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## Workshop on Data Sovereignty in Municipalities

Results of the international workshop on November 19<sup>th</sup>

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*This paper documents the discussions and results of a workshop hosted by the Dialogue Platform Smart Cities. The contents of this document solely represent the opinions of the workshop participants and not those of the Dialogue Platform.*

A multinational group of more than 60 actors from a variety of institutional and professional backgrounds convened on November 19, 2020 in a workshop hosted by the [Dialogue Platform Smart Cities](#) and supported by [Eurocities](#). The focus of the workshop was one of the key issues of urban data governance: data sovereignty. The moderator, Kathrin Bimesdörfer, introduced the Dialogue Platform Smart Cities, highlighted the importance of this topic and

How can we make large scale participation possible? Here are three examples:

- [vTaiwan](#)
- [Decidim](#)
- [Decide Madrid](#)

presented data sovereignty as one of the fundamental pillars of the [Smart City Charta](#). After two keynotes from Francesca Bria (President of the Italian National Innovation Fund) and Malcolm Bain (partner at Across Legal, Barcelona), the workshop focused on the technical, regulatory and socio-economic dimensions of data sovereignty. The City as MyData Operator Project Finland and DECODE Project from Amsterdam enriched the discussion with some empirical results and first-hand practical perspectives.

**“Our ambition is to work with European cities to create a digital Europe that serves the common good.”**

Dr. Margit Tünnemann sketched out the big picture from the point of view of the Federal Ministry of the Interior, Building and Community in her welcome address. Even though the overall impact of the ongoing COVID-19 pandemic is still unclear, we will be faced with significant change. One aspect of the future seems to be clear: it will “(...) most likely be digital.” To facilitate the necessary changes, many governments across Europe have provided stimulus packages this year. Germany’s Federal Government, for example, is currently spending more than €800 million on Smart City projects. This begs the question: how can these resources be used most efficiently? The Federal Ministry of the Interior, Building and Community aims at providing a sufficient regulatory framework in response.

### **Towards a redefinition of smart cities**

Even though the current times may seem frightening, Francesca Bria (President of the Italian National Innovation Fund, and former CTO of the city of Barcelona), stressed that we should rather focus on the “(...) crisis as a historical opportunity to lay the foundation *for a renewal of Europe*.” And cities play a

crucial role in tackling this crisis, projecting us into a digital, democratic and carbon-neutral future. Cities can be seen as a laboratory to **promote and experiment sustainable and democratic innovation that doesn’t increase social inequalities,**

and put people first. Looking at the status quo of how and where data is collected, stored, processed and used, Mrs. Bria sees a handful of large, private companies as occupying a dominant position. One of these corporations is even eponymous for the model of a technology first, top-down, futuristic smart city: the “Google City”. In this model, data and the infrastructure for analyzing and using it are primarily in the hands of a few Big Tech platforms. In contrast, the “people first model”, also dubbed “Barcelona Model” by Mrs. Bria, entails that the data generated in the context of the city is to be considered a common good, and a public infrastructure on top of which innovative urban services can be built. Also, the democratic participation of citizens is key not just to smart cities, but also to smart citizens. Digital technologies (connectivity, platforms, data, artificial intelligence) must help us organise this great shift towards a green and carbon-neutral society. In this sense, there is an absolute need for cities to equip themselves with a **digital infrastructure that collects public data** on electricity and heat consumption, mobility, water management, pollution etc. This data, as Mrs Bria did in Barcelona, can create public value, and be leveraged for the public interest to improve the city and create innovation in full respect of the privacy, security and digital sovereignty of citizens. This agenda that Mrs Bria calls a “green digital new deal” is also embraced by the UN-Habitat through their global program “People-focused Smart Cities”. There is also the Cities Coalition for Digital Rights with over 100 cities that signed up for

**Examples for a regulatory framework for data sovereignty:**

- [Barcelona City Council Digital Plan](#)
- [Cities for Digital Rights](#)

a model of democratic and sustainable digitisation that put people and the environment first.

