

Smart Cities ICT Interoperability

Connected Smart Cities conference Jan 2017

Svetoslav Mihaylov Policy Officer

Directorate-General for Communications Networks, Content and Technologies (CONNECT)

European Commission

The EIP-SCC



CSAs

European Innovation Partnership for Smart Cities & Communities



The smart city data stack



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

"Dog"

Societal Needs

Services & Business Models

City Data

Urban Platform

Infrastructure

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

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

The 'fuel' that offers an exciting new city narrative

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

The base level connectivity that supports the platform

"Tail"

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

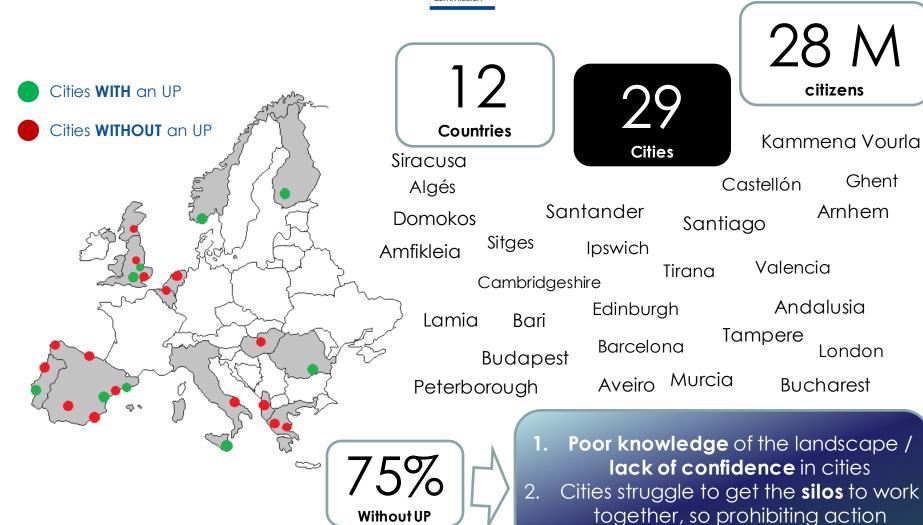
Smart City ICT Vision Interoperability **Urban Platform** Repository of city apps and services Ann qqA App App App Horizontal App App App interoperability Other City **Platform Open APIs** Not our priority City Platform (N factorial problem) **Open APIs** DB Subset of essential standards interoperability City Certification eeKPI data model programme and **Geo Information** Authentication Digital Public Services Vertical Architecture Data Model M2M protocol Containers City services **Public Lighting BIMs** Waste collection eHealth SG **ITS** & EMS Env. monitoring **ALiving** standards standards standards Water standards **Smart** management appliances

SURVEY ON URBAN PLATFORMS

(2015)



Cities suffer **budget constraints**



Without UP

The Urban Platform Initiative within the overall EIP Context



Individual cities of cities of the state of

Agree common requirements, and speed adoption

- Requirements
- Leadership guide
- Management framework

Accelerate the adoption of Urban Platforms in EU cities Urban **Platform Demand-**Side Supply-Group Side MoU Including Bring together EU Industry to (LoI) energy: adopt common open solutions Alliander Reference architecture **EnBW Standards Standards Eandis** Scale EDSO 4 SG Formalise the capture of Etc. H2020 the core content as **ESPRESSO**

international standards

- > By **2016 have reference templates** for tenders in place to allow cities to plan in an integrated way
- > By **2018, create a strong EU city market** for Urban Platforms
- 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)

More information



EIP SCC links:

http://ec.europa.eu/eip/smartcities/

https://eu-smartcities.eu/

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

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

LoI_AC.pdf

https://eu-smartcities.eu/sites/all/files/Memorandum of

<u>Understanding on Urban Platforms_0.pdf</u>

H2020 Espresso:

http://espresso.ru.uni-kl.de/



Thank you for your attention!

Still questions?

svetoslav.mihaylov@ec.europa.eu

Follow us on Twitter @EU_SmartCities





Back up

Demand-side city group



- Individual cities plus associations (in total \sim 90 cities)
- Lead by the Greater London Authority
- Main strategic targets:
 - Taking a city-needs led approach that will move to a more common and aligned set of requirements, and more innovative business models and acquisition processes to acquire urban platforms
 - Support assessment and development of a roadmap for cities on the topic
 - Mobilise the cities market of all sizes across EU to confidently embark on implementation — such that the bold take-up goals are met — and that they see the real value from collaborative activities and more common solutions



EIP SCC MoU for Open Urban Platforms



Working Model

- Based on city demand requirements
- Three workstreams established
 - WS1: Standards & Standardization
 - WS2: Reference Architecture & Design Principles
 - WS3: Scale

Current Status and Activities

- Analysis of standardization base line of related existing standards, primarily IoT standards; Develop landscape of urban platform relevant standards and propose potential necessary standardizations in co-ordination with project ESPRESSO
- Draft Reference Architecture and Design Principles Framework; Develop Reference Architecture Documentation
- Define and execute MoU dissemination and scale plan, including market perspectives, lighthouse projects, extend reach, based on business models und Raumfahrt (DLR), IrRADIARE,



HERE, Alliander, SAP, Microsoft, Continental, Fraunhofer FOKUS, Urban Software Institute, UrbanDNA, HyperCat, EnBW, Flexeye, Greater London Authority, Deutsche Telekom, Device Gateway, Mandat International, Maps, Eandis, Software AG, Konica Minolta, Indra Sistemas, EDSO for Smart Grids, Centro Técnico SEAT, Etna Hitech, TICE.PT, Ubiwhere, InterDigital, General Electric, Clicks and Links, Urban Tide, ZTE Corporation, Zeetta Networks, Vertical M2M, D'Appolonia, Tecnalia, Mondragon Corporation, Effective Knowledge, Deutsches Zentrum für Luft-**GOLEM Integrated Microelectronics** Solutions, ASIDEES, etc.