tourism" Department. Action 2: Mobility Department - CDG to enrol the "Culture and Tourism" Department into the LL.
Genova Parcheggi S.p.A.	Genova Parcheggi S.p.A. is also the public parking operator in Genoa at urban level.	Action 1: Mobility Department - CDG - to introduce the project MoveUs to Genova Parcheggi S.p.A Action 2: Mobility Department - CDG to enrol the Genova Parcheggi S.p.A. into the LL.
Aipark- Genova	Aipark-Genova is the private parking at public use operator.	Action 1: Mobility Department - CDG - to introduce the project MoveUs to Aipark- Genova. Action 2: Mobility Department - CDG to enrol the Aipark-Genova into the LL.
Environment, Health, Energy Department of the Municipality of Genoa	Environment, Health, Energy Department of the Municipality of Genoa has the necessary competence in environmental and energetic field to ask for the attention of LL participants on these aspects.	Action 1: Mobility Department - CDG - to introduce the project MoveUs to the Environment, Health, Energy Department of the Municipality of Genoa. Action 2: Mobility Department - CDG to enrol the Environment, Health, Energy Department of the Municipality of Genoa into the LL. Action 3: the Environment, Health, Energy Department will ask for the attention of LL participants on environmental and energetic aspects.
Civil Protection	the Civil Protection Department of the Municipality of Genoa organizes and manages important actions for citizen especially under emergency.	Action 1: Mobility Department - CDG - to introduce the project MoveUs to Civil Protection Department. Action 2: Mobility Department - CDG to enrol the Civil Protection Department
Service Providers in Smart city solutions	Genova Smart Cities Association has many contacts as service providers.	Action 1: CDG to introduce the project MoveUs to Genova Smart Cities Association. Action 2: Genova Smart Cities Association to enrol service providers in Smart city solutions into the LL.
Event Organizers	Porto Antico S.p.a and Fiera di Genova S.p.A. within the own area (the ancient harbour and the fair on the sea) organize a lot of great events in Genoa	Action 1: CDG to introduce the project MoveUs to participants. Action 2: CDG to enrol the participants.

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FIAB (Bicycle friends Italian league)		Action 1: FIAB will be enrolled by CDG
Pedestrian friends Association of Genoa	Pedestrian friends Association of Genoa is the main pedestrians association existing in Genoa	Action 1: Pedestrian association will be enrolled by CDG
Commuters/Public transport users	Commuters which join Consumers Association will be enrolled as LL participant by CDG.	Action 1: Mobility Department - CDG - to enrol Commuters into the LL.
Private Drivers/Consumers		regarding its contacts from previous
Та	ble 7 Tasks to recruit users	for Genoa Living Labs

It's possible to have additional LL participants, with different roles and actions in which are involved.

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4.3.6 Validation Stage Participation

Participant Organization	Type of participant	MS6 : Evaluation of processes and services	MS12: Evaluation of energy efficiency methodology	MS14: Evaluation platform modules and integration	MS20 & MS22: Workshops for evaluating MoveUs services
Genova Smart Cities Association	Smart Cities Department/Agency	Х	Х		
Business Company	Service Providers in Smart city solutions	х		х	Х
Technologial Planning and European Projects Office - Municipality of Genoa	Open Data Department	Х		Х	
AMT S.p.A. (Urban Public Transport operator)	Public transport operator	Х	Х		X
Genova Parcheggi S.P.A., (Urban Parking operator)	Private transport/parking operators	Х	Х		X
Aipark Genova (private parking at public use in Genoa)	Private parking operator	x			X
TreniItalia S.p.A. (railway operator)	Private transport operator	Х	х		Х
Mobility Department of the Municipality of Genoa	Transport/Mobility Department at urban level	Х	Х	Х	Х
Transport Department of Liguria Region	Transport/Mobility Department at regional level	Х	Х	Х	Х
Culture and Tourism Department of the Municipality of Genoa	Tourism (city department)	Х			X
Environment, Health, Energy Department of the Municipality of Genoa	Energy Utilities		X		
Civil Protection of the Municipality of Genoa	Civil Protection of the Municipality of Genoa	Х			
Porto Antico S.p.a. (or Fiera di Genova S.p.A.)	Event Organizers				Х
FIAB (Bicycle friends	Bikers				Х

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Italian league)			
Pedestrian friends Association of Genoa	Pedestrians		Х
Consumers Association	Private Drivers/Consumers		Х
Consumers Association (for commuters)	Commuters/Public transport users		Х

Table 8 Participation in Genoa Living Labs

4.4 City of Tampere

4.4.1 Establishment of LL Leaders and description of participants roles

Living Lab Leading Partner: Tampere

Living Lab leader:

- Tampere Living Lab Leader: TRE Elli Kotakorpi
- Tampere Living Lab Partner: TUT Angelica Nieto Lee

Living Lab participant's partners and roles:

- TRE will lead the LL in Tampere city, supported by TUT.
 - TRE will coordinate the definition and adaptation of LL methodology to be applied to Tampere pilot with TUT.
 - TRE will organize the workshops for the LL as planed in the DoW, and will contribute to localize the materials to be used in T7.3 workshops so as to gather feedback about the MoveUs services.
 - will contribute with the • Tampere provision of LL stakeholders/users/participants.
- TUT role in Tampere pilot:
 - TUT will support TRE in the definition and development of Tampere pilot, including the services and main functionalities.
 - TUT will contribute with the energy-efficient methodology and the integration of the developed module in the pilot.
 - o TUT will provide technical material for the different workshops organized by TRE thought out the project.
 - TUT will participate in the different LL workshops as technical support for TRF.

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4.4.2 Description of the Living Lab environment and goals

4.4.2.1 Snapshot about the living lab environment:

Tampere is the third biggest City in Finland with about 220 000 inhabitants. Tampere is located in the middle part of Finland, 180 kilometers north of Helsinki, the capital of Finland. The location of the city is difficult from the point of view of traffic. The city center is situated in a narrow neck between two big lakes (Näsijärvi and Pyhäjärvi) and there are only few possibilities to travel in east-west -direction. City of Tampere has a long history with smart mobility and in Tampere mobility management; traffic management, telematics and smart mobility services have been used for keeping the traffic network efficient and safe.

4.4.2.1.1 Tampere Smart mobility

City of Tampere has long experience in leading PPP-model in smart mobility. ITS Factory (http://www.hermiagroup.fi/its-factory/) was launched in 2012 after many years of cooperation in smart mobility with local authorities, universities, research institutes and companies. ITS Factory is a Tampere-based innovation, experimentation and development environment that seeks solutions to these challenges through public and private sector co-operation. ITS Factory and the goal to develop smart mobility are stated in the new Mayor Programme of City of Tampere.

