



Smart Cities Marketplace Initiative within the Citizen Focus Action Cluster:

## “Citizen Control of Personal Data”

Creating a roadmap for the initiative, to help structure the early

Workshops, starting on Feb 25th: The Road to “New DataVille”!

### AIM OF INITIATIVE

The purpose of the “Citizen Centric approach to data” initiative within the Marketplace can be summed up as **helping to build the conditions and relationships whereby the citizen will be willing to share personal data with a city and with other actors in the data economy.**

Whilst having a clear focus, it will recognise its role in the wider MarketPlace community and contribute as widely as possible, as synergies appear. Removing obstacles would grow the extremely valuable “personal data lake” which would then increase activity in the data economy and enrich existing data eco-systems.

Enormous changes will take place in the next few years with the handling of personal data. The advantages of the European approach are being recognised, in comparison to the disadvantages of the current large-corporation approach, where personal data is collected for narrow commercial benefit, rather than for the greater good of society and the economy.

But serious obstacles remain in place to reaching a situation in which a citizen will willingly share their data. But the EU has recognised these obstacles and funded a raft of projects and activities to overcome them. This initiative will seek to help remove these obstacles, bringing together the energy and results from these funded projects and actions, as well as projects still to be determined in the new programme, Horizon Europe, with the first call for proposals being imminent.

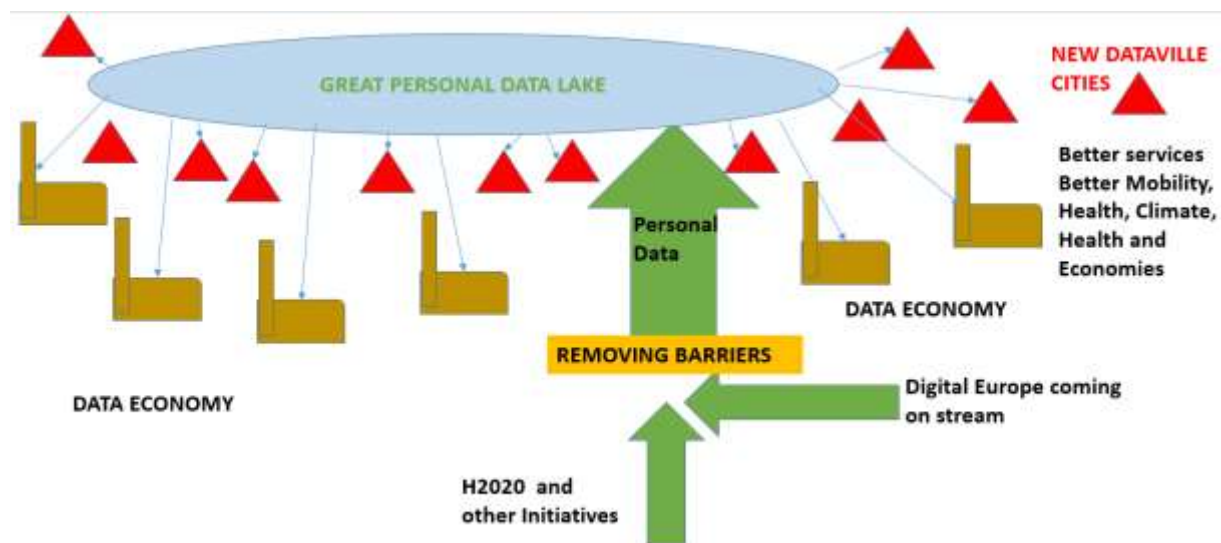
There is a common destination for all these initiatives. These are set out in EU policies and strategies. But for our purposes, and in order to help provide a clear focus for the journey, we will concentrate on those that are set out in the collective objectives of the funding programmes. Both the objectives within H2020, which is financing much of the current work and those objectives set out in the forthcoming Horizon Europe, promising further support and direction from a new raft of projects.

We need to assume that everything promised in the projects and initiatives such as: DATAVAULTS, KRAKEN, i3 Market, SafeDEED, GLASS, PIMCITY, TRUSTS, MUSKETEER, OPERTUS MUNDI, SmashHit. OPEN DEI, MOSAICrOWN, InteropEHRate, DECODE, SMARTER



TOGETHER, RUGGED, BDVA, TOREADOR, URBANITE, NORDIC EDGE, My Data etc. will be delivered on time.

