

JOURNAL

PROJECT

VoxPop - People, Processes & Technology towards the digital transformation of the urban mobility system of Lisbon

📍 Lisbon, Portugal

TOPIC

Digital transition

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The Vox Pop Project Journal No 2

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People, Processes & Technology towards the digital transformation of the urban mobility system of Lisbon (VoxPop) is the new project that will foster digitalization and collaboration between private and public mobility actors in the Portuguese capital. VoxPop is funded by the Urban Innovative Actions (UIA) initiative under the Digital transition topic.

This is the second edition of the VoxPop journal and aims at updating the status of the challenges and partners expectations now that the project is ending. It also includes the major achievement and very last the next steps to close the project. Between June 2021 and February 2023, the project partners have selected the use cases and challenges to be assessed by Innovators Alliance, defined the functionalities of the Navigation support tool for vulnerable city users and the requirements for the Client-observer app and the urban access point. Additionally, a mock-up of the Client-observer app and a functional version of the mobility observatory are available. In addition, the project has executed the Open Call for European Innovators.

VoxPop - People, Processes & Technology towards the digital transformation of the urban mobility system of Lisbon

VoxPop in a nutshell

VoxPop was created to facilitate the digital transformation of the mobility system of Lisbon, aiming at mobilising the various stakeholders of the local innovation ecosystem to collectively provide a response to a set of non-technological challenges of digital innovation in urban mobility.

The ambition is to accelerate the digital transition of the Lisbon's mobility system by developing a data-sharing model where multi-party data are translated into actionable intelligence to enable the creation of enhanced user-centred mobility solutions, and unlock more efficient methods of planning, operating and maintaining transport assets.

The project motivation was the need identified by local actors to improve collaboration by sharing data and thus unlocking efficiency in the asset management of the mobility sector of the Portuguese capital. The focus is on the non-technological challenges, including governance, business models, user focus and unwanted consequences of digital innovation.

Through a process of change based on the three main vectors of digital transformation: People, Processes and Technology, the project was designed to ensure the active participation of citizens, the people who will benefit

from the solutions developed.

The project is led by the Lisbon City Council with the support of various public and private actors of the mobility eco-system of the city, among them civil society, from which active citizen participation is expected. It is aligned with the vision and priorities of the Municipality and it is composed of the following innovations that will become a key structure for managing mobility in Lisbon:

- An Innovators Alliance, a forum to foster dialogue between the mobility actors of the city, aimed at creating sustainable and responsible public and private data-sharing ecosystem with a focus on how to overcome the existing non-technological barriers to urban mobility data-sharing, and ensure both public and private entities generate value from these data.
- Urban Access Point that will facilitate visibility of and access to private and public shared mobility datasets.
- An Open Call aimed at mobilizing the European innovation community, allocating 1 million euros to the development of digital solutions for improving accessibility and security of the most vulnerable city users.
- Navigation support tool for vulnerable city users, in particular, people with reduced mobility.
- Client-observer app that will facilitate the provision of feedback from users about the Public Transport system of the city.
- Urban mobility observatory of Lisbon, to facilitate the access of external entities to information concerning urban mobility measures and support the impact evaluation of the project.

Partnership

The partners of the project include the Lisbon City Council (project leader), EMEL, CARRIS, the Metropolitano de Lisboa and Transportes Metropolitanos de Lisboa. This consortium also has the participation of three companies for key project activities: ARMIS, Beta-i and Deloitte Portugal.

The **Lisbon City Council** (CML) leads The VoxPop Project. In addition to ensuring that the project is aligned with the vision and current priorities for the city, CML leads the activities of the Data Sharing Business Model and by the Observatory of Urban Mobility in Lisbon, which will become a key structure for measuring the impacts of the project.