ITS Factory developer community consists of ca. 150 registered developers and some enterprises that utilize ITS Factory traffic data and create applications, products and services for mobility in Tampere region.

City of Tampere has used ICT systems and services for many years. Currently the second generation of real time Public Transport information system and real time parking information system is in use. New Real time Public Transport system is based on location and a smart background system. All buses send every second their location and information on which line they are driving. The system calculates if buses are on time and send stop time predictions to variable message signs and transmit priority requests to traffic light controllers.

Finnish Transport Agency has a traffic management center in Tampere. Its main task is to control and develop traffic management in the government's traffic lanes and to answer road users' calls. In the center there is also one operator from City of Tampere. His tasks are i.a. monitoring traffic lights, informing Public Transport and operating real-time traffic information system.

Tampere was chosen as a leader and coordinator in nation-wide seven year INKA (innovative cities) project in the theme Smart City and renewing industry. Tampere will make a plan and coordinate Smart City and Smart mobility actions in Finland.

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4.4.2.1.2Living Lab goals:

The main goals of developing the traffic system in Tampere are to increase the share of walking, cycling and public transport by developing for example cycling paths, public transport routes and bicycle parking spaces (Tampere City Strategy 2025). The increase in the share of sustainable mobility is also facilitated by opening traffic data, both real time and static in standard modes.

The MoveUs Tampere pilot will complement these existing efforts by providing mobility information in an integrated and easy-to-use way, through user's mobile devices. The MoveUs services in Tampere will integrate cycling, public transport and car route information with real-time traffic and weather data. In the living labs technical stakeholders and end-users are actively engaged in order to design the services according to their needs. The participants will evaluate the services and also give ideas for further improvement.

4.4.3 Selection criteria for LL participants and planning for their incorporation

ТҮРЕ	POSSIBLE PARTICIPANT		
Smart Cities Department/Agency	INKA (innovative cities) project organization, City of Tampere and regional municipalities and Eco-2 project (EcoEfficient Tampere 2020 project) organization, City of Tampere		
Open Data Department/Agency	ITS Factory & Open Tampere and Open Data Tampere region projects, City of Tampere.		
Public and Private (taxi, car/bike sharing) transport Operators including Flight/Airport Operators	Tampere Public Transport & Tampereen Aluetaksi Ltd.		
Traffic Operators/Managers	Traffic management center, The Finnish transport agency		
Mobility Agencies	EcoFellows Ltd. Produces information, guidance, educational, and expert services on the field of sustainable way of living and operating. Company is committed to promote sustainable way of living in all of its actions.		
Transport/Mobility Department at urban and/or regional level:	Center of Economic Deployment, Transport and the Environment in Tampere region.		

Classification of possible participants:

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Tourism (city department/tour operators)	Visit Tampere Tourist Information office
Parking Operators	Finnpark
Service Providers in Smart Cities solutions	ITS Factory
Local Research Centers and Academies	VTT Tampere, University of Tampere, Technical University of Tampere
Event Organizers	Tampere event office
Pedestrians/Bikers	Cyclists of Tampere association
Commuters/Public transport users	Tampere citizens

Table 9 Participants in Tampere Living Lab

4.4.4 Project Milestones

Project Milestone: MS6. Ends M14.

- What: Workshops with selected technical stakeholders inside the LLs. For evaluating the LL processes and the services specifications (WP3). Co-creation phase. Feedback to be transferred to WP5.
- Type/profile of LL participants:
 - ITS Factory and Open Tampere & Open Data Tampere region projects, City of Tampere. These stakeholders are providing the data for MoveUs services.
 - Public Transport Department, City of Tampere. They are the experts in public transport in Tampere and can give valuable input on how the share of public transport can be increased and what aspect should be taken into account in MoveUs Services.
 - Tampere City Transport (TKL). Provider of bus transport in Tampere (company owned by the city).
 - Bus companies Paunu Ltd and Länsilinjat ltd. They operate some of the bus lines in Tampere.
 - EcoFellows Ltd. Ecofellows is a company owned by the city of Tampere. They host the mobility management unit. They have expertise on what kind of services can be used to change citizens' mobility patterns.
 - Traffic Operators/Managers: Traffic management center, The Finnish transport agency.
 - Local research centres and academia: University of Tampere, Tampere Technical University and VTT. Researchers working in the field of smart mobility
 - Tourism (city department/tour operators): Visit Tampere Tourist Information office

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Project Milestone: MS12. Ends M16.

- What: Workshops with selected technical stakeholders inside the LLs. For evaluating the Energy-efficiency methodology and progress in WP4. Co-creation phase. Feedback is transferred to WP4.
- Type/profile of LL participants:
 - Ecofellows. Ecofellows is a company owned by the city which specializes on energy efficiency and consumer related projects. They can give valuable input when evaluating the energy-efficiency methodology.
 - ECO2 Eco-efficient Tampere 2020 -project. A city of Tampere project working on energy efficiency and climate issues.
 - Public Transport Department, City of Tampere. They can share their expertise on the energy consumption of public transport.

Project Milestone: MS14. Ends M24.

- What: Workshops with selected technical stakeholders inside the LLs. For evaluating the platform modules and integration (WP5). Co-creation phase. Feedback is transferred to WP6.
- **Type/profile of LL participants**: Same participants as in the first workshop (MS6. Ends M10.) + ICT Technology providers.

Project Milestone: MS20. M28-M31 / MS22. M32-M35.

- **What**: Multi-disciplinary Workshops in the MoveUs Living Labs: 1st and 2nd iteration with users for evaluating the MoveUs services
 - User-experience with the MoveUs platform and service to fine-tune the technological solutions
 - Energy savings, including GHG reductions
 - Joint Evaluation-Exploitation workshops to:
 - ✓ Maximise stakeholders engagements;
 - ✓ Assess how results from Evaluation impact willingness to pay, cost effectiveness and sustainability of the MoveUs Platform
 - Habit-change and satisfaction
- Type/profile of LL participants:
 - A group of end users (commuters, public transport users, cyclists...), recruited through local NGO's and also through the City itself (city employees).
 - $\circ~$ City of Tampere Public Transport. Feedback and comments on services.
 - ITS Factory.
 - Event Organizers: Tampere event office
 - Cyclists: Cyclists of Tampere association

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• Tampere tourism office. They can provide the perspective of tourists.

4.4.5 Specification of tasks to recruit users (motivation strategies) and engage in the whole MoveUs LL life

The city of Tampere Living Lab leader has existing close cooperation with most of the stakeholders to be recruited. They will be contacted through email, phone and personal meetings. They will be briefed about the content of MoveUs project and Tampere pilot and then asked to join the living lab. The participants will get information on how the project and Tampere pilot will benefit them, which will then encourage them to participate. Some examples of the motivations for some stakeholders:

USER	ACTION TO ENROL IN LL
EcoFellows	EcoFellows can get a new tool for their mobility management work
City of Tampere Public Transport	The customers of Tampere public transport can get new personalized, gps-based and real-time applications, services and products.
Traffic management center, The Finnish transport agency. Traffic management operators	
End users	Recruited through local NGO's and also through the City itself (city employees).