They will collectively take us along the road we will map out to get us to our destination- “New DataVille”. And that the new initiatives will join us and help in the journey taking us there.



*Figure 1 The roadmap to “New DataVille”*

## STARTING POINTS

**Firstly:** We recognise the basic work being carried out within the Smart Cities MarketPlace. In particular, to widely deploy urban data platforms and we see the synergy in travelling towards the same destination, which is to have 300 million citizens connected to Smart City Urban Data Platforms by 2025. This is the location of “New DataVille” – the focus for our energies. It sits around the shores of the “Great Personal Data Lake”!

**Secondly:** Similarly, for simplicity, a starting point of the Erasmus Study <sup>1</sup> has been adopted. This Report shaped the initial design of the initiative, having outlined a set of actions required, and some of which we will pursue immediately as a starting point for our work, which should steadily evolve. But having a starting point helps.

These actions included:

1. To **identify the Lighthouse cities** leading on societal engagement; Find the lighthouse cities that are leading the pack, and find out how and for what impact in our field.

<sup>1</sup> <https://smart-cities-marketplace.ec.europa.eu/resources/1888>



2. Involve citizens by **creating impactful use cases and easy to use services/Apps** and **facilitate citizens to remain in control of their data**
3. Unpick 'trust'; analyse and set in place clear useful actions. The top 3 measures in terms of their perceived importance for trust building are privacy statements and **GDPR compliance**, information **transparency/dashboard for users** and the use of a data (privacy) charter, describing the key principles of the platform.
4. Establish a **clear legal charter** and measurable goal for use of data by industry
5. Develop frameworks for **accountable and trustworthy** use of data(platforms) and AI
6. Develop **very practical use cases**, that explore **what data could be shared** and combined and how that can be managed to deliver **greater value**
7. Pilot a **CDO network**, and adopt/adapt the CDO role definition
8. **Capture/pilot collaborative / joint business case**; develop method and tools that will **help multiple cities adopt**.

**Thirdly:** As mentioned above, the policies underpinning the funding of many of our key participating projects as set out in the initial call for H2020 proposals are another starting point. Collectively we are aiming to:

- Support the emergence of data markets and the data economy.
- Assist in the setting up and operation of platforms for secure and controlled sharing of "closed data" (proprietary and/or personal data).
- Address the necessary technical, organisational, legal and commercial aspects of data sharing, brokerage and trading whilst building on existing computing platforms.
- Accelerate the take-up of Personal data platforms which ensure respect of prevailing legislation and allow data subjects and data owners to remain in control of their data and its subsequent use.
- Preserve utility for data analysis and allow for the management of privacy and utility trade-offs, and metadata privacy, including query privacy.
- Develop privacy metrics that are easy to understand for data subjects and contribute to the economic value of data by allowing privacy-preserving integration of independently developed data sources.
- Linking to and bringing in industrial data providers that will populate the platforms.
- Contributing to consensus on conditions of use and practical arrangements of data sharing for future regulation.
- Have an impact on the regulatory activity of the EU. The demand for more advanced regulations for a more user privacy centred approach in personal data based business is increasing and the current EU Regulation in Privacy (GDPR) will need enhancing.

**Fourthly:** A further "starting point", is the policy based programme about to be launched, Horizon Europe, with its programme for 2021 -2022 being finalised. We know from this, which direction new projects will be heading in and we will signpost them to join us on our route to "New DataVille" with us having already paved the first stages.



