



European Innovation Partnership on Smart Cities and Communities Urban Platform Semantic Interoperability



EIP-SCC

European Innovation Partnership
on Smart Cities and Communities

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The EIP-SCC

European Innovation Partnership for Smart Cities & Communities



□ 4,600 partners

□ 370 commitments

□ 31 countries

Deliver: scale, acceleration, & impact,...

Through: common solutions, an integrated approach, & collaboration

Focus on Energy, Transport and ICT

H2020

- Lighthouse projects
- CSAs

The smart city data stack



The Urban Platform is an important part in an evolving integrated solution architecture

"Dog"

Societal Needs

The outcomes we strive for within a portfolio of city service domains

Services & Business Models

The operational basis by which data is consumed to add tangible value to key city stakeholders

City Data

The 'fuel' that offers an exciting new city narrative

Urban Platform

The means to configure, share, and interpret exponentially increasing volumes

Infrastructure

The base level connectivity that supports the platform

"Tail"

A **city-needs-led** approach: not the "tail wagging the dog"

Urban Platform Initiative in EIP SCC



Accelerate the adoption of Urban Platforms in EU cities

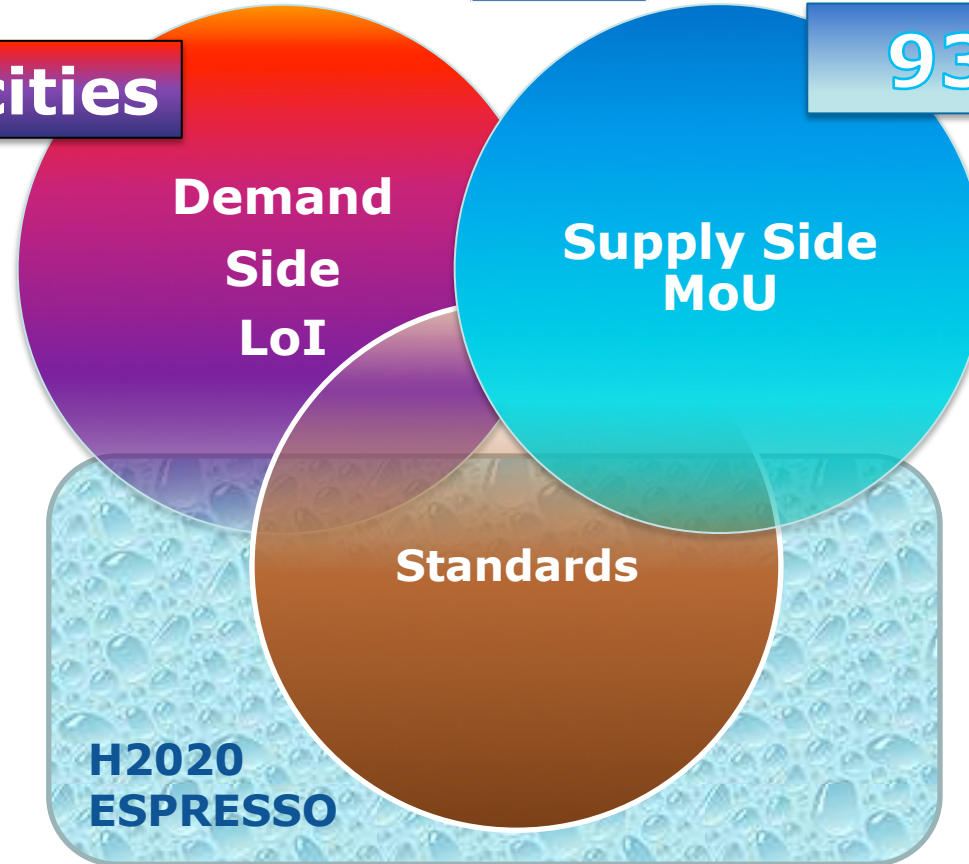
Individual cities plus associations

110 cities

93 signatories

Agree common requirements, and speed adoption

- Requirements
- Leadership guide
- Management framework



Bring together EU Industry to adopt common open solutions

- Reference architecture and design principles
- Standards
- Scale

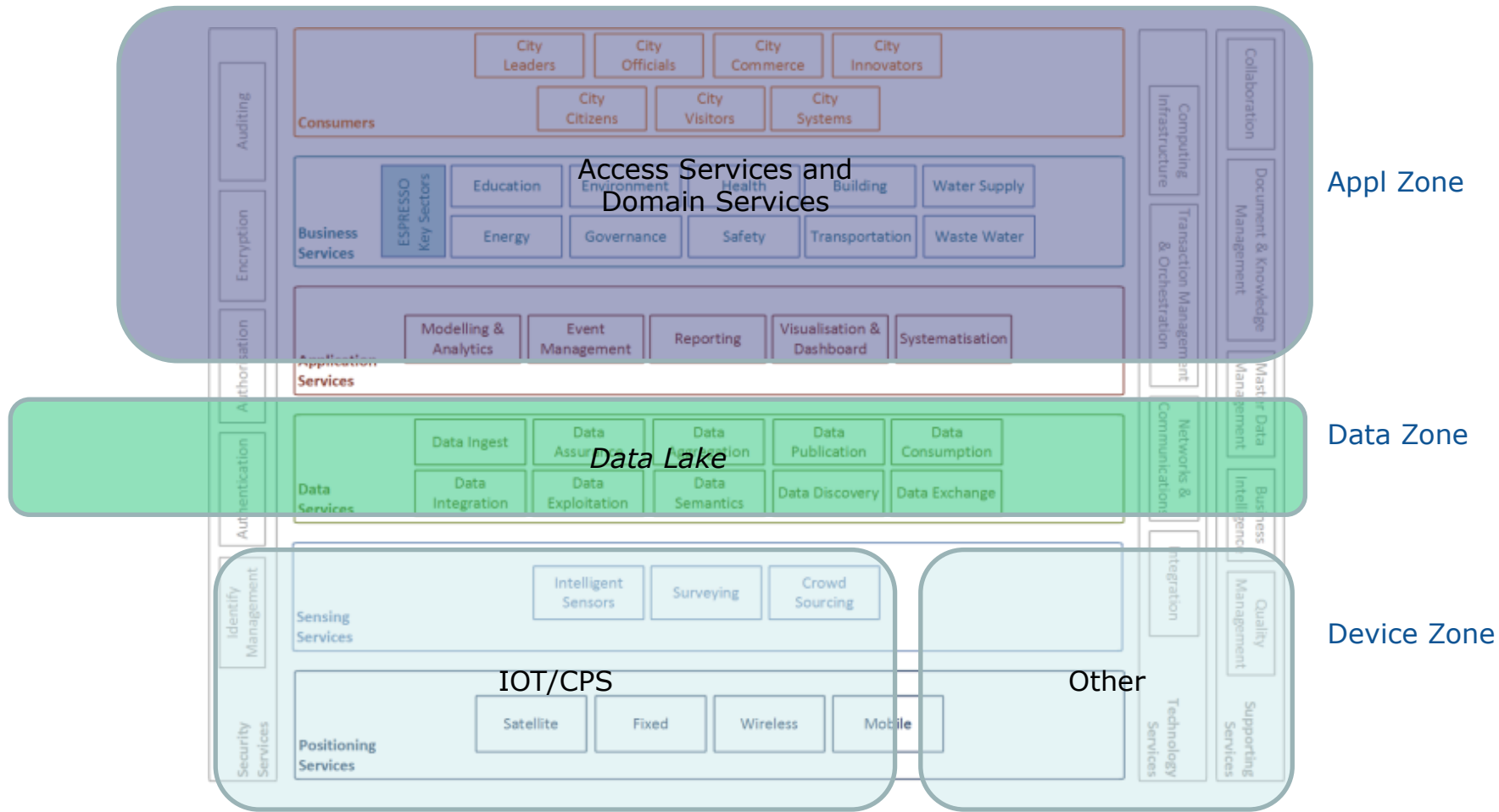
➤ By **2025**, ensure that **300m residents of EU cities** are supported by Urban Platform(s) to manage their business with a city and that the city in turn drives efficiencies, insight and local innovation through the platform(s)



A Horizon2020 support action for the EIP SCC Urban Platforms

- Promote the use of standards to achieve interoperability*
- Status quo of current standards and Platforms*
- Understand business and societal impacts*
- Promote the Urban Platform as the enabler for Smart City solutions*
- 16 Partners, 4 SDO, 4 system integrators, 2 cities*