According to this model, the infrastructure for regular citizen participation, initiated by citizens themselves, needs to be provided and an accessible technological infrastructure for the data e.g. GAIA-X must be established.

**“Actors need to start thinking data first”**

Large scale citizen participation, the definition of certain data as “public good” and a sovereign data infrastructure need an appropriate regulatory framework. In his keynote, Malcolm Bain focused on the legal aspects of the path towards a digital future that enables more data sovereignty. He firmly believes that certain data could be redefined as public good to enable public access to privately generated data, but envisages three main challenges on the way, namely issues of a legal, technological and organizational nature. Mr. Bain sees the 2019 Barcelona data management regulation as a key step in the creation of a regulatory framework and stresses the roles of citizen participation, cooperation among public entities and with the private sector, and shareable open-source technology infrastructures.

Besides all the regulatory changes, we need a cultural change and a new way of thinking about data: “Actors need to start thinking data first”. By that, the keynote speaker was referring to his observation that data has in the past been regarded as of second tier importance in public contracts and services and often overlooked but is now being seen as a key factor in data-driven decision making in cities.

After Mr. Bain’s input, participants expressed their interest in data sovereignty and concrete measures for its implementation. The discussion showed that there is currently no legal obligation for private companies to share their data with public actors. Furthermore, Francesca Bria stressed that the clauses and solutions she is working on will be open source. This way, these solutions can work as blueprints for other cities to adapt. Besides the regulatory framework, the discussion also focused on the technological necessities and know-how for properly operating and managing modern data infrastructure. After stressing the need for the infrastructure (e.g. data lakes and the belonging operating systems), the discussion shifted towards a skill focus. In the early stages of the transition of Barcelona, decision makers relied upon good cooperation with colleges and universities to guarantee a supply of trained professionals. Another example is the German system, with traditionally strong cooperation between the research facilities, universities, and privately owned companies, as Francesca Bria pointed out.

## Spotlight 1

### City as MyData Operator Project Finland



The City as MyData Operator Project Finland is a collaborative project that is being implemented in the four Finnish cities of Helsinki, Espoo, Turku, and Oulu. Johanna Pasilkar, Project Manager from the City of Helsinki and Wilhelmiina Griep, Project Manager from the City of Espoo shared their experiences of project implementation.

The [MyData principles](#) – which are published by the international non-profit organization MyData Global – aim at promoting a fair, sustainable, and prosperous digital society through a human-centric approach to personal data. This means “The people need to be in charge. They need to decide which information they want to share.”

The approach promoted by the MyData

#### MyData Principles:

1. Human-centric
2. Individual as the point of integration
3. Individual empowerment
4. Portability: access and re-use
5. Transparency and accountability
6. Interoperability

principles doesn't mean that the data is simply protected if the individual chooses this option. It aims to combine maximum data usage with maximum individual freedom to decide how one's data is protected.

In Finland it all started with the [Six City Strategy](#) (2014-2020) which was funded by the EU and the Finnish state. The strategy included a focus area for open data and interfaces which was laying the foundation for data sharing, joint projects and principles, and collaboration of the six cities.

The MyData approach came into play at a later point of time when actual principles for data management needed to be defined and implemented. These are the focus areas of the City as MyData Operator Project Finland:

- 1. Simplification of people's lives*
- 2. Unified working on the topic according to the MyData principles*
- 3. Improving services pro-actively by analyzing the data.*

But the implementation of such projects takes resources. Most of the time, municipalities must prioritize their spending. That's why cooperation between the Cities is of utmost importance. Wilhelmiina Griep pointed out that the financing and strong regional and urban cooperation were crucial for the projects' success.

## Spotlight 2

### Decode "Preserve the digital sovereignty of European citizens"

The DECODE project was funded by the European Union's 'Horizon 2020' program and implemented by regional pilots. Aik van Eemeren (Chief Technology Officer, City of Amsterdam) described his experiences of the Amsterdam pilots.