There are several initiatives being planned for, which would give further support to what we are doing and which will give us considerable added impetus for us to reach our goals, increasing the likelihood of the technologies being created in the current projects and initiatives becoming main stream in “New DataVille”. The Horizon Europe programme will reinforce EU critical digital capacities by focusing on the key areas of artificial intelligence, cybersecurity, advanced computing, data infrastructure, governance and processing, and their deployment and best use for critical sectors like energy and environment, manufacturing, agriculture and health. Examples of topics of value to us in relation to Data include:

- **Capacity building, coordination and establishment of a data ecosystem for climate-neutral and smart communities and of urban digital platforms (5.2.2.2)**
- **Data Spaces Support Centre (2.2.2.1)**
- **Sectoral common European data spaces** will be funded as a means to make relevant data available, covering **Green Deal Data Space, Mobility space, Data space for Health, Security, and Media.**
- **Incubators** which will strengthen Europe’s data economy by supporting SMEs in using and combining data sources from different sectors and communities. (2.2.2.3)
- **Testing and Experimentation Facility** for Smart Communities (2.3.4)

Essentially, Horizon Europe will support the deployment of the underlying technologies, processes, standards and tools for the operationalization of the data spaces, namely: (i) the necessary IT systems (digital industrial and personal data platforms, based on competitive and seamless access to and use of cloud infrastructures and services through the deployment of pan-European cloud federations); (ii) technical data governance frameworks establishing enabling schemata (consisting of a definition of actors and their roles, of standards and interoperability protocols) both at sector or domain level and for cross-sector data use; (iii) incubating activities for data use by SMEs and startups.

## WHERE DO WE BEGIN?

We have brought down the focus for activity. Many of the points above are already covered in the activities of the projects. But to make any collective progress, we will need to narrow it down further into those aspects we can start to tackle together immediately. We can subsequently grow into more tasks, but we should aim to gather momentum. Some first thoughts are that we could immediately start to focus on the following from the Erasmus Study referred to above.

### Identify cities willing to be early adopters.

- **1. To identify the Lighthouse cities** leading on societal engagement; Find the lighthouse cities that are leading the pack, and find out how and for what impact in our field.



- **8.Help multiple cities adopt.** There is a wide range of cities (and government) in the projects we are interested in as well as signatories to the European Way Declaration, Lighthouse cities etc.

We could develop a strategy for selecting those cities most likely to join in and contribute and share the vision. Gathering together cities having a total of 300 million citizens in total will be the aim.

### The funding issue

- **Capture/pilot collaborative / joint business case;** Here there is much to borrow from elsewhere in the MarketPlace around the funding of Urban Data Platforms and there is the Investment “match making” programme as a basis.

But what is not factored in is the additional value which giving access to a Personal Data Lake might bring, with increased economic activity, better informed service provision, better policy making, and potential new revenue streams to be shared widely for the benefit of citizens and society as well as for strengthening the European Data economy.

If finance currently flows to the large corporations, where else might finance flow when data flows change? The major anticipated shift at the macro-economic level and adjustment of flows of wealth in step with how the flows of data shift in a changing European Model will radically shape the business models. We should seek to consolidate the work of experts in this field, to inform our more favourable business models emerging, as a result of opening up personal data.

Included would be monitoring new funding opportunities from a wide variety of sources, in addition to the opportunities referred to above.

### Re-assuring citizens.

- **3. Privacy statements and GDPR compliancy, information transparency/dashboard for users** and the use of a data (privacy) charter, covering citizen attitudes, ethics, privacy, legal aspects etc.

### Use cases on sharing data

- **6. Develop very practical use cases,** that explore **what data could be shared** and combined and how that can be managed to deliver **greater value.**

This would entail activity aimed at developing links with all the various data eco-systems which would benefit widely from having greater access to the Personal Data Lake. These





include improving mobility, health, energy efficiency, better governance , incorporating citizen-generated data as “city data”. etc.

## Getting key personnel in the leading cities involved

- **7. Piloting a CDO network and including the recruitment from the “multiple adoption” cities**

The nature of the work set out above has being described as embracing four pillars, reflecting the divisions above and it is provided in the Appendix to this document. Again, this will be revised by all the participants as we progress. Nothing is too rigid.

## ACTION PLAN

The “**First Year Activities & Outcomes**” document was envisaged only as a guide, which can now be re-addressed according to the collective requirements of the participants in this initiative.

Once a route is mapped out and the destination agreed, then there is flexibility, with already having a common basis/shared vision. This is reproduced below just for guidance and it can be readily adapted as we wish.

## FIRST-YEAR ACTIVITIES & OUTCOMES

This Action Plan was drafted to outline what is planned in general during the first year. But it is expected that it will become a “Living Document” and is expected to be in a constant state of revision in order to capture the dynamics of this initiative and make sure rationed effort is spent constructively at all times. It will be revised after the First Workshop, Thursday 25 February, 2021. 10.00-12.00.

