URBANITE

Supporting the decision-making in urban transformation with the use of disruptive technologies

Deliverable D2.2

Mapping of stakeholders

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Abstract:	This deliverable will create a mapping of different actors to be involved in the Social Policy Labs in each of the cities/nodes involved in URBANITE.
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V1.0	29/09/2020	Ready for submission	TECNALIA
V1.1	15/06/2022	Format fixing	TECNALIA

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Terms and abbreviations

DoA	Description of the Action
EC	European Commission
ICT	Information and Communications Technology
ITS	Intelligent Transport Systems
KR	Key Result
LTE	Long Term Evolution
LTZ	Limited Traffic Zone
OCR	Optical Character Recognition
SoPoLab	Social Policy Lab
SUMP	Sustainable Urban Mobility Plan

Executive Summary

This document contains the deliverable D2.2 Stakeholder mapping. Its main objective is to carry out the first identification of stakeholders that may be members of the community to be created jointly between the cities participating in the project, as well as those attending the first activity that is going to be carried out as Social Policy Lab (SoPoLab).

Framed in WP2 "Social impact of disruptive technologies", it has a direct relationship with WP6 "Use Cases", where the different use cases hosted in Amsterdam, Bilbao, Helsiniki and Messina will be specified.

For each of these use cases in the four cities, an identification of the relevant stakeholders that potentially can be engaged has been made. This information is used to know in advance the participants in activities such as SoPoLabs and design these sessions according to their characteristics. And also, to lay the foundations as the first members of the community.

This document contains 1) a qualitative study of each of the pilot cities explaining the background, including information regarding the socio-economic and geopolitical particularities of the cities involved in this project, and 2) an initial list of identified stakeholders and their overview situation in the city.

Subsequently, it is detailed how the community of members with similar interests will be created, the activities already programmed that are going to be carried out, how it is planned to stimulate this participation, etc.

As future work, this initial list of stakeholders will be expanded, depending on the needs of the project, barriers or points of interest identified... All this action will help the community to grow and to have more agents involved for future activities in SoPoLabs.

1 Introduction

1.1 About this deliverable

This document is the Deliverable 2.2 "Mapping of stakeholders", lead by Tecnalia, but with the direct collaborations of the partners representing the four cities involved in the project (Amsterdam, Bilbao, Helsinki and Messina). Due to the direct relationship with the use cases of the cities, WP2 and WP6 involved partners have worked collaboratively, especially collecting the information from the pilot cases.

All the content of this deliverable and the information collected for developing it is public and open for public dissemination.

1.2 Document structure

The document is structured as follows:

Chapter 2: *Introduction and justification*.

Chapter 3: *Urban mobility / Project contextual info*.

Chapter 4: *Pilot cities and their Stakeholders*. This chapter includes a section for each of the cities participating in the project. For each of them, it exposes some information regarding the socio-economic and geopolitical particularities of the cities involved in this initiative.

Also, a shortlist of the main stakeholders that have been identified for each pilot is included. This list indicates additional information per stakeholder such as main activity, role, issues/problems (main problems the stakeholders face), interest in the project, expected benefits, target group, expected participation.

All this collected information will allow a more in-depth knowledge of the participants or community members to be created in the project.

Chapter 5: *Community building*. The methodology for the creation of a stakeholder community is specified in this section. The co-creation approach and the different activities that will be carried out for its dynamization, both face-to-face and virtual, are explained, as well as initiatives to increase participation.

Chapter 6: *Conclusions*. Conclusions section after having carried out the stakeholder mapping exercise.

Chapter 7: *References*. Literature review and relevant references taken into account for the development of this deliverable.

2 Introduction and justification

As referred in the URBANITE project Grant Agreement[1], one of the objectives is to "create an in-depth knowledge on the different implications of the use of the disruptive technologies, such as big data analytics, algorithmic techniques, and simulations in the public sector context, as well as a thorough understanding of the impact of the use of disruptive technologies in participants of the mobility and urban transformation value chain with the aim of providing a set of recommendations and lessons learned that will enable public authorities to develop pathways for the introduction of such disruptive technologies".

The main objective to achieve when developing this stakeholders mapping is to have the first step on the building of a community around URBANITE, with common interests, that can contribute with different points of view, needs, barriers, difficulties... before the adoption of disruptive technology by part of the public authorities.

This work is part of the more in-depth knowledge about the current situation in pilot cities, the ecosystem of participants in each one, related to the administrations, citizens, services providers, civil servants, etc.

And to hold this achievement of community building, the establishment of a SoPoLab has been set as Key Result (KR), defined as a thoughtful space where the trust of the society and public servants in technologies can be analysed, and the early outcomes of the project discussed with the main actors of the new urban mobility scenario: citizens, service providers, public servants and policy makers.

3 Urban mobility / Project contextual information

This deliverable is one of the results of the WP2 Social impact of disruptive technologies, which overall goal is to assess the social impact of disruptive technologies in public administrations and to develop new proposals for government processes and decision-making tools. This goal is addressed through the direct contributions of public servants, citizens and other stakeholders in a co-creation process.

As defined in "Task 2.2 Social Policy Lab", in order to gather the vision of all stakeholders related to the impact of disruptive technologies in public administrations, a social policy lab will be set up in the first year of the project to provide a thoughtful space where the trust of the society and public servants in technologies can be analysed, and the early outcomes of the project discussed with the main actors of the new urban mobility scenario: citizens, service providers, public servants and policy makers. The social policy lab will be built upon two pillars:

1) co-creation sessions, both for the policy-related aspects and the design of the platform and

2) the empirical analysis on trust, attitude, impact, benefits and risks of the stakeholders in the use of URBANITE's disruptive technologies.