The **EMEL** (Lisbon Municipal Mobility and Parking Company's) mission is the development, management, and operation of urban mobility solutions, integrated in Lisbon's global mobility and accessibility system. As the operational arm of CML for urban mobility, EMEL has a very active role in the implementation of the project. It will be responsible for the operational management of the project, sharing the responsibility for communication activities with CML. EMEL also leads several activities in the Data Sharing and Urban Data Integration Business Model.

CARRIS is a key player of the urban mobility ecosystem in Lisbon, being the main surface Public Transport Operator in the city. As an operator, CARRIS has access to a set of relevant data and a vast experience in being part of different organisations that share databases and information. It will be responsible for leading the Urban Data Integration.

Metropolitano de Lisboa (ML) is a public company responsible for the metro system in the Lisbon area and is one of the main players in the city's urban mobility ecosystem. Its participation in the project involves contributing to the reflections on the data sharing model and business models. ML also participates in the development activities of new and improved mobility services complementary to its current offer.

Transportes Metropolitanos de Lisboa (TML) is the entity responsible for the management of the technological platform that integrates the ticketing system and public information and for the development of studies, plans and implementation of accessibility, mobility and transport policies of the 18 municipalities that integrate the metropolitan area of Lisbon. It will also be the entity responsible for the management of AML's public road transport service. It will be a key-player in the discussion around the data-sharing model including roles and business models.

ARMIS is a technology-based company focused on providing IT services in a wide range of areas, including transport and ITS. It leads the Urban Access Point for data sharing between organisations, ensuring its development in open source to promote the adoption of this solution by other EU cities ARMIS is also responsible for ensuring the harmonization of EMEL and CARRIS data with the European standards DATEX and NeTex.

Beta-i is a collaborative innovation consultancy with a global reach. It will lead the work of the Open Call, contributing with its experience in open innovation programmes. In particular, Beta-i will mobilize a group of NGOs to identify the main challenges to be solved and will accompany the development of the solutions selected, and for seeking ways to promote their transferability to wider markets.

Deloitte is a leading global provider of audit & assurance, consulting, financial advisory, risk advisory, tax and related services. Deloitte Portugal coordinates the Smart City Solutions Center, a centre that brings together

diverse expertise in the areas of Smart Cities and Future of Mobility globally. Deloitte Portugal is responsible for the development of a regulation and control tool, which will support the municipality of Lisbon and the micro mobility operators in the use of public space.

Highlights

This is the second edition of the VoxPop journal and aims at providing an updated overview of the faced challenges during the execution of the project. It also includes the major achievement and the next steps for the final period.

Between June 2021 and February 2023, the project partners have selected the use cases and challenges to be assessed by Innovators Alliance, defined the functionalities of the Navigation support tool for vulnerable city users and the requirements for the Client-observer app and the urban access point. Additionally, a mock-up of the Client-observer app and a functional version of the mobility observatory are available. In addition, the project has executed the Open Call for European Innovators.

The VoxPop project partnership has advanced on most of the planned activities, overcoming the initial delay caused by administrative issues as well as the difficulties created by the pandemic crisis. More concretely, during this period the partners have managed to achieve the following:

Innovators Alliance - IA

The IA has identified the barriers and the use cases for data sharing between the members as well as 12 use cases to be analyzed. Thus, the project started generating valuable output from the discussions among the IA members. Additionally, the IA identified the rules for data sharing and access by having the relevant actors engaged / on-board as well as it has defined the governance model to overcome barriers for data sharing based on a set of basic principles.

Open call for European Innovators

The call opened in August 2022 and closed in October 2022. A total of 53 applicants participated (47 eligible), from which 18 were selected to implement their solutions.

Navigation support tool for vulnerable city users

The user needs and solution requirements for the VRUs navigation app have been identified, allowing for defining the functionalities of the tool.

Client-observer app

The requirements for the client-observer app have been captured and a mock-up of the solution is already available.

Lisbon Urban Mobility Observatory – LUMO

The list of indicators has been validated, including a total of 79 indicators that will be available on the observatory. A functional version of the mobility observatory has been already launched.