EIP SCC/ ESPRESSO reference architecture

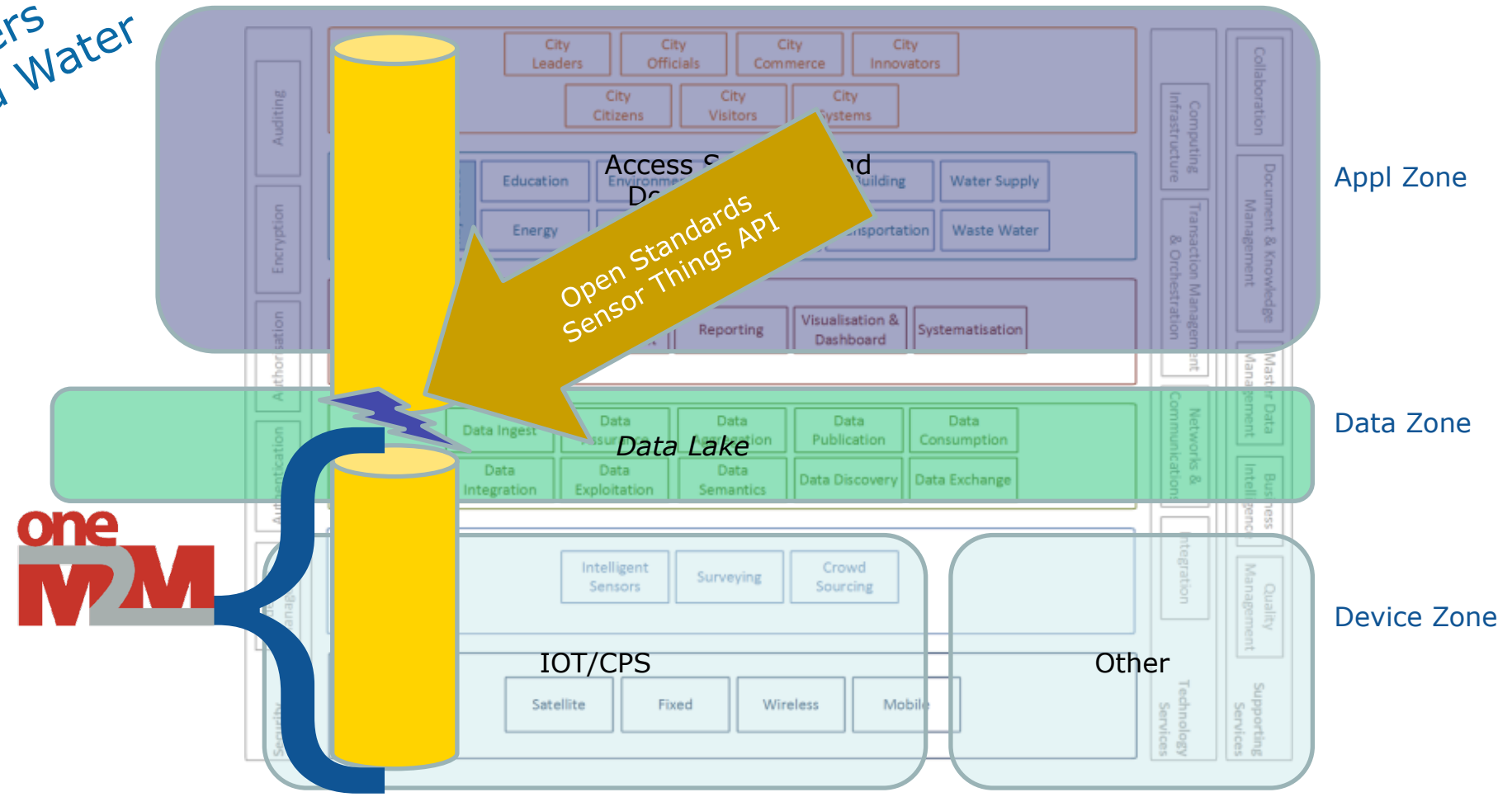


EIP SCC/ ESPRESSO reference architecture



Rotterdam implementation case

- Two use cases:
- Waste paper containers
 - Ground Water Level



Semantic Interoperability

SAREF ontology



- *SAREF (Smart Appliances REference ontology) - one common "language" for any home appliance to talk to any energy management system/entity*
- *Fast track standardisation via a study by a broad stakeholder community -> Global ETSI/OneM2M standard in 2015*
- *Version 2*
 - *modular structure with extensions*
 - *Energy, Building, Environment ready*
 - *More under development, notably **Smart Cities***
(Stakeholder workshops – IoT Week 2018 and EC premises)
- *ESPRESSO and Synchronicity working on it*



More information on:

EIP SCC:

<http://ec.europa.eu/eip/smartcities/>
<https://eu-smartcities.eu/>

Platforms:

<https://eu-smartcities.eu/urban-platforms>

Letter of Intent:

https://eu-smartcities.eu/sites/all/files/Urban Platform LoI_AC.pdf

MoU on urban platforms

https://eu-smartcities.eu/sites/all/files/Memorandum of Understanding on Urban Platforms_0.pdf

H2020 Espresso:

<http://espresso-project.eu/>



Thank you for your attention!

Still questions?

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Some milestones

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- **June 2011**
SET Plan Initiative
 - **July 2012**
European Innovation Partnership for Smart Cities and Communities (EIP-SCC)
 - **March 2013**
Green light from EU Council
 - **October 2013**
Adoption of Strategic Implementation Plan
 - **2014-2016**
Development of the EIP-SCC Market Place with involvement of 100+ cities and 100+ companies in concrete roll-out initiatives
 - **2017**
Complete rebuild of the EIP-SCC Market Place towards bankable projects