The first step towards these achievements is the identification and creation of a mapping of all relevant actors sharing services in urban mobility in each of the pilot cities. The result of this activity is presented in the next section.

[1] Grant Agreement 870338 – URBANITE - DoA - Part B - Page 6 of 97

4 Pilot cities and their Stakeholders

This section of the document exposes information regarding the socio-economic and geopolitical particularities of the cities involved in this initiative. This analysis aims to identify the context of the pilot cities where the stakeholders are acting and provides the first step in identifying the possible members of the community to be created throughout the life of the URBANITE project.

Knowing the background of each city, the activities carried out and the actors involved, allowed us to identify the context facets and opportunities for a fruitful involvement of potential community members.

So, a shortlist of all the stakeholders that would be interested in the project activities has been identified. This list of actors is a first step towards the active involvement of participants in the SoPoLab at later stages. Of course, this group of initial names will be growing during the next months of activity, but at this stage, it is necessary to provide a minimum of organizations that can be engaged for having a current snapshot of partner interactions with stakeholders.

The process for obtaining information has been as follows: Tecnalia, as the leading partner for this deliverable, has contacted, with WP6 collaboration, the partners acting on the different pilot cities where the project takes place. These partners are the ones who have first-hand information on the most relevant agents in their contexts and their motivations for being engaged. In many cases, stakeholder identification has been carried out for other research activities/purposes, previous collaborations, or service providers.

All this information on the cities has been collected alongside the definition of the use cases, which will be carried out in each of the four pilot cities involved, for promoting a better understanding of the particularities around identified stakeholders. Therefore, these stakeholders have a direct relationship with the needs, services, problems, or developments of each use case. This is particularly relevant considering that the final purposes of this community building are discussing and boosting the conversation among the participating stakeholders regarding societal aspects (such as trust, attitude and privacy) of using disruptive technologies in the cities (particularly in urban mobility).

4.1 Amsterdam

4.1.1 Amsterdam background

Amsterdam, the capital of the Netherlands, is a municipality with 800.000 inhabitants. The city harbours many creative and technological businesses and has a strong focus on innovation, winning the iCapital award in 2016, with its Amsterdam Approach. This approach to innovation is not solely economically driven and incorporates cooperative strategies involving the quadruple helix. Amsterdam aims to stay a frontrunner in the digital transition of government services and the changing role of government in society. The city recently presented its agenda on the topic “The Digital City”, which focusses on a free, inclusive, and creative city. This agenda includes policy, experiments and guidelines on digital infrastructures, digital rights, and room for creative projects, enabling innovation with the citizen at its centre. The organization and collaboration between commercial, societal and governmental is organized in consortia, such as Amsterdam Smart City. Here parties look at citywide innovation topics and together develop initiatives to tackle urban challenges.

Another topic that is of growing importance in the city is figuring out their data position. This evolving position looks at how to deal with data generated by the city and how data is generated

and used by businesses in co-operation with the city. One of the main ways the city relates to this issue is by developing leading principles on data usage. These principles are collected in the TADA manifest. These six principles on how to deal with data responsibly are designed by the city in collaboration with stakeholders.

Another core issue in Amsterdam is its rapid growth. More inhabitants and visitors lead to increased mobility and traffic issues. In order to deal with this growth, there is a specific focus on *Smart Mobility*. The city has complex traffic streams with massive amounts of bicycles combined with cars and public transport. To manage these traffic issues, there is a need for better data analysis to create sustainable mobility solutions.

https://tada.city/en/home-en/

Amsterdam is currently (June 2020) working on a data strategy, looking for ways to protect better and involve citizens.

4.1.2 Amsterdam stakeholders

These are the stakeholders identified in the city of Amsterdam.

Waag: NGO on public tech. Waag operates at the intersection of science, technology and the arts, focusing on technology as an instrument of social change, and guided by the values of fairness, openness and inclusivity. Role as a project partner. High interest in the project. Civil Society/platform users/neighbor associations target group. Expected participation as "Advisory input": Community has a formal advisory role.

Contact: Sander@waag.org, https://waag.org/

Bits of Freedom: NGO/ lobby on digital rights. Advisor role. Focused in how to involve people?. Moderate/high interest in the project. Civil Society/platform users/neighbor associations target group. Expected participation as "Advisory input": Community has a formal advisory role.

Contact: evelyn@bitsoffreedom.nl, https://www.bitsoffreedom.org/

Dorien Zandbergen/ Gr1p: Foundation on digital society. Advisor role. Moderate/high interest in the project. Civil Society/platform users/neighbor associations target group. Expected participation as "Advisory input": Community has a formal advisory role.

Contact: dorien@gr1p.org, https://gr1p.org/

Fietsersbond: Foundation on bike mobility. Advisor role. Aimed more at recreational cyclist, still commuter who will have more interest in project. Moderate interest in the project. Civil Society/platform users/neighbor associations target group. Expected participation as "Advisory input": Community has a formal advisory role.

Contact: info@fietsersbond.nl, https://www.fietsersbond.nl/

Big Tech companies: Business Companies, Urban Mobility Platforms target group.

Local Tech companies: Business Companies, Urban Mobility Platforms target group.

University of Amsterdam/ Hogeschool van Amsterdam: Teaching activity. Role as potential project partner. Have lots of students and little knowledge yet of data commons. Moderate/high interest in the project.

Contact: https://www.hva.nl/, https://www.uva.nl/

Vervoerregio/ David Uiterwaal en Mark Konst: Metropole Region Amsterdam. Role as a potential project partner. Moderate/high interest in the project. City's administrators, Local Authorities target group. Expected participation as "Advisory input": Community has a formal advisory role.

Contact: m.konst@vervoerregio.nl, https://vervoerregio.nl/

Geert Prins: Ping if you care project. Role as a colleague. Main problems facing: how to involve people? / little data sources on bike mobility in the city. Moderate interest in the project. City's administrators, Local Authorities target group.