Urban access point - UAP

The user needs and system requirements has been collected within the participants of the Innovators Alliance.

Promotional and dissemination activities

The project website is ready at <https://www.voxpoplisboa.pt/>.

A zoom-in video about the of the Navigation support tool for vulnerable city users is available.

The project partners have successfully submitted and presented scientific papers to Velo City 2021 and 2022, ITS World Congress 2021, Civitas forum 2021, IT-Trans and Transport Research Arena.

Successfully handling key challenges

Vox Pop is managing well the foreseen challenges. Details are provided in the respective section of this journal.

What to expect next

In the next period the IA will define the governance model requirements of the data sharing ecosystem; the

implementation of the Navigation support tool for vulnerable city users will start; the Client-observer app specifications will be validated and its operationalization model and implementation plans defined; the impact assessment model on the digital transition will be started; the technical tests for the Urban Access Point will be carried out.

VoxPop: expectations and challenges

Initial expectations from the consortium members

In the first journal the expectations from the consortium members participating in the project were collected. In this second journal these expectations were discussed with the partners in order to assess at what degree these are being met by the project outputs.

Significant improvement of accessibility for people with reduced mobility aiming at a higher quality of life.

Needs of people with disabilities should be defined and analyzed towards higher accessibility (e.g. indicating which are the accessible vehicles) and security (reporting tools to alert about potential dangerous points).

Update: Often in Lisbon, shared mobility vehicles are poorly parked, cluttering sidewalks and pedestrian areas, thus creating unsafe environments for people with reduced mobility, such as people in wheelchair and visually impaired. A smoother and ordered operation of e-scooters and e-bikes in the city is needed. Deloitte is helping Lisbon municipality on the design of a regulation model and tool for shared mobility management, more specifically e-scooters and e-bikes. With this new regulation model and management tool, among other things Lisbon Municipality will be able enforce e-scooter parking and act on poorly parked vehicles, ensuring a proper and efficient management of shared mobility, which is key for improving accessibility for people with reduced mobility.

CARRIS operates an on-call DRT-type service for people with wheelchairs and has a strong interest on improving the service for people with disabilities. With regards to innovative mobility services, CARRIS is currently establishing a DRT service, as part of a pilot project with CEF funding, which may be extended to lines with suitable characteristics (e.g. night services). For this purpose, data from the other mobility service providers should be utilized.

Update: the service is yet «under analysis».

Additionally, this challenge is included in the ones identified by the Innovators Alliance. Challenge 3: Mapping accessibility for persons with reduced mobility (PRM) of journeys on public transport.

Finally, it is also supported by the Open Call by 1 out of 4 of the selected proposals.

Other main improvements in the mobility landscape for the city of Lisbon

First, improve the mobility of those that live, work, study and visit the city of Lisbon, including school mobility and having special focus on the inclusive mobility of vulnerable people (dedicated routing and improvement of conditions).

Update: CARRIS developed a tool for supporting mobility of people with reduced mobility (people in wheelchair and visually impaired). The tool is currently in procurement and it will include features considered to be of priority for users in the co-design processes implemented, including for example alerts for blind people about which station to get off the bus and an assessment of the presence of a shelter in bus stops.

Second, reduce the use of private cars in the city, increase of the share of bikes and expansion of the bicycle network, reduction of the number of road accidents towards zero deaths and regenerating public spaces, not only in Lisbon but also in the other municipalities.

Update: This was the original goal of the project and it remains the same. Several challenges were identified and data was made available to demonstrate how this expectation can be met. More concretely:

- Challenge 2: Making dissuasive car parks more appealing by mapping the car parks offer in Lisbon city.
- Challenge 5: Prioritize sustainable modes at intersections with higher conflict/competition of flows
- Challenge 6: Increasing the experience of using sustainable modes by ensuring a maximum of 15 minutes walking distance to the nearest GIRA station
- Challenge 7: Improving the cycling network in areas already having high levels of cycling and without cycling infrastructure.