Action	Description	Month
Launch	This Smart Cities Marketplace Initiative was launched in January 2021.	M1
Workshops	The aim of this first Workshops will be for the participants from a range of other initiatives and viewpoints to map their priorities, needs and capacities for contribution. The agenda will embrace a presentation from a project to focus discussion and a outline plan as to how we can proceed will be tabled, to be re-organised as we make progress. We will make a start on producing a “canvas of priorities, needs and capacities” The Appendix sets out the approach.	M2 on
Structuring the initiative	A <b>structure</b> will be created to channel the energy and results in the most effective way, also taking into account how we can link and provide benefit to other initiatives within the Smart Cities Marketplace, concentrating on where synergies are strongest and more realisable.	M3



Selection and recruitment process and scoping work.	Prior to the launch we had the opportunity to contact the initial new stakeholders for this “movement”. Whilst the launch was of interest to a wide smart cities audience, considerable attention will be given in the coming months to <b>seeking out and recruiting</b> those keen to contribute their results to this movement, seeking to increase the size of the personal data lake available. Carrying out this <b>scoping work</b> will be important to a good start and successful outcome and will be iterative.	M1-M12
State-of-the art Document/Use-case Directory	Based on the canvas of priorities, needs and capacities, a <b>working document</b> will be drafted, summarising <b>the state of the art</b> in terms of advances in the utilisation of citizen’s data for smart cities and circulated. The <b>Use Case directory</b> will be continually updated with best practice generated by our participating projects and cities.	M5
Study	We will consider the evaluation findings and interact with the Lighthouse community in terms of understanding their lessons learned, both in terms of data-platforms and in sharing best practice and replication, assuming much work will have been done.	M7
Create a Process to understand which cities have something to share and others with needs they are looking to fulfil.	To develop an evaluation process to identify the cities which are most likely to be supportive in taking the movement forward and who will be the early adopters and multipliers. The refined lists of cities from those we have been scrutinising, will guide the direct approaches to those invited to join the drivers of this movement. But we would still engage widely with all cities	M8-12
Regular Meetings	The initial charting will give rise to a <b>series of online working meetings</b> . These will be held with down-to-earth, peer-to-peer knowledge exchange and cooperation between experts in this field on concrete cross-cutting activities. Depending on the specific scope, the working meetings will be held either in cooperation with <b>core networks</b> within their established meeting arenas, such as Barcelona, Nordic Edge, Urbis etc. or organised by ourselves to attract participants across stakeholder networks. The working meetings will enable us to create an overview and substantiate whether we are on course to reach our objectives or whether directional adjustments are required. When we can return to real meetings, these will coincide with other events.	Frequency to be determined
White paper	Based on the working meetings, in Autumn 2021, a first <b>White Paper</b> will be created, in cooperation with interested experts from Marketplace and other networks/platforms. The position paper will be <b>presented in selected European</b>	M10



	<p><b>arenas</b>, to generate concrete discussion and influence agenda-setting of relevant national and European policy frameworks. The policy paper will amongst other things:</p> <ul style="list-style-type: none"> <li>• Take stock of the most likely solutions to the existing problems identified.</li> <li>• Chart and categorise the roadmap to scale-up the solutions.</li> <li>• Provide initial feedback on any regulatory changes in 2021</li> </ul>	
Manifesto	At the last large meeting of the year, a <b>Manifesto</b> and Protocol will be produced to solidify our efforts.	TBC
Future Plan	In parallel to these meetings, this Initiative will clarify what is the realistic capacity and competency of the participants, in order to be able to plan for achievable outcomes and quick wins. Together with the participants, we will create a <b>timeline and growth plan</b> for implementing the solutions we have identified, whilst extending the original scope towards any new challenges which may be obstructing progress. The <b>Future Plan</b> will be discussed with Marketplace and presented at the end of Y1.	M12

## Appendix: A Framework to structure activities in the first months of the “Citizen’s control of personal data” initiative.

SETTING OUT FOUR INTERLINKED EXERCISES TO HELP STRUCTURE FUTURE WORK - WHICH SHOULD PRODUCE REAL RESULTS AND TAKE-UP.