Contact: g.prins@amsterdam.nl, https://www.amsterdam.nl/, https://oost-online.nl/ping-if-you-care-de-gemeente-is-aan-zet/

Sjam Jokhan: Datastrategy city of Amsterdam. Role as a colleague. Main problems facing: how to make the data strategy a living document?. High interest in the project. City's administrators, Local Authorities target group.

Contact: s.jokhan@amsterdam.nl, https://www.amsterdam.nl/

Pim Oosterlaken: Legal advisor on data & mobility. Role as a colleague. Main problems facing: what is in the tenders for the new mobility platforms, how can we monitor and evaluate this?. Moderate interest in the project. City's administrators, Local Authorities target group.

Contact: p.oosterlaken@amsterdam.nl, https://www.amsterdam.nl/

Rijkswaterstaat-Marco Martens: City's administrators, Local Authorities target group.

CTO: smart mobility team/ Digital city agenda/ democratisation/ decode: City's administrators, Local Authorities target group.

Johan Feld- Zuidas: City's administrators, Local Authorities target group.

4.1.3 Overview of Amsterdam stakeholder mapping

The stakeholders identified in the city of Amsterdam have the clear trait of being focused on society, in understanding the digital society in technical, political and cultural sense. As explained in point 4.1.1, the two main pillars of stakeholder identification in Amsterdam have been Data Rights and Smart Mobility and under these lines, partners will collaborate with: NGOs focused on public technologies and digital rights, representatives of technology companies, universities that can contribute the collaboration of their students and their studies. And legal advisor in disciplines such as data & mobility, as well as representatives of the city's strategy.

The combination of all of them makes the group with the necessary knowledge and experience for their active and complete participation in the URBANITE project.

4.2 Bilbao

4.2.1 Bilbao background

With an area of 41,60 km2 and around 355,000 inhabitants, Bilbao is located right in the heart of a metropolitan area that extends along the estuary of the Nervión River with a population close to 1 million.

In the last 25 years Bilbao has suffered a significant urban transformation from an industrial economy with heavy industries and harbour facilities to a city based on a service economy. This has helped to balance the city and provide a friendly environment for pedestrians with wider pavements; reduction of on-street car parking in the city centre; traffic light control system to cater to pedestrians; promenades for walking and cycling. Today, 65% of internal movements are produced on foot.

In the framework of the ITS (Intelligent Transport Systems) Plans of the city, Bilbao's investment has been oriented to promote public transport, user-centric information services (e.g. open data policy integrating static and dynamic standardized information), to improve safety and reduce traffic congestion (by means of new traffic management systems) and pollution. The exploitation of the city's IT infrastructure has allowed defining and implementing a modular ITS architecture, ready to grow up and admit any new system.

Due to the orography of the city and the growth population living on the hillsides, Bilbao developed an "Accessibility Plan" focused on facilitating access and mobility in these High Districts primarily for elderly and groups with special needs.

Bilbao has also been working on public-private partnerships to solve the complexities of urban freight delivery.

Recently, Bilbao launched its Sustainable Urban Mobility Plan (SUMP) for the horizon of 2030 with the objectives of:

- Reducing air and noise pollution.
- Improving safety by reducing accidents and fatalities.
- Guaranteeing universal accessibility.
- Improving energy and transport (passengers and goods) efficiency.
- Contributing to the improvement of attractiveness and environmental quality of the city.

In the context of the SUMP, the city has carried out some initiatives like Bilbao 30, to calm the traffic to favour bike mobility and the promotion of Electric Vehicles (EVs) with a new e-bike sharing service, grants for the acquisition of EVs, replacement of some BilboBus's fleet for E-buses, implementation of charging points, and so on.

Bilbao is also deploying a public WIFI network to be upgraded to LTE (Long Term Evolution) communication technology.

Another relevant topic is Zorrotzaurre island project, which is the latest major urban regeneration project to be implemented in Bilbao. The regeneration of Zorrotzaurre represents a balanced and integral project, defined by concepts of sustainability, that recuperates a degraded space and converts it into a new quarter of Bilbao

During the definition of the SUMP, sectorial workshops were conducted bringing citizens, businesses and other stakeholders needs to be considered in elaborating of the measures to be

adopted in the SUMP. In parallel to the launch of the SUMP, the Sustainable Mobility Forum of Bilbao was created as an interactive space (physical and on-line) oriented to different mobility agents to monitor biannually the progress of the SUMP and address sectorial working groups or citizens consultation. https://www.bilbao.eus/blogs/pmus/

4.2.2 Bilbao stakeholders

Sustainable Mobility Forum: City Forum integrating different neighbourhood and business associations and other relevant mobility agents. Forum to interact with business and society for the city SUMP development and monitoring. More dynamic tools and improved methodologies to interact and involve society in the city mobility plans expected. City's administrators, Local Authorities target group.

Contact: foromovilidad@bilbao.eus

Urban Freight Distribution Forum: Forum integrated by agents related to urban deliveries created by the city together MLC to discuss on last mile aspects. Forum to interact and discuss with urban delivery agents

Contact: nrojas@mlcluster.com

BilbaoTIK: Municipal ICT provider. They manage all Communication Infrastructures in the city, exploiting the Informatic Systems and providing hardware and software aspects. As municipal ICT provider, they are subject of adapting/integrating the project developments to the IT infrastructure of the city. Any module/system to be implemented will require their support. They will provide requirements and may implement improvements and additional functionalities to have more advanced systems in the city. City's administrators, Local Authorities target group. Expected participation as "Limited delegation": Partner organizations give limited control over decision making to the community.