Table 10 Tasks to recruit users for Tampere Living Labs

4.4.6 Validation Stage Participation

Participant Organization	Type of participant	MS6 : Evaluation of processes and services	MS12: Evaluation of energy efficiency methodology	MS14: Evaluation platform modules and integration	MS20 & MS22: Workshops for evaluating MoveUs services
ITS Factory	Smart mobility department / Open data department	Х	Х	Х	Х
Open Tampere Region Project	Open Data Department	Х		Х	
Tampere Public Transport	Public transport department	Х	х	Х	Х
Ecofellows	Tampere Mobility management project	Х			х

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Ecofellows	CEO of ecofellows, expert on energy efficiency	Х	Х		
ECO2 project	Climate and energy project of the city	Х	Х		
Tampere City Transport	Public transport provider	Х	Х		Х
Länsilinjat	Bus operator	Х	Х		Х
Paunu	Bus operator				Х
University of Tampere	Research on smart mobility	Х		Х	
Visit Tampere Tourist information office	Tourism office	Х			Х
Tampere cyclists organisation	Cyclists	Х			Х
NGO's	End users				Х
City of tampere	End users				Х
Traffic Management Centre		Х			

Table 11 Participation in Tampere Living Labs

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5 Preparation of Iteration **#1** workshops

5.1 Planning of workshops. Iteration #1 context

The iteration #1 is the first of the Living Lab workshops in the context of the Living Lab Methodology and is part of Cycle1 for Concept design in WP7 activities (MoveUs Living Labs & Community Building), as detailed in Figure 7 below. This iteration of workshops has the goal of obtaining feedback of the whole Living Labs process, including activities from WP7 and WP9 (Multi-disciplinary Workshops in the MoveUs Living Labs), and obtain feedback on the services specifications defined in each one of the three pilot cities.

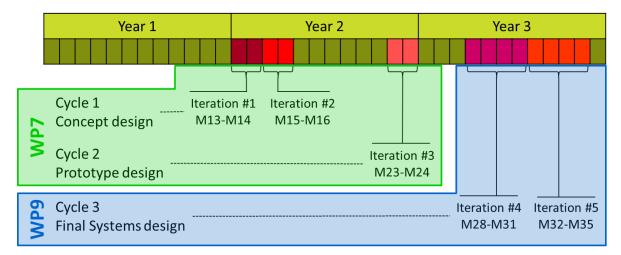


Figure 7 Timeline of planned workshops in MoveUs project

5.2 Communication

The communication plan and materials are tailored according to the needs and objectives of the corresponding workshops.

The communication for the first iteration of workshops consists of the following steps and materials:

- Participants are sent formal invitation (either by email, telephone or postal delivery) to the workshops according to the templates provided for that purpose. Attendance confirmation is requested.
- During the workshop, informative material about the objectives of the project, the Living Labs processes and workshops to which they are invited and detailing of what is the expected role of the LL participants attending.
- Specific presentations, with explanation of the issues to be validated by the LL community in the corresponding workshop activities. In this first iteration,

these presentations are about the Living Lab processes and the specifications of the defined city services.

5.3 Workshops execution and materials

Specific guidelines and material will be designed for each iteration workshop in the project. For comparability of the results, all the pilot cities have to follow the same structure (agenda, general presentations, questionnaire, etc.).

To ensure this comparability the pilot cities have available the guidelines for the first iteration of workshops (see ANNEX VII. Guidelines 1st Iteration workshop) where the whole process is defined, including the materials to be used for the invitation, for running the workshops, for collecting the feedback and reporting towards WP7 and the other affected project Work packages. The guidelines also include a guide for the supporting documentation package, as well as an overview of the agenda and the related supporting material to be used in each slot.

Some materials for the workshops have to be produced exclusively for each pilot. In this first iteration it is the case of the presentation of the city pilot services specifications, that will detail the functionality of the services designed to cover the Use Cases in every pilot.

As part of the preparation activities, Genoa city has conducted a Kick Off meeting for the launch of its Living Lab. More details are provided in ANNEX VIII. Genoa Living Labs Kick Off.

5.4 Evaluation and feedback

The evaluation of the workshops is based on the feedback collected during the corresponding Focus Groups organized at each pilot site. For this reason some support materials have been specifically designed,

- Questionnaire to collect demographic information from workshop participants, and to identify participants in the template for analysing the answers (Word template). Available at ANNEX III. Questionnaire for collecting demographic information
- Template to analyse responses, with one sheet for every focus group question (Excel template). Available at ANNEX V. Template to analyse responses from focus group
- Synthesized Report Focus Group, collecting some formal data from the Focus Group, and the summary of answers for every question raised during the Focus Group (Word template). Available at ANNEX VI. Synthesized Report Focus Group

The synthesized report from the focus group will be distributed to the corresponding work packages to take into account the corresponding feedback. In

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this case to WP7 for the living labs processes and to WP3 and WP5 for the services specifications.

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6 Conclusions

The activities carried during the first year of the Living Labs have been preparatory, in terms of setting-up the different Living Labs in the pilot cities, and to adapt the FormIT methodology to run the defined workshops. The most tangible outcome is the preparation of the first workshops, which after their execution will provide the first feedback for the Living Labs processes and for the services specifications for every pilot city. It will be in the next periods where specific feedback and conclusions will be collected.

So far, two of the pilots have started contacts with stakeholders. In the case of Madrid a first contact with professional stakeholders was made in order to obtain information related to requirements for the creation and provision of mobility services, based on a survey activity.

In the case of Genoa city, a Kick off meeting was conducted for the launch of its Living Lab. The objective was to present for the first time the MoveUs Project and the living labs' goals and methodology to the target stakeholders. It was an opportunity to meet the stakeholders that provided significant contributions based on a brain-storming process.



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D7.1.11st Report on the Set-up of MoveUs **MOVE US**

Living Labs demonstrators

7 References

- [1] A. Ståhlbröst, B. Bergvall-Kåreborn, M. Holst and A. Sällström, "FormIT users as catalysts for innovative IT solutions," CDT – Centre for Distance-spanning Technology and Social Informatics at Luleå University of Technology, 2010.
- [2] Wikipedia, "Madrid," [Online]. Available: http://en.wikipedia.org/wiki/Madrid.
- [3] IDC, "Smart Cities Analysis in Spain 2012 The Smart Journey," September 2012. [Online]. Available: http://www.portalidc.com/resources/white_papers/IDC_Smart_City_Analysis_ Spain_EN.pdf.
- [4] G. Blank, "Conducting A Focus Group," [Online]. Available: http://www.cse.lehigh.edu/~glennb/mm/FocusGroups.htm. [Accessed June 2014].
- [5] Eliot & Associates, "Office of Assessment, Trinity College," [Online]. Available: http://assessment.aas.duke.edu/documents/How_to_Conduct_a_Focus_Group. pdf. [Accessed June 2014].