- Challenge 8: Impact assessment of the introduction of a new bicycle lane in the city
- Challenge 11: Identifying bicycle parking and other needs of bicycle users
- Challenge 13: Factors influencing the use of sustainable modes

It is also supported by the Open Call by 1 out of 5 of the selected proposals.

Creation of an eco-system able to share dormant, scattered, and silo-ed operational data.

Integrated information from both public and private transport service providers should be available and the establishment of links with the other members of the eco-system facilitated. Local operators already collect data related to safety or to the performance of the systems aiming to work with the city to improve the conditions when the data depicts conflictive areas or operation problems. Moreover, collaborations with local police and the local parking company to solve operation problems due to incidents are already established. However, these still rely in human operators and are therefore not as efficient as if they would be if they were relying on automatic communication channels between the involved actors, facilitating the information flow.

Update: There need for data sharing for real-time management and long-term mobility planning have been recognized, however this issue will remain as one of the challenges to overcome after the end of the project. There is a clear maturity gap between public and private stakeholders regarding digital innovation conversations while at the same time there is an important mismatch of public and private interest in sharing data. Thus, the data supporting the identified challenges was limited to the one provided by the public authorities. However, the creation of the Urban Access Point will create a trusted environment for entities to exchange information based on bilateral agreements supported by a local platform for data sharing. Additionally, with the new regulation model and management tool, micromobility operators will share operational data with the municipality.

To put a seed that will grow to a better data collection infrastructure in Lisbon and to a better dialogue and collaboration between all the actors of the mobility eco-system.

Transform corporate data into strategic assets to improve the quality of life of our fellow citizens, providing them a services that meet their expectations and needs". These strategic assets should also improve the efficiency of business processes, encourage problem solving and support management in the planning- and the decision-making process. At the end VoxPop should create a culture of "co-evolution" because data and its uses, will continue to evolve. This means that the skills needed to collect, categorize, assess, and act on data will need to evolve, too.

In the same direction as in the above expectation, the fact that only data provided by public authorities were used illustrate the difficulty to engage the private sector. However, the Innovators Alliance was founded, and it is the seed for a better dialogue between all the actors of the mobility eco-system. Moreover, the collaboration of the public partners allowed to solve common problems of all partners in order to enable a mobility eco-system. More specifically, the conversations and collaboration with micromobility operators will serve as an example for future dialogues among Lisbon Municipality and other transport operators. Also, such collaboration can be mimicked by other areas and operators, e.g. energy, water, waste management operators.

It is also supported by the Open Call by 1 out of 6 of the selected proposals.

Standardize data generated by the actors of the mobility ecosystem of Lisbon following European standards.

Data standardization and communication protocols such as DATEXII should be promoted, in line with other international, national and local relevant projects such as C-Roads, C-Streets, IDACS, DATA4PT, UVARBox, EU-EIP and of course the implementation of the Portuguese NAP (National Access Point). Especially relevant to VoxPop is the NetEx standard, which is conceived for multimodal public transport data.

The expectations are still high, but many difficulties are foreseen to get the Urban Access Point.

New challenges identified

Mobility challenges in Lisbon

A total of 13 mobility challenges were identified by the Innovators Alliance.

- Challenge 1: Increase the commercial velocity of buses
- Challenge 2: Making dissuasive parking more appealing
- Challenge 3: Mapping accessibility for persons with reduced mobility (PRM) of journeys on public transport
- Challenge 4: Increase the attractiveness of public transport compared to private car use
- Challenge 5: Prioritize sustainable modes at intersections with higher conflict/competition of flows
- Challenge 6: Increasing the experience of using sustainable modes
- Challenge 7: Improving the cycling network

- Challenge 8: Impact assessment of the introduction of a new bicycle lane in the city
- Challenge 9: Public transport alternatives more suitable for the demand of Lisbon Schools students
- Challenge 10: Creation of mobility hubs for better accessibility to Lisbon neighbourhoods
- Challenge 11: Identify cycle parking needs in the city
- Challenge 12: Prevent the effects of one-off events and natural phenomena that generate higher (and disruptive) demand
- Challenge 13: Factors influencing the use of sustainable modes