Contact: https://www.bilbao.eus/cs/Satellite/transparencia/es/ambitos/entidades-municipales/bilbaotik

Bilbaobizi: Municipal e-bike sharing service. e-bike data provider. As a municipal bike-sharing operator, they could benefit from decisions to promote bike that could increase the number of users and provide an added value service to increase the attractiveness and security of bike mode. Business Companies, Urban Mobility Platforms target group.

Contact: https://www.bilbaobizi.bilbao.eus/es/bilbao/ bilbaobizi@bilbao.eus +34946564905

Bilboko Hiribus: Bilbobus operator. Bus Data Provider. Public Transport operators in the city could benefit from data analytics to better adapt the offer to demand, avoid duplicities in the transport offer, and identify potential multimodal exchanges. Business Companies, Urban Mobility Platforms target group.

Contact: https://www.bilbao.eus/cs/Satellite/bilbobus/es/inicio

Metro Bilbao: Bilbao Metro Operator. Metro Data provider. Public Transport operators in the city could benefit from data analytics to better adapt the offer to demand, avoid duplicities in the transport offer and identify potential multimodal exchanges. Business Companies, Urban Mobility Platforms target group.

Contact: https://www.metrobilbao.eus/

Euskotren: Bilbao Tram Operator. Tram and Train Data providers. Public Transport operators in the city could benefit from data analytics to better adapt the offer to demand, avoid duplicities in the transport offer and identify potential multimodal exchanges. Business Companies, Urban Mobility Platforms target group.

Contact: https://www.euskotren.eus/tranvia

Bizkaibus - Bizkaia County - Mobility Department: Interurban bus operator. Interurban bus data provider. Public Transport operators in the city could benefit from data analytics to better adapt the offer to demand, avoid duplicities in the transport offer and identify potential multimodal exchanges. Policy Makers target group.

Contact: https://web.bizkaia.eus/es/web/bizkaibus

Ibilkari: Car-sharing service provider. As a mobility service provider, they could benefit from measures oriented to promote car-sharing services, analysis oriented to determine pick-up points or to offer routes for intermodal connections.

Contact: https://www.ibilkari.com/ info@ibilkari.com 902 540 399.

Amenabar: Construction company. Company exploiting the intermodal transport station. As a company exploiting the intermodal station, they may benefit from the future implementation of data aggregation models and tools developed by the project to optimize data capture, sharing and analytics. Business Companies, Urban Mobility Platforms target group.

Contact: https://www.construccionesamenabar.com/

IDOM: Consultancy and Engineering Services. City Advisor. As consultant companies they can benefit from project results to better support on the making decision process of mobility politics. Business Companies, Urban Mobility Platforms target group. Expected participation as “Advisory input”: Community has a formal advisory role.

Contact: https://www.idom.com/es/

LEBER: Traffic & Transport Consultancy. City SUMP Advisor. Business Companies, Urban Mobility Platforms target group. Expected participation as “Advisory input”: Community has a formal advisory role.

Contact: http://leber.org/

KAPSCH: Mobility service provider. Traffic Control Centre System Provider. As contractors in charge of municipal services and/or systems management, they may benefit from implementing functionalities that better supports them in integrating data with other systems. Business Companies, Urban Mobility Platforms target group.

Contact: https://www.kapsch.net/es/

ETRA: Mobility service provider. Bus exploitation system provider. As contractors in charge of municipal services and/or systems management, they may benefit from implementing functionalities that better supports them in integrating data with other systems. Business Companies, Urban Mobility Platforms target group.

Contact: https://www.grupoetra.com/

BATURA: Mobility service provider. BilbaoBus app developer. As contractors in charge of municipal services and/or systems management they may benefit from implementing functionalities that better supports them in integrating data with other systems. Business Companies, Urban Mobility Platforms target group.

Contact: https://baturamobile.com/

GERTEK: Mobility service provider. On-street parking service provider. As contractors in charge of municipal services and/or systems management, they may benefit from implementing functionalities that better support them in integrating data with other systems. Business Companies, Urban Mobility Platforms target group.

Contact: http://www.gerteksa.com/

Bizizbizi: City bike users association. As citizens and users of mobility services they may benefit from more dynamic communication channels related to SUMP implementation and from measures and solutions to be implemented supported by data analytics, this should provide a better understanding of mobility demand in the city in the making decision process. Civil Society/platform users/neighbour associations target group.

Contact: https://www.bizizbizi.org/es/inicio/ info@bizizbizi.org +34667462123

Fekoor: Disabled people association. As for the previous stakeholder, the results of the project should provide a better understanding of specific mobility demand in the city. Civil Society/platform users/neighbour associations target group.

Contact: http://www.fekoor.com/ fekoor@fekoor.com +34944053666

4.2.3 Overview of Bilbao stakeholder mapping

As indicated in the background, Bilbao has launched its Intelligent Transport System (ITS) Plan and its Sustainable Urban Mobility Plan (SUMP). This means that a broad group of stakeholders has already been identified in the city, covering numerous areas of interest within mobility in the city and already actively collaborating.

Among those identified, there are: ICT providers, which controls communication infrastructures in the city and informatic systems providing hardware and software aspects; various mobility service providers, with different means of transport in the city (metro, tram, train, interurban bus, car-sharing). For this reason, data on transport use, needs, barriers or problems are known; consultancy companies, which can support the making decision process of mobility politics. Citizens and users of mobility services, users' associations and disabled people association for considering accessibility problems are also onboard.

This group of stakeholders is an excellent ecosystem of actors who will participate and actively collaborate in the project.

4.3 Helsinki

4.3.1 Helsinki background

Helsinki is the Capital of Finland and the centre of the Helsinki Region, a functional urban region of about 1.48 million inhabitants and 767,000 jobs.