8 ANNEX I. Agenda 1st Iteration

WORKSHOP SESSION FOR EVALUATING LIVING LABS PROCESSES AND SERVICES SPECIFICATIONS

DATE:

[Day and date in dd.mm.yyyy format]

PARTICIPATION FEE: FREE OF CHARGE

VENUE:

[Name of your institution] [Address and details of your institution]

CONTACT PERSON:

[Name of contact person] [Position of contact person] [Email of contact person] [Phone number of contact person]

Scope of the Workshop Session

MoveUs is a Collaborative project supported by the European Commission launched in October 20013. The consortium includes 10 institutions from three countries (Spain, Italy and Finland) that aim to radically change the European users' mobility habits by offering intelligent and personalized travel information services, helping people to decide the best transport choice and providing meaningful feedback on the energy efficiency savings obtained as a result. Recommendations supported by incentives will be provided to foster 'soft' mobility modes and the use of shared and public transport modes (buses).

The aim of this workshop session is to obtain input on the Living Labs processes and on the services specifications for the city of [name of the city] in order to reduce the risks involved in the services development at the mobility functional level. The workshop will give participants the opportunity to meet other stakeholders with similar interests and start exchanging knowledge and experiences with them.

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WORKSHOP SESSION FOR EVALUATING LIVING LABS PROCESSES AND SERVICES SPECIFICATIONS

Time	Description
10:00 - 10:10	Welcome Speech and Introduction to MoveUs project
10:10– 10:25	Living Labs objectives and processes presentation
10:25 – 10:50	[Name of the city] pilot services specifications presentation
10:50 – 12:20	Focus group interview to evaluate Living Lab processes and pilot services specifications
12:20 – 12:30	Wrap up – Closing

This workshop is organized with the support of the MoveUs project. This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement no 608885.



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9 ANNEX II. Formal Invitation 1st Iteration

Dear Sir / Madam,

MoveUs project and [Name of your institution] would like to invite you to participate in the **workshop for the evaluation of Living Labs processes and the services specifications.** This workshop is addressed to stakeholders interested in providing their feedback on the mobility services to be implemented in the framework of the MoveUs project. The main goal of the MoveUs project is to design, implement, pilot, evaluate, disseminate and exploit a number of novel ICT tools for smart mobility in the context of smart cities, directly addressing real users' needs while promoting a habit-change in their daily lives.

MoveUs is a Collaborative project supported by the European Commission launched in October 20013. The consortium includes 10 institutions from three countries (Spain, Italy and Finland) that aim to radically change the European users' mobility habits by offering intelligent and personalized travel information services, helping people to decide the best transport choice and providing meaningful feedback on the energy efficiency savings obtained as a result. Recommendations supported by incentives will be provided to foster 'soft' mobility modes and the use of shared and public transport modes.

The aim of this workshop session is to obtain input on the Living Labs processes and on the services specifications for the city of *[name of the city]* in order to reduce the risks involved in the services development at the mobility functional level. The workshop will give participants the opportunity to meet other stakeholders with similar interests and start exchanging knowledge and experiences with them.

We would highly appreciate your participation in the MoveUs workshop session and kindly ask you to confirm your participation by [*day*, *month*, 2014] by e-mail at [*contact person email*] or by phone at [*contact person phone*].

For further information about the MoveUs project, please visit the MoveUs website at <u>http://www.MoveUs-project.eu</u>.

Yours sincerely,

[Name of contact person]

[Position of contact person]

[Email of contact person]

[Phone number of contact person]

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Questionnaire for collecting **10ANNEX** III. demographic information

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				Iteration Wo	rkshop numbe	r		
				Place/city				
				Date	Date			
				Participant II)			
email (optional):								
email (optional): Gender:				Ag	je:			
email (optional): Gender: Job Title:				Ag	je:			
email (optional): Gender: Job Title: Country:		a. 1. 19	-			Cline	1 P - 1 1	011-00
Participant Name (optional): email (optional): Gender: Job Title: Country: Stakeholder type (select one):	Mobility data provider	Mobility management bodies	Transport operator	Energy efficiency agency or consulting firm	ge: ICT technology provider	Citizen	Visitor / tourist	Other
email (optional): Gender: Job Title: Country: Stakeholder type	provider	management		Energy efficiency agency or consulting	ICT technology	Citizen		Other

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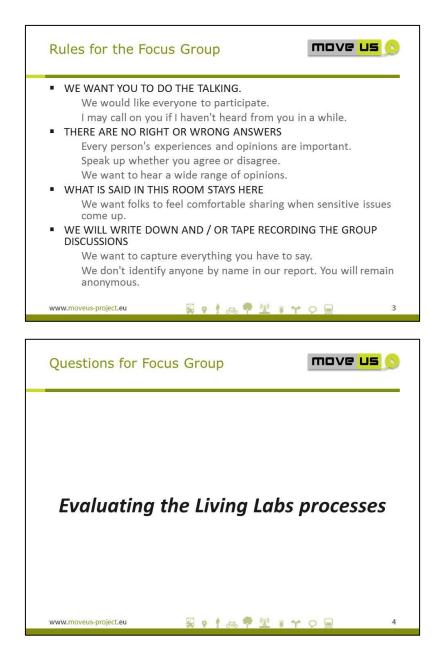


