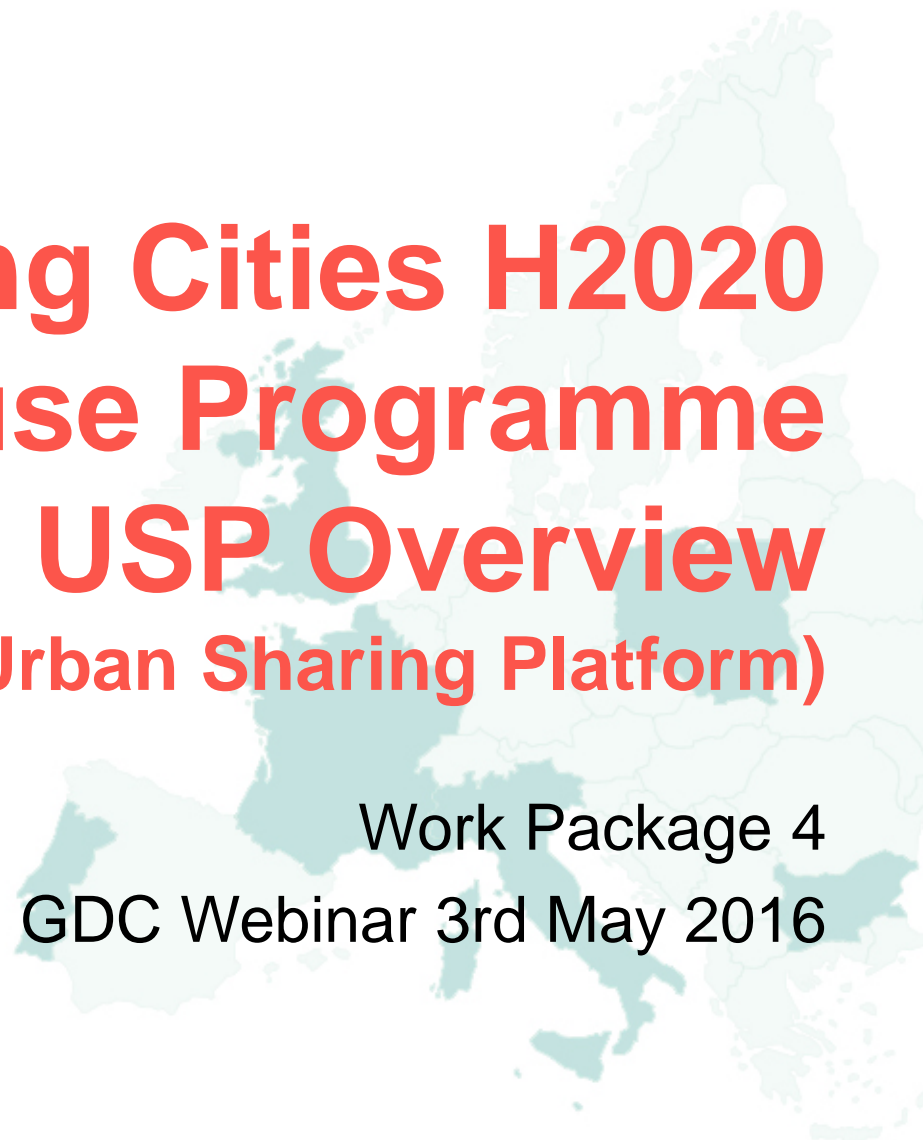


BUILDING SMART CITIES TOGETHER

# SHARINGCITIES



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement N° 691895

A faint, light blue map of Europe is visible in the background, centered behind the main text.

# **Sharing Cities H2020 Lighthouse Programme USP Overview (Urban Sharing Platform)**

Work Package 4  
GDC Webinar 3rd May 2016



# The Urban Sharing Platform (USP)

The goal of this Work Package (“Platform”) is to architect and build an **Urban Sharing Platform (USP)** that enables both the technical and functional aspects of the proposal interventions. An Urban Sharing Platform is a logical collection of technical components, capabilities and processes which provides functions and services that enable a Smart City. Its purpose is to aggregate data and control from a wide variety of devices and sensors, store and process the data and present information to the city and citizens, via WP2, which enables better use of the city resources.