[The DECODE Project](#) aims at enabling the individual to be able to decide, what data they want to share and what they want to keep to themselves.

Since data is the most important raw material of the digital age and everyone generates data by using digital services, the question of who uses the data and who is creating added value from the data is more important than ever. Currently it is not clear what exactly happens to data and data sets are often exclusively held and monetized by resourceful private actors.



Decentralized  
Citizen  
Owned  
Data  
Ecosystem

Source: [decodeproject.eu](http://decodeproject.eu)

To enable users to actively decide what happens to their data, DECODE provides tools that puts individuals in control of whether they keep their information private or share it for the common good. DECODE is supposed to become a free and open source ecosystem of tools that are validated in real life. One of those tools that was developed with the help of DECODE is the [IRMA app](#). Both DECODE and IRMA are acronyms. The abbreviation stands for “**I** **R**eveal **M**y **A**tttributes” which is a very instructive description of what the app does. The app serves as a digital wallet for all kinds of documents. You can add your personal address, other personal data, your email address, personal banking data, your mobile number and even information regarding healthcare. But one thing is key to the app: the personal decision if you want to upload or share the information. This makes the IRMA app an embodiment of DECODE’s core values.



The same applies to the [FairBnB](#) platform that does not only focus on the maximum revenue generated by renting out apartments but also on data minimalism. To select pilots, the DECODE team used the Amsterdam Digital Agenda as a guideline. To cooperate for the greater good, almost all the code that’s used in DECODE-projects can be used to build similar solutions that can be adjusted to specific regional demands.

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### Key takeaways of the workshop

From a technological and infrastructural standpoint, the topics of *interoperability*, *data usability* and *resources of a human and technological nature* were identified as essential for the realization of data sovereignty. Regarding the legal and contractual dimensions of data sovereignty, the collaborative drafting of 'standard clauses' for procurement contracts for data solutions and services was deemed potentially very useful by the participants. To this end, *identifying, connecting, and involving actors across city limits and national borders* was considered crucial. On the other hand, the working group saw the *definition of data that's needed for urban development* and the *definition of specific data as essential and which must be shared* as important. *Data literacy* and *quality* coupled with a *need for awareness of opportunities* that lie in the usage of data in a responsible way were in the center of the discussions of the working group that focused on the social and economic requirements for data sovereignty in municipalities.

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## Further reading

### Articles:

European Commission (2020): Privately held data available in the European Union should be used better and more: <https://ec.europa.eu/digital-single-market/en/news/experts-say-privately-held-data-available-european-union-should-be-used-better-and-more>

Ignacio Cofone (2019): Algorithmic Discrimination Is an Information Problem, in: 70 Hastings Law Journal 1389: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3387801](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3387801)

John Thornhill (2019): Smart cities still need a human touch, Urban experiments in Toronto and Barcelona will inform policymakers around the world: <https://www.ft.com/content/67c52480-b51f-11e9-8cb2-799a3a8cf37b>

### Guidelines, principles and toolkits

Ethical Digital Standards: A Policy Toolkit:

<https://www.barcelona.cat/digitalstandards/en/init/0.1/index.html>

EUROCITIES principles on citizen data:

[http://nws.eurocities.eu/MediaShell/media/Citizen\\_data\\_principles\\_final\\_draft.pdf](http://nws.eurocities.eu/MediaShell/media/Citizen_data_principles_final_draft.pdf)

Manifesto in favour of technological sovereignty and digital rights for cities:

<https://www.barcelona.cat/digitalstandards/manifesto/0.2/>

### Other interesting Projects worth taking a look at

6aika strategy <https://6aika.fi/en/frontpage/>

H2020 DataVaults project – <https://www.datavaults.eu>

NGI eSSIF-Lab – <https://essif-lab.eu>

Solid Project – <https://solidproject.org>

Sovrin – <https://sovrin.org>