



URBANITE

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

Deliverable D2.1 Addendum

URBANITE Analysis of Experiences in Other Industries

Editor(s):	Max Kortlander
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Contributor(s):	Max Kortlander (WAAG), Heli Ponto (FVH), Raul Tabares Gutierrez (Tecnalia)

Abstract:	This deliverable in an addendum to the previously submitted deliverable that integrates the feedback from URBANITE reviewers.
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Terms and abbreviations

MUV	Mobility Urban Values
SDK	Software Development Kit
SoPoLab	Social Policy Lab

1 Deliverable D2.1 Addendum

1.1 Introduction

‘Case Studies for Participatory Mobility’ was an Urbanite deliverable that explored various disruptions in mobility, smart city development, and participatory democracy. Now, Urbanite partners have considered how the information presented in these case studies is relevant for questions faced on the ground in their pilot cities.

This piece, D2.1 Addendum, presents the links identified between Urbanite pilots and our previous research into disruptive technology. The report is the result of interviews held with pilots near the end of 2021. It provides insight into how questions and recommendations posed in earlier research influence and aid decision making in Urbanite pilots, particularly with regard to questions surrounding citizen participation and the ethical application of technology.

1.2 Amsterdam

Social Policy Labs (SoPoLabs) held in Amsterdam in late 2021 focused around the question of whether people in the municipality and Fietsersbond (bicycle association) would like to work together on developing a data commons. Stakeholders present were enthusiastic about the process towards developing a data commons with a few specific goals in mind:

- Develop more routes for citizens and residents to be involved with sharing experiences and insights, and in turn to be involved with the development of cycling policy;
- Allow people with shared (cycling) concerns to find one another (e.g. people who would like to cycle together through more dangerous areas);
- Improve insight into mobility data, by ensuring that different actors have access to various types of (open) data.

During these SoPoLabs, ethical questions were raised regarding citizen participation and cycling data. For example: If citizens are involved in data collection and creating awareness, how can project partners and the municipality make sure that shared goals (stated purpose for data) is actually what the data is used for? Different people will have different interests – how can we ensure that data is used for the purpose for which consent was given?

General questions were also raised regarding data anonymisation, privacy, prioritisation, and access, such as how to make consent revocable, or how to define and enforce the purposes for which data may or may not be used: What data would be included in a data commons? How do we address the risks that data driven mobility decision making may take away agency from human policymakers and citizens?

Through these sessions, the Amsterdam pilot addressed fundamental questions regarding the development of a bicycle data commons. These fundamental questions are broad, and include whether to technically build a functioning Amsterdam bicycle data commons that is integrated with the Urbanite platform, or to instead focus on addressing fundamental ethical and structural issues. A main challenge in this regard is to converge on how shared goals (like transparency, openness, fairness) can be pursued through concrete developments and outputs within the Urbanite project, whether through technical development or some other means.

1.3 Bilbao

Stakeholders in Bilbao are interested in the relationship between traffic and bicycling. The SoPoLabs in Bilbao near the end of 2021 were primarily concerned with identifying and prioritising use cases for further development. Potential use cases in this regard include simulations with bicycle traffic and common bus routes (starting points and destinations).

Two SopoLab sessions brought together tech providers, municipal representatives, and citizen associations. 'Trust and ethics' was a key discussion point during meetings, with stakeholders pointing to a number of issues that affect these areas:

- There is a lack of consistency in the purpose, requirements, and regulation for data gathering between local, regional and national authorities;
- There is a lack of consistency in how the data itself is formatted, shared, stored, and utilised; and
- There is a subsequent lack of trust from citizens regarding how data is being used by various administrative bodies.

Following these sessions, Urbanite partners and local stakeholders established working groups to focus on how to address each of these three topics.

1.4 Helsinki

The City of Helsinki has the objective to have all public data in one interoperable location. In line with this goal, Urbanite partners in Helsinki are working towards a demo case scenario which provides a simulation for the construction of tunnels in Jätkäsaari. As discussions surrounding mobility simulations can be technical and specific, there is a challenge to open up this process further to citizen and multi-stakeholder collaboration.

So far, discussions on the ethics of the tunnel simulation have mostly been internal. Ideally, this process would expand towards collective decision making involving both experts and members of the general public who are interested in social decisions. Helsinki has many existing instruments and channels to gather opinions on the city's decision making (for example, Decidim is used in the city), but in practice it can be difficult for people to know who to address or which channel to use. This raises a specific challenge for Urbanite partners in Helsinki: to develop a mobility data ecosystem that works for both traffic and mobility planners, researchers, and citizens who want access to open data.

In attempting to bridge this gap between mobility (simulation) data and the general public, the Helsinki pilot encounters considerations ranging from bureaucratic and technical to philosophical and ethical. For example, in practice, the people who view and interpret the simulation will not make decisions themselves. Instead, they will pass their interpretation on to someone else, who then makes a decision. Not every stage of this process can be opened to all citizens (such as complex data analysis), but project partners can indeed search for opportunities to open up parts of this process, make it more transparent and understandable to citizens, and incorporate citizen voices.

1.5 Lessons from Case Studies for Urbanite Partners

The areas of concern and focus in the pilots are quite similar; they involve questions of trust and ethics, of participation and citizen involvement, and of practically and technically addressing these issues through concrete choices about technical design and process. In this regard, Urbanite partners can learn from and build upon the previous experiences of others (and of each other) in areas related to citizen participation, ethics, trust, and data standards.

The areas of consideration around trust and ethics in Urbanite pilots are reminiscent of those confronted by other municipalities and initiatives in the past. For example, developers in Amsterdam faced questions of interoperability in the Smart City SDK project, which addressed the need for mobility standards using JSON linked data, and which approached data initiatives as services (which need to be maintained) rather than a set-in-stone product (without the expectation of maintenance). Smart City SDK can also inform us about the value of boundaries – in that case, it was not possible to fully remodel the system Amsterdam’s data entirely. It was, however, possible to make progress within the limits of defined goals (for example, by focusing on a limited number of geographic data sets which led to the creation of <https://maps.amsterdam.nl/>). Urbanite partners face a similar challenge now to define the technical limits of their pilot efforts around goals which balance ambition and feasibility.

The Assessment List for Trustworthy AI is also relevant for Urbanite partners. While the Assessment List does not fully address the issue of federative interoperability, it does provide useful guidelines for developing and using AI. In this way, the Assessment List can be taken as a minimum standard, and considered in terms of applied specificity; that is to say, partners and stakeholders can consider how the ethical guidelines and spirit of the Assessment List can be applied in specific contexts at the local, regional, and national levels, and can provide a basis of mutual agreement as a starting point for unifying the approaches to data collection and use at all levels of governance (local, regional, national, and EU).

Finally, there is a need to ensure that Urbanite pilots include citizen voices as part of a co-creative and participatory process around urban tech development. In this regard, facilitators in Bilbao can consider lessons learned from previous European projects in participatory mobility. The MUV project produced a number of resources for involving people in mobility policy. Resources like Cities4People’s Co-Creative Prototyping may provide further inspiration for practical strategies to involve the general public in co-designing their own mobility policy.