Reluctancy in sharing data by private entities and other barriers in sharing data

Important barriers to data sharing were identified, such as the additional costs needed to process the data (human and/or technological), the lack of reciprocity or proportionality in sharing data, potential legal implications and risk of sharing data with economic value. Additionally, various public entities had difficulty in sharing ticketing data due to the GDPR. Different formats are investigated to share it while complying with the laws.

Challenges towards digitalization identified by the IA

- Dormant, scattered, and isolated operational data;
- Inefficient public space management;
- Lack of systematic approaches, and processes that are poorly integrated into day-to-day life to enable future use;
- Users of public transport, and vulnerable users of the mobility system in general, have no voice;
- Regulatory blind spots that allow the uncontrolled entry of innovators;
- Service providers, especially large companies, promoting the use of intrusive solutions with unclear data use policies.
- Identifying a sustainable business model to exploit the potential of mobility data in Lisbon.

The above challenges are being tackled by the 18 solutions that have been selected in the open call and the digital tools that are being developed within the project. The latest includes, among others, the navigation tool for VRUs and the tool to regulate public space use by shared mobility providers as well as the generation of actionable information supported by people-centered qualitative research to ensure that the real needs, preferences and expectations of the citizens are met.

Launch and management of the open call, collection of specific requirements

The open call was delayed due to the difficulties in drafting its content under pandemic conditions. However, these delays were minimized thank to the execution of on-line workshops. Additionally, the open call was planned to be based on open-source, reducing the interest of participants, but this issue was overcome by not limiting the call to solutions based on data (data-driven) but also data generators, i.e. Digital solutions, that could be platforms, apps, or others.

With regards to the collection of requirements for the client-observer app, the difficulties were related to the recruitment of the right participants but also to the change in mobility habits due to the pandemic.

Key challenges

This is how the key implementation challenges tracker is illustrated for the period since the start of the project to the time of writing of this journal.

Challenge

Observation

Leadership for implementation: aversion to risk by administrations

Challenge level ●

Political commitment has been ensured at high level. Indeed the project already created expectations to be fulfilled, therefore priority to its implementation will be given by the public side. At the same time, it is a strategic project for the participating entities (including the private ones), so it is placed high on their agendas. This challenge is expected to remain low during the whole duration of the project.

Update: in 2021 there was a political change in the Municipality and the project priority was downgraded.

Public procurement:
prepare the right
tender and attract the
right providers to
achieve expected
results and ensure local
benefits

Challenge level ●

No large procurement is foreseen in the project, only external expertise and services. Still, the project has planned cascade funding for an open call, which may be challenging to implement from the administrative side. In addition, other problems related to the IT equipment might appear, such as difficulties arising from regulations or from low interoperability between the open framework and the legacy IT systems. All these issues will be taken into account when designing the tenders so they do not hinder the project implementation.

Update: Although the tendering process was long, there were no difficulties in its execution.

Integrated cross-
departmental work:
“silo” organisational
culture

Challenge level ●

The project fits the strategy of the city and has the support of the different departments potentially involved from the Lisbon Municipality side and the other participating entities. On the other hand, mobilisation of internal resources has been taking longer than initially envisaged which led to significant delays in the start of the activities. Indeed the establishment of the governance of the project was identified as high risk and it appeared, creating a delay in the start of the project. Today this issue has been mostly solved.

Update: This issue was even further improved during the project implementation.


Participative approach:
how to co-create and
keep participants
motivated?

Challenge level ●

The project has been conceived to be participatory by design. Co-creation and co-implementation are foreseen. Still, attraction of the citizens’ attention and ensuring their long-term engagement can be challenging. In order to ensure the participation of citizens, NGOs and citizens’ associations will be also involved in the identification and design of the challenges.