11ANNEX IV. Focus Group Rules and Questions

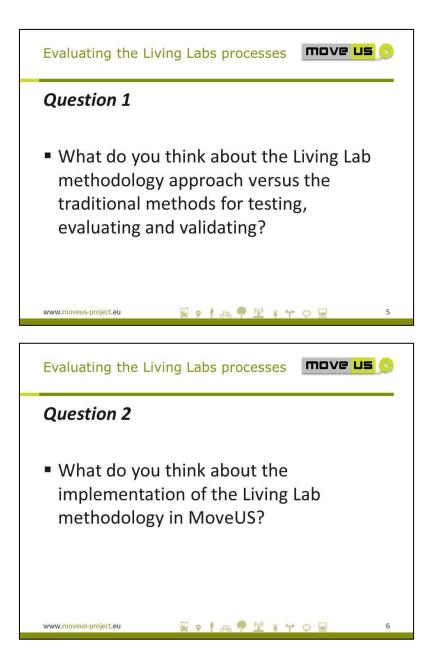
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O.	ICT cloud-based platform	
-9	and mobility services available universal and safe for all use	le, rs
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*	1 st Iteration Focus Group	
-0	questions	
	www.moveus-project.eu	
Purpose	of Focus Group activity	move <mark>us</mark> 🕥
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As deta	ailed in the Living Labs Objective	es and
	ses presentation, you, as stakeh	
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been in	nvolved in this focus group to ev Labs processes and to verify the	valuate the
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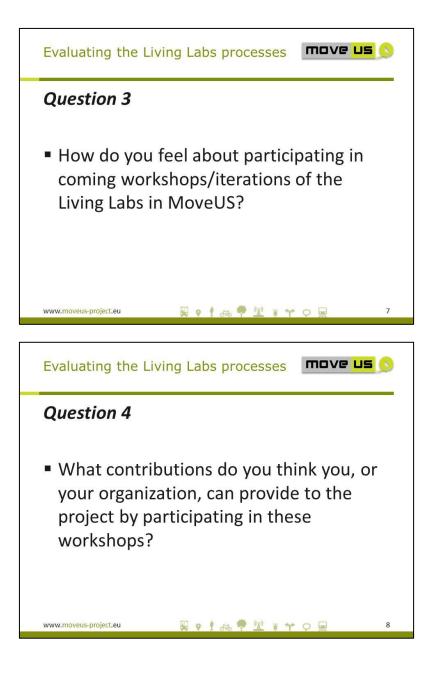


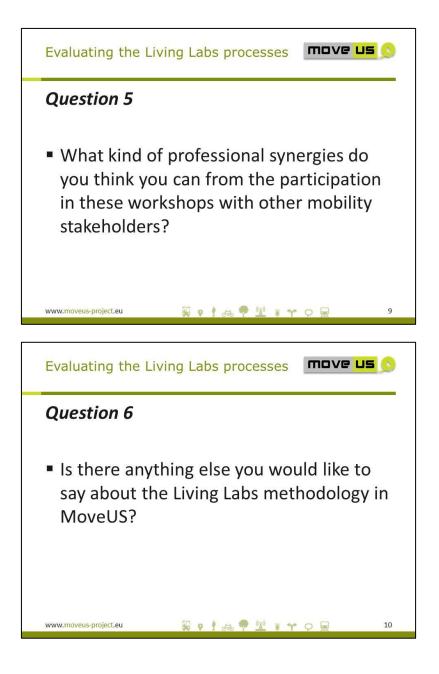
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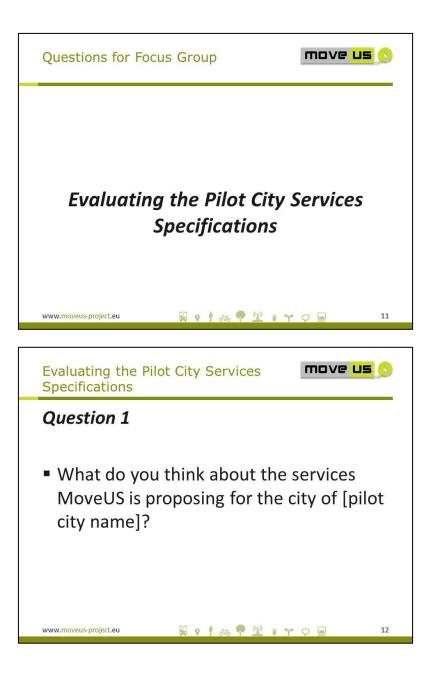


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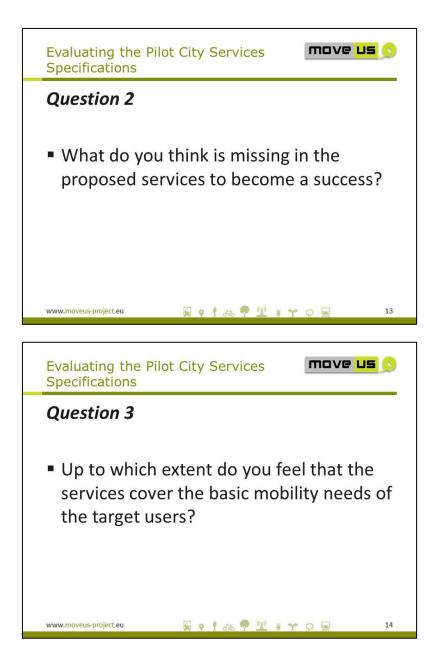




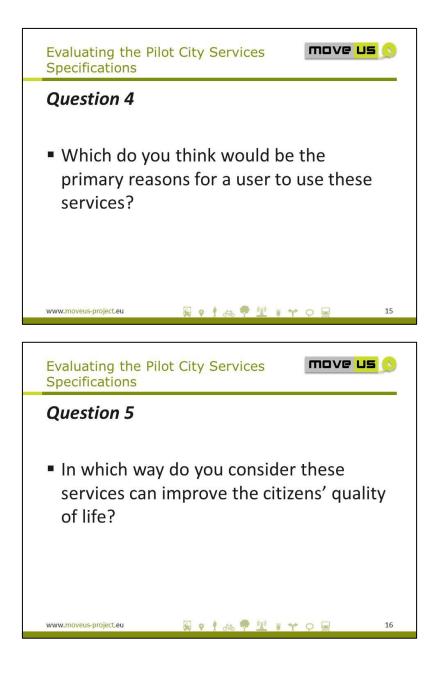




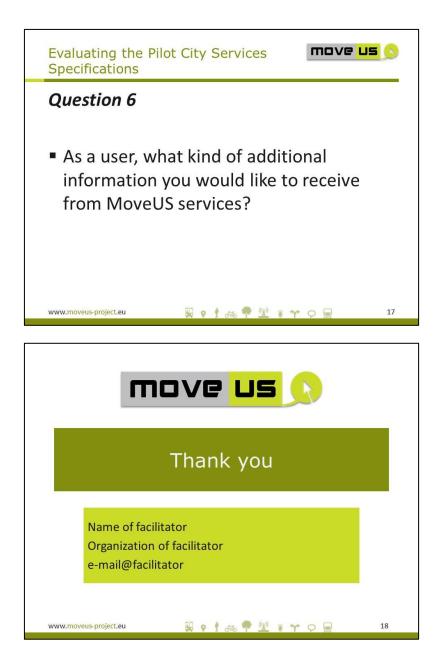
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12ANNEX V. Template to analyse responses from focus group

For the analysis of the responses there is a excel template available. The first sheet is to record generic data on the Focus group, as per the Figure 8 below

	А	В	С
1	Iteration Workshop number	1st Iteration	
2	Place/city		
3	Date		
4	Number of participants		
5			
6			

Figure 8 Record sheet to collect generic data on the Focus Group

To collect and analyse the responses there is one sheet per question with a layout that can be appreciated in Figure 9 below. Answers are placed line by line, classified, sorted and ranked.