The Helsinki West Harbour area and its surroundings is an international transport hub and corridor as well as a long-time development site of transport-related R&D and home of real-life

mobility challenges. Intensive development of the area and growth in transport are challenging the transport system and services to enable smooth and efficient mobility of people and goods.

Jätkäsaari (West Harbour) is a growing passenger and transport harbour and a new residential district construction site, right adjacent to the centre of Helsinki. It is currently the world's largest passenger port. The harbour is the main connection between Helsinki and Tallinn, with growing mobility and a new terminal built in 2017. Annually 1 million private cars travel on the connection.

Jätkäsaari is also a new development site for 18.000 new residents and 6.000 new jobs. Truck freight traffic from and to ferries provide economic feasibility of the ferry routes. A single main road leads in and out of Jätkäsaari. This road feeds directly to the largest car commuting junction (70.000 cars daily) from the city centre to the western suburbs of Helsinki, creating interference.

The site is such that infrastructure investments (bridge, tunnel) are not economically feasible. Also, Jätkäsaari public transport (tram) is out of capacity at peak hours (nicknamed "Hate Tram" in local media).

The Helsinki West Harbor area has its data system around mobility the district catalogued (https://www.hel.fi/hel2/ksv/julkaisut/los_2017-3.pdf), containing a description of open-data sets, real-time data sets, and some closed data sets that are available and/or would be needed towards mobility needs. This catalogue is also the baseline for the project but will be complemented with other data sets from private sources and other sectors' data (like social data).

The city of Helsinki has already launched the LIDO project, which aims to construct a platform for traffic data and tighten co-operation with public servants. The aim is very similar to URBANITE, but the LIDO project is owned by the city of Helsinki. Therefore, the city of Helsinki has already started to build the platform. From the perspective of URBANITE, this means that the city of Helsinki does not need a new platform, but it should rather be an extension to the existing platform.

4.3.2 Helsinki stakeholders

Mikko Lehtonen: Traffic engineer, the City of Helsinki. LIDO project manager, LIDO steering group member and chair. Focused in data not available in a same place, city isn't owning the platforms. High interest in project. City's administrators, Local Authorities target group.

Contact: mikko,j.lehtonen@hel.fi

Katja Moilanen: Traffic researcher, the City of Helsinki. LIDO steering group member. Focused in data not available in a same place, new technical solutions needed. High interest in the project. City's administrators, Local Authorities target group.

Contact: katja.moilanen@hel.fi

Jiri Grönroos: ICT department, the City of Helsinki. LIDO steering group member. High/moderate interest in the project. City's administrators, Local Authorities target group.

Contact: jiri.gronsroos@hel.fi

Hannu Seppälä: LIDO steering group member. Moderate interest in the project. City's administrators, Local Authorities target group.

Contact: hannu.seppala@hel.fi

Marko Mäenpää: LIDO steering group member. Moderate interest in the project. City's administrators, Local Authorities target group.

Contact: marko.maenpaa@hel.fi

Piia Hanhirova: Project manager FVH (SmashHit, Horizon2020). LIDO steering group member. Piia's project is working with MyData in Jätkäsaari. High/moderate interest in the project. 'Others' target group.

Contact: piia.hanhirova@forumvirium.fi

Timo Ruohomäki: Development leader, FVH. LIDO steering group member. Timo is the technical expert and leading IoT team at FVH. High/moderate interest in the project.

Contact: timo.ruohomaki@forumvirium.fi

Eeva Kostiainen: Traffic researcher, the City of Helsinki. LIDO steering group member. Moderate interest in project. City's administrators, Local Authorities target group.

Contact: eeva.kostiainen@hel.fi

Reetta Putkonen: Director of Transport Planning Division. LIDO steering group member. Focused in the fact that the city of Helsinki wants a first version of the platform in Oct. 2020

Contact: reetta.putkonen@hel.fi

4.3.3 Overview of Helsinki stakeholder mapping

The identification of stakeholders has already been carried out because they are already actively collaborating in the LIDO project. The URBANITE project will also benefit from their knowledge and experiences, in the activities in which they participate, and as members of the community. And always focused in the specific objectives: the assessment of social impact of disruptive technologies in public administrations and to develop new proposals for government processes and decision-making by those public servants. So both projects could be aligned.

After analyzing the projects, they can be complementary with respect to the technical solutions, but at the same time with shared know-how by the different stakeholders involved.

4.4 Messina

4.4.1 Messina background

The city of Messina is the third largest city in Sicily with a population of around 250,000. The area is a vital service centre not only for the surrounding municipalities of the province, but also for the Calabria and Straits area. Its particular geographical position makes Messina the gateway to Sicily from the mainland. As a matter of fact, it has always served as a crossroads for Sicily. Messina is the first stop for those who come from the strait. Therefore, the flow of commuters comes from the surrounding area municipalities and from the sea.

Messina presents a linear city style (sea front) that spans over 25 km in length with less than 5 km in width. It owns the port in a unique strategic position in the center of the city as a multimodal hub for the metropolitan/regional network for handling freight, transport passengers from and to the rest of Italy and welcomes nearly half a million vacation visitors a year (cruise ship passengers). The port of Messina is one of the first Italian port that appears in the top ten of European ports for passenger according to the recently published Eurostat survey.

The port area is a centre for logistics and contains both civil and military shipyards. Peculiar to the city of Messina is also the local public transport consisting mainly of buses, tramway and rail transports network and of hydrofoil and ferry boats fleets.

The city of Messina has already running the PON METRO 2014-2020 project (European Structural and investment funds), which is focused on sustainable mobility policies by creating an efficient and interconnected network of alternative ways to the private means of transport, introducing pedestrian services and enhancing the local public transport fleets with electric vehicles with low CO2 emission.