Update: Although the project was executed partly during the COVID pandemic, the participants in the co-creation events were well motivated and there were high levels of participation in interviews and co-creation sessions (e.g. for the challenges of the open call).


Monitoring & Evaluation: how to achieve a deep understanding of the impact achieved?

Challenge level 

Monitoring and assessing the results of the project will be challenging, especially the indirect ones. The number of data sets shared or services enriched by the project can be easily measured, but the final impact in the mobility experience of the Lisbon citizens will be more difficult to quantify. It will be critical to be able to demonstrate the added value of the data sharing ecosystem, and the magnitude of its results in the local context. Causality of the impacts and activities will be quite challenging to determine. Moreover, the establishment of the baseline will be even harder to determine due to COVID effects. An activity dealing with the Monitoring & Evaluation of the project results has been foreseen to plan in advance how these issues will be tackled.

Update: After the definition of the monitoring and evaluation framework there was a clearer picture of the challenges and how to assess the results of the project.

Communication: how to establish a two-way inclusive and honest communication process

Challenge level 

Citizens will be involved in the design and implementation phases, so the selection of the right communication channel to reach them will be crucial. In this direction, Beta-i will be the responsible for the communication to the startups / innovators, and they have an extensive experience in communicating and engaging with these types of stakeholders. Communication to citizens's associations and NGOs might be the more challenging, and it will be driven by the Municipality. A communication plan has been drafted to ensure proper interaction between the project partners and the citizens.

Update: The first approach didn't worked well, but since Oct 2022 the communication agency is working with the project partners and there is a good overall communication. All publicity campaigns and material were created with them, including public sessions live on social networks and the live transmission of events (e.g. open call launch).

Upscaling: how to scale solutions in space and time

Challenge level



It will be challenging to keep the momentum generated by the project in such a multi-party effort, especially after the end of the project. In addition, there will be the need to generate a mechanism to maintain, update and enlarge the project outputs, for which sustainability should be ensured. This is not trivial since due to transparency and openness of public tenders, solutions with similar specifications but with a better value for money will be selected, not ensuring interoperability or continuity. All the way around, having pilots should not be a binding process to a concrete provider for the later scale up. These two issues should be well balanced. In this direction the project is building an engaging "general" value proposition for the innovators, but the scaling up will need to be addressed in a case by case scenario depending on the specificities of each developed solution.

Update: Due to the delay in the project execution, not fully functional tools but pilots with a limited scale will be executed. The same for the open call.

Others

Challenge level



Engage and keep the commitment of the private sector; avoid unintended consequences; create trust; ensure privacy and security; unlock data silos; ensure data quality; define use cases and ensure financial sustainability of the data sharing ecosystem.

Update: All these issues are of high importance to VoxPop and are being tackled in the relevant work packages.

The level of maturity and data sharing interest of private partners was low so most of the datasets were closed and limited to project partners being public entities.

A data sharing governance needs to be defined.

Different quality levels on the available data, including the limitation to processed data in some cases (no raw data).

Use cases defined but not yet including financial sustainability.

Major achievement

Call for innovators launched

The Open Call for innovators was launched in 10th of August 2022 and ended in 9th of October 2022. A total of 117 proposals were received from all the world, not only Europe. From these 47 were eligible, coming mostly from Portugal (18), Spain (7) and Italy (6).

A total of 18 proposals were selected, mostly related to "community solutions for inclusive mobility" and "seamless route planning" and addressed to physically impaired and elderly.

The Selected proposals are the following:

- **CIDADE CICLÁVEL:** The project aims to contribute to achieving greater social and gender justice in cycling. To this end, we propose, through a collaborative platform, to provide information about the infrastructure, the registration of road

harassment incidents and danger zones.