	А	В	С	D	E	F
1	Question 1	: What do y	ou think aboι	It the Living Lab methodology approach versus the traditional methods for tes	ting, ev	valuating and validating?
2					C	ODING CATEGORIES
3					Α	"category description"
4					В	"category description"
5					С	"category description"
6					D	"category description"
7					E	"category description"
8					F	"category description"
9					G	"category description"
10						
11						
		Category	Participant			
12		Code	ID	Responses		
13						
14						
15						
16						
17						
18						
19						
20						
14 - 4	► ► Recor	rd Q1 LL /	Q2 LL / Q3 LL /	/Q4 LL / Q5 LL / Q6 LL / Q7 Services / Q8 Services / Q9 Services / Q10 Services 🛛 🖣		

Figure 9 Template sheet to collect and analyse responses to answers

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13 ANNEX VI. Synthesized Report Focus Group template

SYNTHESIZED REPORT FOCUS GROUP

Formal Data:			
Name of Institution organizing the event:			
Date of event:			
Location of event:			
Number of Participants:			
Type of participants	Number of participants		
Mobility data provider			
 Mobility management bodies 			
Transport operator			
Energy efficiency			
agency or consulting firm			
ICT technology provider			
Citizen			
Visitor / tourist			
Other			
Name of facilitator:			
Any other supporting person? If yes, pl. list the name and function of this person:			

Synthesized focus group data

Questions for Focus Group on evaluating the Living Labs processes

1. What do you think about the Living Lab methodology approach versus the traditional methods for testing, evaluating and validating?

<Short paragraph summarizing findings>

<Ranking of answers per category>

<Add some quotes from the most representative answers>

2. What do you think about the implementation of the Living Lab methodology in MoveUs?

<Short paragraph summarizing findings>

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Living Labs demonstrators

<Ranking of answers per category>

<Add some quotes from the most representative answers>

3. How do you feel about participating in coming workshops/iterations of the Living Labs in MoveUs?

<Short paragraph summarizing findings>

<Ranking of answers per category>

<Add some quotes from the most representative answers>

4. What contributions do you think you, or your organization, can provide to the project by participating in these workshops?

<Short paragraph summarizing findings>

<Ranking of answers per category>

<Add some quotes from the most representative answers>

5. What kind of professional synergies do you think you can from the participation in these workshops with other mobility stakeholders?

<Short paragraph summarizing findings>

<Ranking of answers per category>

<Add some quotes from the most representative answers>

6. Is there anything else you would like to say about the Living Labs methodology in MoveUs?

<Short paragraph summarizing findings>

<Ranking of answers per category>

<Add some quotes from the most representative answers>

Questions for Focus Group on evaluating the Pilot City Services Specifications

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Living Labs demonstrators

7. What do you think about the services MoveUs is proposing for the city of [pilot city name]?

<Short paragraph summarizing findings>

<Ranking of answers per category>

<Add some quotes from the most representative answers>

- 8. What do you think is missing in the proposed services to become a success?
- <Short paragraph summarizing findings>
- <Ranking of answers per category>
- <Add some quotes from the most representative answers>
- 9. Up to which extent do you feel that the services cover the basic mobility needs of the target users?
- <Short paragraph summarizing findings>
- <Ranking of answers per category>
- <Add some quotes from the most representative answers>
- 10. Which do you think would be the primary reasons for a user to use these services?
- <Short paragraph summarizing findings>
- <Ranking of answers per category>
- <Add some quotes from the most representative answers>
- 11. In which way do you consider these services can improve the citizens' quality of life?
- <Short paragraph summarizing findings>
- <Ranking of answers per category>
- <Add some quotes from the most representative answers>

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Living Labs demonstrators

- 12. As a user, what kind of additional information you would like to receive from MoveUs services?
- <Short paragraph summarizing findings>
- <Ranking of answers per category>
- <Add some quotes from the most representative answers>

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14ANNEX VII. Guidelines 1st Iteration workshop

14.1 Introduction

14.1.1 Scope

The aim of the present document is to provide guidelines for the first iteration of Living Labs workshops for evaluating the Living Labs processes and the services specifications (WP3). These guidelines will guide the MoveUs pilot cities partners to attract a core group of representatives from mobility stakeholders, present them the LL processes and the pilot services specifications to gather their input and reduce the risks involved in the services development and learn more about the stakeholders.

14.1.2 Audience

This report is addressed to MoveUs Consortium for organizing and structuring their first iteration of Living Labs workshops.

14.1.3 Structure

Chapter 14.2 Overview of workshops: Contains an overview of this document, as well as providing a summary of the process of organizing the workshops whilst identifying the associated target groups.

Chapter 14.3 Proposed Agenda: provides the specific guidelines to the project partners who are going to organise the Workshops.

14.2 Overview of workshops

In the context of the MoveUs project, a set of local workshop events will be organized by the consortium in order to gather the inputs of the stakeholders in the concept design phase to:

- evaluate the LL processes,
- evaluate the services specifications from WP3
- create a community that will extend in the next iterations of the Living Labs, and little by little assist its members in taking up the services provided by MoveUs,

thus offering intelligent and personalized travel information services to the people.

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Living Labs demonstrators

During the first iteration events, the consortium will provide the stakeholders information about the project scope, the Living Labs processes and the services selected to be deployed in each pilot city. These services will help people to decide the best transport choice and will provide meaningful feedback on the energy efficiency savings obtained as a result. Recommendations supported by incentives will be provided to foster 'soft' mobility modes and the use of shared and public transport modes.

The aim is to build a community of interested stakeholders who can be involved in the following iterations and actively engage in the project, by providing inputs from their experience in the mobility and gain new knowledge from the proposed mobility services. The workshops are multipurpose events, focusing on both evaluation and dissemination. In these events we should encourage and support the development of links, experience exchanges and first discussions on possible collaborations. The participants should be asked to participate in the next iterations, according to their profile, and provide contacts that would be interested to join them.

14.2.1 Ensuring Comparability of the training events in the different countries

For comparability of the results, it is important that all the pilot cities follow the same agenda, with slight adaptations, where necessary. However, the core elements of the events should stay the same (agenda, general presentations, questionnaire, etc).