### 1. Removing obstacles which prevent citizen’s controlling and widely sharing their personal data.

**ERASMUS Study<sup>2</sup> recommendation:** “Methods and tools that will help multiple cities adopt. Assist in the setting up and operation of platforms for secure and controlled sharing of "closed data" (proprietary and/or personal data).”

**Column 1. To start to make a list of all the issues, problems faced, obstacles in the way etc. which stand in the way of citizens being able to share their personal data, with cities and the wider data economy, within a European Model. These will be reflected in EU policy designed to support their removal.**

<sup>2</sup> <https://smart-cities-marketplace.ec.europa.eu/resources/1888>





**Column 2.** To identify where solutions have been developed and where progress has already been made, with lessons to be learned, from the Lighthouses, EU Projects and elsewhere in relation to reducing these obstacles to be listed in column 1.

**Column 3.** This will identify where the source of the solution lies, be it a project, a city, or elsewhere in the data economy.

**Column 4.** This will be the roadmaps for the adoption of each of the identified solutions, either individually or a grouping of solutions to an individual city or as a group of cities.

**Work being carried out to remove barriers to releasing personal data:**

Column 1. Problem/Obstacle Identified	Column 2. Potential solutions	Column 3. Source of solution (project, initiative, smart city, industry etc.)	Column 4. Steps to be taken in order to replicate the solutions.
Problem 1	Solution A	Project X	To be determined
	Solution B	Initiative Y	
	Solution C	Network Z	
Problem 2	Solution D	Project V	To be determined
	Solution E	City W	
ETC.			

## 2. Identification and recruitment of cities, both as “contributors of solutions” and as potential participants in a “multiple cities adoption.”

**ERASMUS Study Recommendation:** Develop very practical use cases and capture structured evidence-based case studies. Develop practical roadmaps

**Column 1** will be a “long-list” of cities and communities.

**Column 2** will categorise the contributions they can make.

**Column 3** will seek to share the benefits which individual cities may be interested in.

1. Target City	2. Benefits brought to initiative	3. Elements to be taken from the initiative
<b>Lighthouse cities</b>	This should all be straight forward with much information available to gather. Surveys could add the final ingredients.	To be determined
<b>Cities with Data Platforms etc.</b>		



Cities in involved projects and initiatives		
Via existing Networks		
Through dissemination etc.		

### 3. Financial models: Capturing and piloting collaborative and joint business cases, within the data economy as a whole.

**ERASMUS Study Recommendation:** Capture/pilot joint business case; develop method and tools that will help multiple cities adopt.

**Column 1 will give a broad brush approach to the levels of investment required.**

**Column 2 will scrutinise sources of finance.**

**Column 3 will list potential sources of additional revenue, arising from the potential changes in flows of finance and data which may occur as the European Model materialises, with this initiative seeking to contribute to these changes and bring about additional revenue flows.**

1.Costs of deployment for city	2.Potential Sources of Finance	3.Potential sources of Revenue
These will be indicative given that two cities are never alike.	The MarketPlace activity will be a starting point.	These can be similar across individual cities or with cities acting together where beneficial.

### 4. Cross-cutting benefits associated with growth of accessible personal data, for the MarketPlace and other initiatives contributing to the European Model.

**ERASMUS Study Recommendation:** Address the necessary technical, organisational, legal and commercial aspects of data sharing, brokerage and trading whilst building on existing computing platforms.

Whilst the core of our initiative is aimed at reducing barriers to citizens sharing their personal data more widely and securely, there are clear synergies with other ongoing work, much of it within the MarketPlace. Thus we will try to fully exploit the synergies we identify with mutual benefits



accruing. This will also feed into the Financial discussions. Governance of such new models will need to be monitored.

<b>Beneficiary (examples)</b>	<b>Benefit to initiative identified</b>	<b>Benefit to growing the personal data lake.</b>
Urban Data Platforms within MarketPlace		
Other EU projects		
SME incubators for data economy		
Green Deal Data Space, Mobility Data Space, Data Spaces for Health, Security, and Media.		
Data ecosystem for climate-neutral and smart communities/ and of urban digital platforms		