The municipality of Messina is also investing a lot in infrastructure and smart services for the city and citizens. It is proved by the several activities it is carrying on, such as vehicular access detection in LTZ (Limited Traffic Zone) and pedestrian areas, centralized traffic management based on smart lights, micro and macro simulation of traffic flows and analysis, incentives to use public transportation, video surveillance.

To this aims, it has set up an ICT infrastructure to perform the following monitoring activities:

- real time tracking of bus and tram positions in the city;
- vehicular access detection in LTZ (Limited Traffic Zone) and pedestrian areas based on vehicular plate recognition at well identified access gate;
- access detection of trucks moving dangerous goods in the urban area based on OCR video-cameras;
- noise monitoring for traffic degree detection;
- electro-magnetic field monitoring for electro-magnetic pollution detection.
- Bus and tram tracking, and noise and electro-magnetic monitoring activities are at operating speed from several years (the monthly and yearly reports can be seen on the Municipality web site https://trasparenza.comunemessina.gov.it/stato-ambiente.html).
- Vehicular access monitoring-based OCR video-cameras is in a testing stage and will start to operate in May 2019.

4.4.2 Messina stakeholders

The list of relevant agents identified in the city of Messina, and the justification for their choice are the following:

Economic Development Department: Economic development for the Municipality. It expects to have at its disposal socially useful tools for the economic development of citizens. The department works in order to solve problems related to the economic development of the municipality. Interest in context analysis and territorial control permit the department to have a more complete overview of the municipality state. The social co-operation and decision-making ecosystem of Urbanite can help the Municipality decision makers to adopt more efficient tools to optimize resources and choices. City's administrators, Local Authorities target group. Expected participation as "Ownership": Community has overall ownership assets. There are no conditions which have to be met.

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CED: it provides ICT facilities for the whole municipality. ICT Technical Unit. The department is working to improve his offer for increasing the efficiency in municipality process and for better services leveraging ICT facilities. Interest in bringing innovation in ICT infrastructures and services to support new generation municipality processes. Expected benefits by investigating

challenging technologies exploiting new computing paradigms and services. Best practices in using new technologies in the domain of urban mobility. Policy Makers target group. Expected Participation as "Control": Community has control over all activities, but only within conditions laid out in contractual agreements.

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Urban Mobility Department: it deals with the monitoring of the road network and the city environment; it would like to improve the performance of its work through innovative tools. Territorial Information System (SIT). The department is working to improve his offer for a better service to population and technicians in the field of urban planning, trying to modernize communication, elaboration and co-operation tools. Urban Mobility Department is interested in one platform or ecosystem that could help technicians to solve pollution and noise problems and to prevent possible dangerous situations by using data harvested in all the municipality territory. The benefit expected is the straightforward approach to investigate problems or possible dangerous situations by the use of modern and smart tools in terms of prediction and risks analysis too. Policy Makers target group. Expected participation as "Genuine consultation": Community is properly and genuinely consulted.

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ATM: Azienda Trasporti Municipalizzata, involved in improving public transport service to citizens. Public transport service company. "The company does not yet have a system capable of managing the data collected by sensors on the vehicles at their disposal. Urbanite could improve the system of public connections allowing decision makers to manage their resources better." ATM is interested in the Urbanite project because of the improvement of their own capabilities and the better transportation system. The main benefit could be the optimisation of their own systems, better use, and improved efficiency of public transportation. Business Companies, Urban Mobility Platforms target group. Expected participation as "High quality information": Community is receving high-quality information.

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Department of Cultural and Education Policies: This department deals with the implementation of social policies and aims to provide innovative tools to support its work in the field of decision making. Social policies area: family-poverty-migration-active inclusion. The department works hard in many ways in order to solve problems related to social policies and active inclusion. The department is interested to have some information and tools that can provide useful data and analytics to a better understand the municipality state and help decision makers to take right actions. Expected benefits as prediction tools and intelligent analysis can help to have a more complete overview of the municipality state. City's administrators, Local Authorities target group. Expected participation as "High quality information": Community is receiving high-quality information.

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Citizens: Involved in improving the daily life of the city in terms of reduced traffic, improved public transport services, reduced pollution and a more sustainable road system. The main problems face with traffic, noise, some issues with public transportation efficiency. They are interested in solutions for a better quality of life in terms of smart transportation, better ways to know about the city life, reduction of noise and traffic. The main benefit for citizens is a system

that consent to know, maybe in real time, the status of the traffic in some city zones, reduction of noise, the control of the ambient in terms of quality of air and pollution, and so on. Civil Society/platform users/neighbour associations target group. Expected Participation as "LIP-Service only": Despite the rhetoric, participation amounts to nothing.

4.4.3 Overview of Messina stakeholder mapping

What stands out in the list of stakeholders identified in the city of Messina is the broad support of the administrative institutions, with numerous departments taking part in both economic, transport, culture and educational policies.

The administration, together with the ICT providers, makes it possible to monitor the road network and the city environment, identify public policies and provide innovative tools for decision-making.

This potential, together with the participation and collaboration of citizens, makes Messina a Use Case with the entire range of stakeholders necessary for its successful collaboration and participation in URBANITE project.

5 Community building

5.1 Co-Creation approach

URBANITE defines co-creation as any act of collective creativity that is experienced jointly by two or more people. How is co-creation different from collaboration? It is a special case of collaboration where the intent is to create something that is not known in advance.

Co-creation can be a force for participation and democratisation that does create meaning for all, rather than merely an alternative research technique or a way of creating value through co-opting the skills and creativity of individuals. This is what Magala calls the *'Postmodern pattern of sensemaking'* (Magala, 2009) where there is a transparent, open-ended flow of social communication built around the negotiation and renegotiation of meanings that leads to a networked, evolving social world co-creation can be a force for participation and democratisation that does create meaning for all, rather than merely an alternative research technique or a way of creating value through co-opting the skills and creativity of individuals.