More specifically, in order to ensure comparability of the results the consortium will:

- Follow the Guidelines provided in this document:
 - Use the invitation email template, "MoveUs_2_INV_Invitation_1st_iteration_LL.docx" and the official Invitation, "MoveUs_1_AGN_Agenda_1st_iteration_LL.docx" (to attach or/and print and share) to promote the events and attract interested participants in each city.
 - Use the Agenda (list of sessions, duration of sessions, materials to be used), as described in section 14.3 and in ANNEX I - Overview of the Agenda and Supporting Material.
- Use the provided PPT presentations (but adapt them to the LL's own native language).
- Use the same timeline for the events:
 - Preparations for the workshop to take place during September 2014 and organization of workshops to take place in October/November 2014.
- Involve a number of 5 to 10 stakeholders from mobility data providers, mobility management bodies and transport operators.
- Evaluate the event by using the same templates; template to analyse responses from Focus Group, "MoveUs_8_TAR_Template_Analysis_Focus_Group_responses.xlsx"

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Living Labs demonstrators

and the template for the Synthesized Report Focus Group, "MoveUs_9_SRF_Synthesized Report Focus Group.docx"

- Making sure that they have a sufficient number of people that support the event. At least one facilitator/moderator will be needed to conduct the session and in some cases an additional person with knowledge on the pilot city services.
- Use the 1st iteration workshop Session Information Package provided on the MoveUs repository as referenced in section 14.3.2 Supporting Documentation Package.

14.2.2 Proposed general timeline

14.2.2.1 Planning the events

Planning of the events starts on October 2014. This includes deciding and finalizing the following details:

- date and place of the event
- finalizing the agenda
- identification of the target groups addressed
- adapting and sending the invitation to participants "MoveUs_1_AGN_Agenda_1st_iteration_LL.docx".
- receiving the confirmation of 5-10 participants for the workshop

Make sure the following minimum requirements are fulfilled:

- A room with capacity for 10 to 15 people, depending on the number of expected attendants and people from the project, where all the participants and facilitators can be accommodated comfortably.
- Arrange the room so all participants can view one another -- U-shaped seating or all at one table is best. This is important for the Focus Group session.
- Materials for the session
 - \circ Notepads and pencils
 - Computer with presentation
 - Flip chart or easel paper
 - Focus group script
 - List of participants
 - o Markers
 - o Masking tape
 - \circ Name tags
 - o Refreshments
 - Watch or clock

Once you have made all the preparations, downloaded and adapted the necessary documents and guidelines from the MoveUs repository as referenced in section **14.3.2 Supporting Documentation Package**.

Organize the actual event between October and November 2014.

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14.2.2.2 Running the Events – Focus Group [4] [5]

Follow the agenda as indicated in section 14.3.1 Overview of the agenda.

To run the Focus group use the "MoveUs_7_FGQ_Focus Group Rules and Questions.pptx", where the first two slides provide the introduction to the activity, purpose of the group and the rules to be applied, and after that there is one slide per question, 6 questions for the evaluation of the Living Labs processes, and 6 additional questions for the evaluation of the pilot city services.

If possible record the session; if not make sure a second facilitator takes notes of the participants' answers. Carry out the focus group as per the plan and script. Attention to the following items will help ensure success:

- Set the tone; participants should have fun and feel good about the session.
- Make sure every participant is heard; draw out quieter group members.
- Get full answers (not just "we need more money" but "we need more money to hire a receptionist to answer phones").
- Monitor time closely; don't exceed time limits.
- Keep the discussion on track; try to answer all or most of the questions.
- Head off exchanges of opinion about individual items.

Additional general guidelines on how to conduct a Focus Group can be found at <u>http://assessment.aas.duke.edu/documents/How to Conduct a Focus Group.pdf</u>

14.2.2.3 Analysing the results from the Focus Group [5]

In order for all participant comments to be understandable and useful, they must be boiled down to essential information using a systematic and verifiable process. Begin by transcribing all focus group tapes and inserting notes into transcribed material where appropriate.

Clean up transcripts by stripping off nonessential words. Simultaneously assign each participant comment/quote a separate line on the page as well as each new thought or idea therein. Label each line with the participant number as assigned in the Questionnaire Demographic Information.

Each line is then entered into the Excel for analysing the group results "MoveUs_9_TAR_Template_Analysis_Focus_Group_responses.xlsx":

COMPILE

- 1. Add session information to the "Record" Sheet.
- 2. Use the assigned sheet for each question in the template.
- 3. Enter each separate response or idea on a separate line with participant ID attached. The coding column is filled in during the next phase analysis. Now it can be the time to translate the responses into English, or alternatively it can be done at the end of the analysis phase.

ANALYZE

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Living Labs demonstrators

- 1. When all comments have been entered, look for common categories or themes across the entries for each question. The most ideal situation is to ask several people to participate in this process.
- 2. Once consensus has been achieved regarding the best categories for organizing the data, assign a number or letter to each category.
- 3. Then assign the number/letter of the category that best fits to each entry on the sheet.
- 4. Use the Excel 'Sort' function to group entries by the categories you have assigned to them.
- 5. If some entries seem inconsistent for their category, consider re-categorizing or adding another category. It may also be apparent that one or more categories can be collapsed.
- 6. Arrange categories from those with the largest number of entries to those with the smallest.
- 7. Repeat for each question.
- 8. If you have not translated the responses/comments at the end of the COMPILE phase, translate them now.

SYNTHESIZE

Use the template for the synthesized report of the focus group, "MoveUs_9_SRF_Synthesized Report Focus Group.docx".

- 1. Identify category and sub-category heading titles.
- 2. Write a short paragraph summarizing findings for each sub-category.
- 3. Add powerful quotes to each sub-section

14.2.2.4 Reporting the events

The results and materials resulting from the workshops should be collected and sent by email to the following Workpackage leaders, WP3 (Softeco- Michele Masnata), WP5 (TECNALIA - Begoña Molinete,) and WP7 (ATOS – Ricard Munné) by the end of the first iteration of Living Labs workshops (1st half of December 2014). Additional information will be provided to WP8 for dissemination purposes.

Each organizing partner is expected to submit the following documents:

- Filled Template to analyse responses "MoveUs_8_TAR_Template_Analysis_Focus_Group_responses.xlsx"
- Filled Synthesized Report Focus Group "MoveUs_9_SRF_Synthesized Report Focus Group.docx"
- 4-7 pictures from the workshops. Pictures most useful for the purpose of demonstrating what has happened during the workshops on the side of the trainers and also showing participation from attendants.

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14.2.3 Participants

In each organizing city, the workshops have to include a number of participants from the listed categories:

- Representatives of MoveUs project partners, as facilitators / observers
- Facilitators who will conduct the workshop, who might come from the organizations forming the MoveUs consortium
- Representatives of the hosting Pilot City.

14.3 Proposed Agenda

14.3.1 Overview of the agenda

1. Welcome Speech and Introduction to MoveUs project: local partners welcome speech and introduction,

Materials: MoveUs presentation wit PPT project "MOVEUS_General_Presentation_final.pptx"; Questionnaire to collect information and identification of demographic participants "MoveUs_3_QDI_Questionnaire Demographic Information.docx".