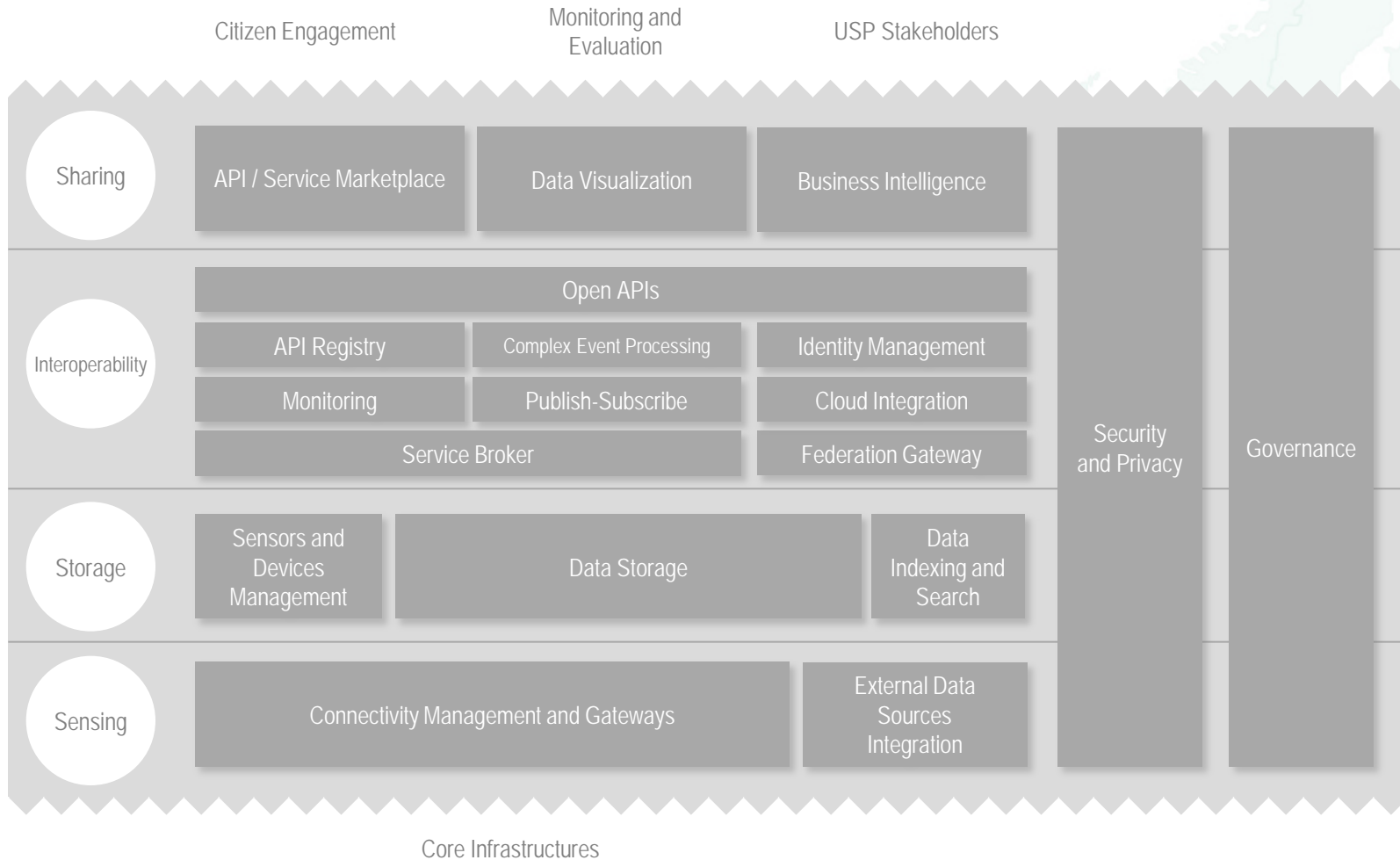
The USP will be co-developed by the consortium to:

- Provide a shared reference architecture that extends the strengths and capabilities of each of the cities both ‘vertically’ increasing each cities capability and ‘horizontally’ shared between the cities, followers and scale up cities.
- Will enable sharing by providing an interoperable platform based on open standards.
- Will utilise Enterprise Architecture and API economy best practices to align city needs with services and technology.
- Provide a federated governance structure to ensure alignment between the cities.