This co-creation approach is the methodology and the objective that will be followed in the actions to be carried out in the project to energize this community, which are explained later in this document.

5.2 Build a community of kindred spirits

The "Community" form is most relevant when developing something for the greater good. Groups of people with similar interests and goals can come together and create. This model, so far, works mostly in software development and leverages the potential force of a large group of people with complementary areas of expertise.

Example: The Linux open source operating system software was developed by users and for users. The software code is free to use and owned by nobody. It started with one simple e-mail with a request for help." [2]

The first step in community creation is to identify groups of people with similar interests and goals can come together and create. That is the reason for this first exercise carried out to identify the stakeholders most directly involved with the use cases of pilot cities.

They have been chosen for their interests, for their work areas, for their knowledge, for previous collaborative work with them... This first group of stakeholders are the candidates to potentially participate in the first session of SoPo Lab "Ask: defining challenges and formulating shared values and principles".

5.3 Dynamization of the community

For a community to work and obtain results, there are a series of premises to be considered:

- The objectives must be clear.
- All the information that is shared must be clear and easily accessible.
- There must be an organized and shared participation process.
- There must be a clear methodology for the different actions that are carried out.
- Accessibility at all times to information or materials.
- Encourage reflection.
- Maintain continuous feedback on the actions that are carried out.

[2] https://wiki.p2pfoundation.net/Four_Types_of_Co-Creation

5.3.1 SoPoLabs

The spreading of social labs and its continuous evolution adds significant complexity to the task of providing a definition and providing a proper categorization. However, we would like to draw the attention to the work developed by Zaid Hassan at the MIT, who has been worldwide recognized. As Zaid argues, "social labs are platforms for addressing complex social challenges that have three core characteristics:

- *They are social.* Social labs start by bringing together diverse participants to work in a team that acts collectively. They are ideally drawn from different sectors of society, such as government, civil society, and the business community. The participation of diverse stakeholders beyond consultation, as opposed to teams of experts or technocrats, represents the social nature of social labs.
- *They are experimental*. Social labs are not one-off experiences. They're ongoing and sustained efforts. The team doing the work takes an iterative approach to the challenges it wants to address, prototyping interventions and managing a portfolio of promising solutions. This reflects the experimental nature of social labs, as opposed to the project-based nature of many social interventions.
- *They are systemic.* The ideas and initiatives developing in social labs, released as prototypes, aspire to be systemic in nature. This means trying to come up with solutions that go beyond dealing with a part of the whole or symptoms and address the root cause of why things are not working in the first place" (Hassan, 2014).

As Zaid exposed in this definition, these three elements provide social labs of a vibrant and holistic identity that can be widely recognized in several spaces and communities that have been developed during the last years. A social lab can also be envisioned as a container of social experiments for addressing complex social challenges on a systemic level. Social labs offer a space, a momentum and a process to deliver observation, reflection and analysis, and insights to trigger further actions to a proposed solution. Other recently published works recognize six characteristics of social labs (Timmermans, Blok, Braun, Wesselink, & Nielsen, 2020):

- Social labs offer a space for experimentation.
- Social labs are not closed off from the outside world, but intently are a part of the real world.
- Social labs require the active participation of a wide range of societal stakeholders that are of relevance to or have an interest in the social challenge, such as policymakers, businesses, government, and civil society.
- Social labs are multi and interdisciplinary, involving a wide range of expertise and backgrounds as well as approaches.
- Social labs support solutions and prototypes on a systemic level.
- Social labs have an iterative, agile approach.

SoPoLab will provide a socially based, experimental and systematic approach to deal the use of the disruptive technologies. In this sense, several individuals coming from diverse organizations will assist. The experimental element stresses that trial and error is allowed. A laboratory is a place where experiments are being held, and this SoPoLab will provide a field where different solutions can be tested for future implementation. The systematic approach highlights the level upon the lab aims to solve issues, providing a panoramic and holistic vision of problems.

To sum up, several objectives that want to be achieved by the SoPoLab approach are:

- To set up a team of participants representing the constellation of stakeholders affected, concerned and interested in the use of disruptive technologies in public administration.
- To deliver a SoPoLab process that will go beyond what is gathered in this document (workshops, methods, etc.)
- To create spaces where the selected participants are engaged and empowered to empirical analysis on trust, attitude, impact, benefits and risks of the stakeholders in the use of URBANITE's disruptive technologies.
- To diagnose barriers and obstacles for use case implementation.
- To help to design and to develop "social experiments" during the lifespan of the SoPoLab that can promote sustainable changes in diverse urban ecosystems.
- To reflect on the process of the SoPoLab itself and their workshops (what went well? what went wrong? what can/should be modified?)
- To recap and capture storylines about the use cases actions, successes, failures and experiences held during the SoPoLab

This social policy lab will be delivered in 3 main sessions on both local and European level, where representative actors that are involved in the emerging mobility services will be gathered to encourage discussion and generate synergies that can promote policies based on evidence, as well as other types of bottom-up initiatives.

The first social policy lab session "Ask: defining challenges and formulating shared values and principles" (Month 12) will focus on shared values, goals and question articulation. The topics that will be addressed in the session goes from the transformative impact of disruptive technologies, trust and attitude of civil servants/citizens or local and European regulation.

In the second social policy lab session "Create: going into the details of challenges and designing roadmaps" (Month 18) will be driven on process design going into the details of the challenges that arise in the first session and drafting roadmaps for policy co-creation. Moreover, not only policy challenges will be faced in this second session, but also design aspects of the services under development in order to ensure the results meet all stakeholders needs and are usable by end users and public servants.