- **SAFEJOURNEY:** Using satellite and street images, we propose to automatically calculate a pedestrian mobility index for people with reduced mobility at street level (eg crosswalks and services without a ramp, tactile pavement), for use by external services and municipalities.
- **ANDYAMO:** We propose to improve the current GPS of the City of Lisbon by proposing 100% pedestrian & multimodal routes that are fully adapted according to the level of mobility of its habitants / tourists (in wheelchair, visually impaired, in stroller with children or elderly people)
- **3FINERY:** 3FINERY LTD proposes a tool that would allow citizens with visual, cognitive and physical disabilities to obtain an accurate verbal description of their environment using Augmented Reality with geolocation services.
- **INCLU:** Inclu is a visual positioning system capable of delivering multimedia information relevant to the physical location of its users. The product resorts to AI to automatically recognize the position of users by analyzing a video stream captured through the users' smartphones.
- **lisbonhub:** Development of a multimodal transport application to aggregate and process public transport and micromobility data. The app will suggest the safest, fastest, and cost-effective trips. Additionally, users can report incidents for rapid assessment and resolution.
- **willeasy:** A digital ecosystem to collect, process and make available information on the accessibility of places and routes, the use of innovative inclusive mobility means and a web app for seamless navigation, creation and constant update of open data.
- **enterprise bot:** Enterprise Bot creates AI-powered chatbots to automate customer interactions and provide enterprises with a readily accessible digital agent that improves customer experience and reduces operational costs by up to 40% and allows users with disabilities to be more autonomous.
- **lisbon on wheels:** Collecting accessibility data about public buildings, public space and public transport and to adding it to our On Wheels app and Openstreetmap. All data will be available as open data for everyone to use. We want to built a management platform to link with the city.
- **space4all:** Creation of a digital solution for GPS navigation and displacement in public spaces (squares, gardens, parks, cemeteries, monuments), with predefined routes and relevant information for individuals with reduced mobility and visual, auditory and motor impairments.
- **smart path:** SMART-PATH is a web-based platform that uses public transportation real-time and historic data as well as its characteristics to offer its users a simple way to find the best mean of transport to move around in Lisbon and understand which transport will match its specific needs.
- **skipit:** Our app allows the physically impaired tourist to buy a ticket, see transport maps, identifying the accessibility points of each station in a new city. Information and services that are usually scattered across various locations, with various obstacles and contact points.
- **lisbora:** Lisbora is a gamification smart city system to encourage mobility around the city of Lisbon for physically impaired citizens. Rewards (vouchers to spend in local trade shops) will be issued for the kilometres travelled by users with any means of transport except the car.
- **takeme by family:** We propose an Assisted Mobility Platform for mobility-dependent people. The platform provides an Assisted Commute Service, individual or grouped, on foot, by bicycle or on public or shared transport. Services can be recurrent or on-demand.
- **ajuda+:** The Ajuda + app aims to connect the elderly living alone in the Lisbon municipality with registered volunteers who will accompany the elderly in performing tasks, from charging a pass, bringing groceries, or just keeping them company.
- **childfy:** Parents spend lots of time driving their kids around to attend school, extracurricular activities, birthday parties etc becoming their "taxi drivers". With our solution we create a community of families to share and request trips facilitating their travel logistics.
- **cycle4lisbon:** Cycle4Lisbon intends to encourage the use of environmentally friendly means of transport, promote healthy habits and support people with reduced mobility by integrating in a single app public and Micromobility transport services.
- **popstore:** PopStore empowers users to create a weborder page in 2 minutes, and share with their environment. Anyone with limited IT skills can make e.g. shopping lists for neighbours, friends, family members. This makes "social commerce" (informal business among friends) extremely simple.

The projects are being developed and will be delivered in June 2023.

What to expect next

The project is coming to an end (it will end in June 2023) and during this last period of the project, all the VoxPop developments will generate the expected outputs, namely:

- Innovators Alliance
- Urban Access Point
- Open Call
- Navigation support tool for vulnerable city users
- Client-observer app
- Urban mobility observatory

Digital transition

See on UIA website