Primary aim: Identify and engaging participants

Duration: 10 min

2. Living Labs objectives and processes presentation: Living Labs objectives and overall presentation, with expected role of Living Labs participants. Detailed presentation for Living Labs processes.

Material: Presentation should be given by the facilitator with PPT "MoveUs_5_LPT_Living Labs Objectives and Processes.pptx"

Primary aim: To convey to the audience the purpose of the Living Labs processes so they can provide feedback on these.

Duration: 15 min

3. [Name of the city] pilot services specifications presentation: Presentation with description of the services specifications understandable for the participants involved at the iteration.

Material: Presentation should be given by the facilitator with a specific PPT for the pilot city services.

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Living Labs demonstrators

Primary aim: Describing the pilot city services specifications and make them understandable so the attendants can provide feedback.

Duration: 25 min

4. Focus group interview to evaluate Living Lab processes and pilot services specifications: Based on questionnaire scrip to collect feedback.

Material: Rules and questions for focus group to be displayed by the facilitator during the course of the activity "MoveUs_7_FGQ_Focus Group Rules and Questions.pptx".

Primary Aim: To gather feedback from the experience of the participants. The discussions must be on the mobility functional level, not on the IT level.

Duration: 90 min

5. Wrap up – Closing (10 min)

Dissemination material:

Dissemination material such as the project brochure, the project presentation, and some giveaways can be distributed during the event.

Reference Document: MoveUs brochures, newsletters

14.3.2 Supporting Documentation Package

All the necessary documentation for the organization of the workshops is available for downloading from the MoveUs repository at **MOVEUS > Work Packages** (WPs) > WP7 MoveUs Living Labs & Community Building > 1st Iteration LL Materials: <u>http://ari-</u>

<u>alfresco.atosresearch.eu/alfresco/n/browse/workspace/SpacesStore/ad6708f4-f7bc-11e3-8e77-f510b4c59f2b</u> and comprises of the following documents (sorted by directories):

Index	Material - Iteration #1	Filename
1_AGN	Agenda for the workshop (Word template)	MoveUs_1_AGN_Agenda_1st_iteration_LL.d ocx
2_INV	Formal invitation to workshop (Word template)	MoveUs_2_INV_Invitation_1st_iteration_LL .docx

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Index	Material - Iteration #1	Filename
3_QDI	Questionnaire to collect demographic information from workshop participants (Word template)	MoveUs_3_QDI_Questionnaire Demographic Information.docx
4_PPT	MoveUs project presentation	MOVEUS_General_Presentation_final.pptx
5_LPT	Living Labs objectives and overall processes presentation, with expected role of Living Labs participants. Detailed presentation for LL processes for iteration #1.	MoveUs_5_LPT_Living Labs Objectives and Processes.pptx
6_SPT	Presentation with description of the services specifications understandable for the participants involved at the iteration	PPT to be prepared by WP3 & LL pilot site
7_FGQ	Focus Group Rules and Questions presentation to be displayed during the focus group activity	MoveUs_7_FGQ_Focus Group Rules and Questions.pptx
8_TAR	Template to analyse responses (Excel template)	MoveUs_8_TAR_Template_Analysis_Focus_ Group_responses.xlsx
9_SRF	Synthesized Report Focus Group (Word template)	MoveUs_9_SRF_Synthesized Report Focus Group.docx
10_GI1	Guidelines for 1st iteration of LL workshop	MoveUs_10_GI1_Guidelines_1st_iteration_ LL_v0_3_FINAL.docx

 Table 12 Supporting documentation material

14.4 ANNEX I - Overview of the Agenda and Supporting Material

The table below outlines the provided material for each session.

Session	Time	Material
Welcome Speech and Introduction to MoveUs project	10 min	PPT "MOVEUS_General_Presentation_final. pptx" "MoveUs_3_QDI_Questionnaire Demographic Information.docx"
Living Labs objectives and	15 min	PPT "MoveUs_5_LPT_Living Labs

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processes presentation		Objectives and Processes.pptx"
[Name of the city] pilot services specifications presentation	25 min	Presentation should be given by the facilitator with a specific PPT for the pilot city services.
Focus Group Rules and Questions presentation to be displayed during the focus group activity to evaluate Living Lab processes and pilot services specifications	90 min	PPT "MoveUs_7_FGQ_Focus Group Rules and Questions.pptx"
Wrap up - Closing	10 min	MoveUs FactsheetMoveUs Newsletters
TOTAL	~2,5 h	

Table 13 Overview of agenda and material

14.5 ANNEX II – Script with questions for Focus Group

Questions for Focus Group on evaluating the Living Labs processes

- A) Engagement question:
- 13. What do you think about the Living Lab methodology approach versus the traditional methods for testing, evaluating and validating?
- B) Exploration Questions:
- 14. What do you think about the implementation of the Living Lab methodology in MoveUs?
- 15. How do you feel about participating in coming workshops/iterations of the Living Labs in MoveUs?
- 16. What contributions do you think you, or your organization, can provide to the project by participating in these workshops?
- 17. What kind of professional synergies do you think you can from the participation in these workshops with other mobility stakeholders?
- C) Exit question:
- 18. Is there anything else you would like to say about the Living Labs methodology in MoveUs?

Questions for Focus Group on evaluating the Pilot City Services Specifications

A) Engagement questions:

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- 19. What do you think about the services MoveUs is proposing for the city of **pilot** city name?
- B) Exploration Questions:
- 20. What do you think is missing in the proposed services to become a success?
- 21. Up to which extent do you feel that the services cover the basic mobility needs of the target users?
- 22. Which do you think would be the primary reasons for a user to use these services?
- 23. In which way do you consider these services can improve the citizens' quality of life?
- C) Exit question:
- 24. As a user, what kind of additional information you would like to receive from MoveUs services?



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15ANNEX VIII. Genoa Living Labs Kick Off

Genoa city has conducted a Kick Off meeting for the launch of its Living Lab. The meeting was held on 24th September at the Biblioteca Berio. The main objective of this meeting was to present for the first time the MoveUs Project and the living labs' goals and methodology to the target stakeholders, in particular Civil Protection, transport operators, local public authorizes, ICT and service providers, parking operators and many more stakeholders involved in the first meeting.



Figure 10 Debate among Kick Off attendants

As conclusion, about twenty persons contributed to the success of the meeting. The Transport and Mobility Alderman, Dr. Anna Maria Dagnino, was very impressed with the results. For Genoa's team it has been a wonderful opportunity to meet the stakeholders that they gave a very important contribution in the brain-storming process. In the last part of the meeting, the staff expressed the future challenge and synergies for the MoveUs project.



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Figure 11 Presentation from City of Genoa representative



Figure 12Presentation from Softeco representative

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