Regarding the third social policy lab session "Policy: translating insights into practical policy and requirements" (Month 24), based on the local insights and testimonies collected in the two previous sessions as well as a desk research on European regulation on sharing services in urban mobility, this session will design and develop practical solutions, roadmaps and next steps translating the insights gained in the two previous sessions into practical policy and requirements from the stakeholders' point of view, with particular regard to public servants and end users (citizens). There will be carried out on four local sub-sessions (one in each city/node) and at a final European level to gather insights and feedback from European policy makers related to the results of the local sessions.

All these sessions will transfer the findings delivered by the research to the different stakeholders engaged, with the idea of promoting knowledge mobilisation and knowledge brokering to trigger further actions [1].

These sessions will imply also to deliver dynamics, workshops and meetings where the participants of SoPoLab will be able to address questions, ideate and prototype interventions, as well as reflecting about data and documents coming from the project. Communication with key stakeholders will be promoted among different sessions, trying to keep them engaged and

offering support and answers to different questions. Invitation and engagement of new stakeholders will be carried out when needed and dissemination efforts about the findings of URBANITE project about the implications of the use of disruptive technologies in the public sector.

5.3.2 Virtual SoPoLab

Along with the SoPoLab, a Virtual SoPoLab will be established to stimulate steady communication among participants and distribute the results of URBANITE project in an accessible and friendly way before, during, and after SoPoLab sessions.

The aim of this space is to maintain communication among participants and workshops, share information, allow collaboration and work in an asynchronous way, combine local work with work at European level.

The platform that will gather different useful resources for the participants in the Social Policy Lab will be delivered by the deployment of the first SoPoLab Session.

More in detail, Virtual SoPoLab will provide functionalities to:

- Host different kind of resources created by the project such as deliverables, policy briefings, multimedia content;
- Suggest or report common needs and social/local issues;
- Launch challenges in order to find possible solutions to solve the needs;
- Propose, by following a collaborative approach, new ideas as possible solutions;
- Evaluate and select the best ideas to be refined and implemented in a collaborative way;
- Provide some details (refinement) about the selected ideas.

This space will be fed and monitored to uptake emerging themes or issues that could be of interest to redirect the co-creation process within the SoPoLab.

It is necessary to bear in mind that the importance and influence of the Virtual SoPoLab have increased considerably after the appearance of Covid-19 and the travel restrictions and face-to-face meetings that are being established throughout Europe. Therefore, it becomes a much more necessary platform since its integrating role will increase.

5.3.3 Local dynamization.

SoPoLab/Virtual SoPoLab management will be conducted by WAAG, TECNALIA and ENGINEERING. This work team will be responsible for setting up the lab, maintaining and managing it during the lifespan of this task.

But this work also requires an important role of the local dynamization. Combining activities at European level and continuous communication with specific people in each city, who will be in charge of stimulating discussions and energizing activities, in order to be as effective as possible.

5.3.4 Boost community participation

With the irruption of COVID-19 significant difficulties have raised for gathering physical meetings across Europe. The project team expects that activities in the next months will be highly virtualized for avoiding physical meetings. For this reason, it is of high importance to develop a value proposal highly attractive for participants in the SoPoLab, as a growing number of activities elsewhere might be virtualized.

In such a way that changes are necessary, moving them to a more on-line mode, virtualizing them. But these changes affect in two ways:

The first one, the activities design. Since a face-to-face methodology cannot be transferred to on-line mode, because each of the formats has its characteristics and its rules of participation.

The second one is the callenge of how to promote collaboration in a remote or virtual environment and maintain that feeling of being a member of an active group.

Incentives for participation in participatory and virtual workshops can be split into extrinsic motivations and intrinsic motivations [1]. These two kind of primary motivations have been widely studied in the literature of user-driven innovation and crowdsourcing [2] [3]. Below, we list some of the most common extrinsic and intrinsic motivations to participate in open-innovation platforms:

Extrinsic Motivations

- Payments
- Reputational gains and acknowledgements
- Leveraging capacity

Intrinsic motivations

- Altruism
- Sense of belonging
- Learning, skills development and knowledge exchange
- Intellectual challenges
- Fun, social networking and enjoyment

During the different activities around the community, URBANITE will address extrinsic and intrinsic rewards that the participation in the sessions can offer to the participants. In this sense the aim is to focus on all intrinsic motivations, and also in some extrinsic motivations such as reputational gains and leveraging capacity, as we are not able to offer any kind of payment to participants. To this extent, the benefits associated with active participation will be included in communications with possible community participants.

6 Conclusions

Four use cases will be carried out in the project, one in each participating pilot cities (Amsterdam, Bilbao, Helsinki and Messina).

Likewise, in parallel, a community of agents mainly interested in the study of the use of disruptive technologies in the public sector context, mobility and urban transformation will be created. Different activities will be held to achieve this objective, such as sessions of social policy labs and virtual policy Lab, both at the local and European level.

What has been done is a joint effort, in such a way that the cities have selected the most relevant agents involved in their use cases, who will be the members of the community and participate in the different actions.

Once this first identification has been made and analysed city by city, it is seen that the proposed group of stakeholders fully covers the key target groups identified in the project: city's

administrators and local authorities; policy makers; business companies, urban mobility platforms; Civil society/platform and users/neighbour association.

The activities to be carried out from now on will also require the active participation of a wide range of societal stakeholders that are of relevance to or have an interest in the social challenge, such as policymakers, businesses, government, and civil society, as well as involving a wide range of expertise, backgrounds and approaches (Timmermans et al., 2020).

The results of this co-creation approach will be a set of recommendations and pathways for public administrations dealing with similar technologies and the public servants in particular, and the public sector, in general, can benefit from the guidance on what to do and what not to do (lessons learned) in the use of disruptive technologies for decision-making.

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