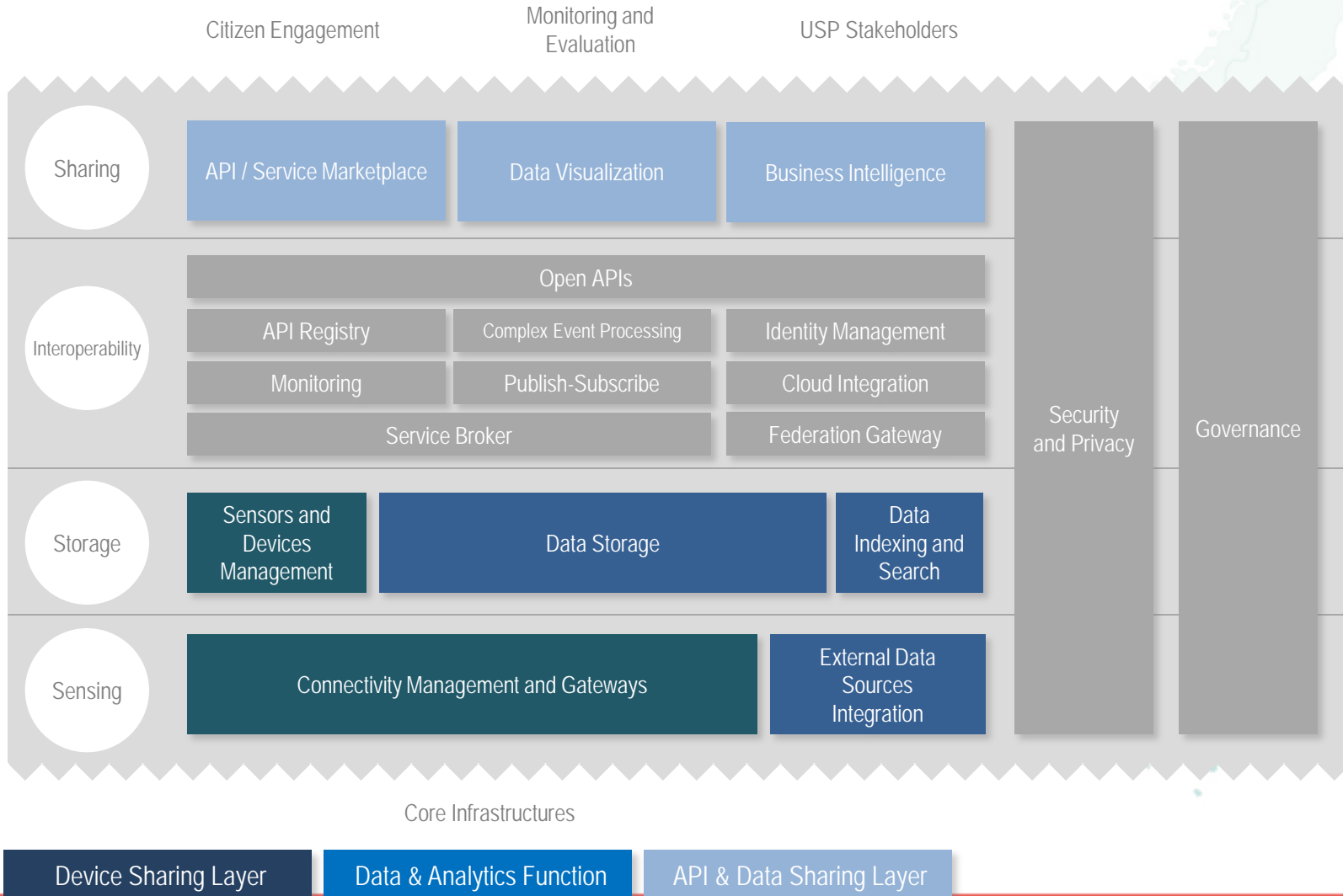
The USP will provide the following Key Functions:

- Support collection of data from different sources, e.g., sensors and devices (see WP3), end-users (see WP2), monitoring and evaluation (see WP8).
- Provide data storage facilities as well as components for analysing, processing and refining data.
- Provide guidelines and tools for interoperability both at technical and process level.
- Enable sharing of information through Open standards and APIs and knowledge and skills sharing.

# USP – Shared Capabilities



# USP – Shared Capabilities



# Co-creation amongst the cities

## API & Data Sharing Layer – Milan

- Present data to city consumers via standard API's
- Support a market place for API's and data to generate value for the city
- Enable application portability and re-use between cities
- Reduce the cost and time of city application development
- Provide an open, standards based platform for city applications development
- Accelerates and reduces cost, complexity and risk of design & procurements by providing a specification for tenders.
- Provides a framework for the development of citizen engagement tools for WP2
- NOTE: check alignment with EIP Urban Platform and FI-WARE and other sources eg Triangulum

## Device Sharing Layer – Lisbon

- Connect any device or data source to the platform, which complies to USP specification
- Includes device control, management and feedback loop.
- Supports distributed data capture
- Provides guidelines and specifications for design and procurement including quality, security etc
- Accelerates and reduces cost, complexity and risk of design & procurements
- Provides a specification for the procurement of devices by WP3

## Data Storage & Analytics – London

- Provide standard data models, ontologies and analytics
- Enhance the cataloguing and access to data
- Enable authorised access to datasets and subsets based on an access control policy.
- Enables city stakeholders to make better decisions based on rich data & standard analytics
- Support the gaining of value from data
- Enable the sharing of data between cities as determined by data collector
- Enables efficient transit of data between the Device and API layers including accommodating real-time and historic data