

## Integrated Infrastructures & Processes Action Cluster

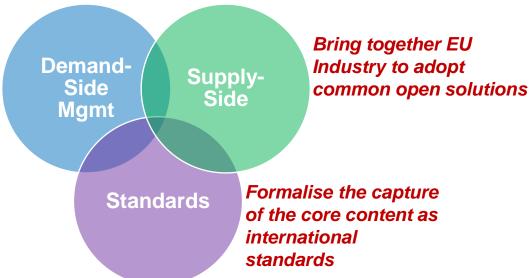
### **Urban Platform**

**Graham Colclough** 29<sup>th</sup> June 2017, Brussels, Standards Workshop

# Urban Platform Initiative: Set-Up & Goals



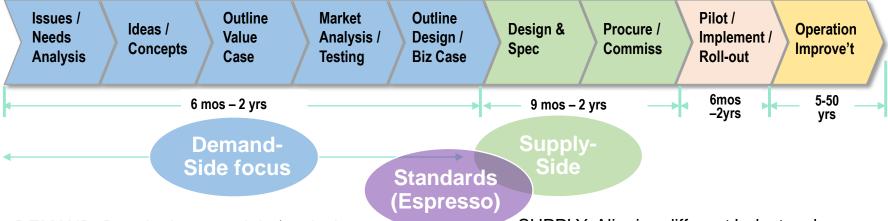
City-Needs-Led Principle Agree common requirements, that will help speed adoption



- > 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)

## Focus of attention of Urban Platform activities





- DEMAND: Developing materials / tools that:
- Build awareness of the value of standards
- Inform city leaders
- · Align across services / functions
- · Accelerate pre-procurement actions
- Clearly define needs
- · Increase confidence for decision makers
- Support collaboration across public actors (city-city-region collaboration / aggregation)
- Build capacity
- Help shape the market to benefit both sides
- Make solutions affordable / improve value

SUPPLY: Aligning different Industry players:

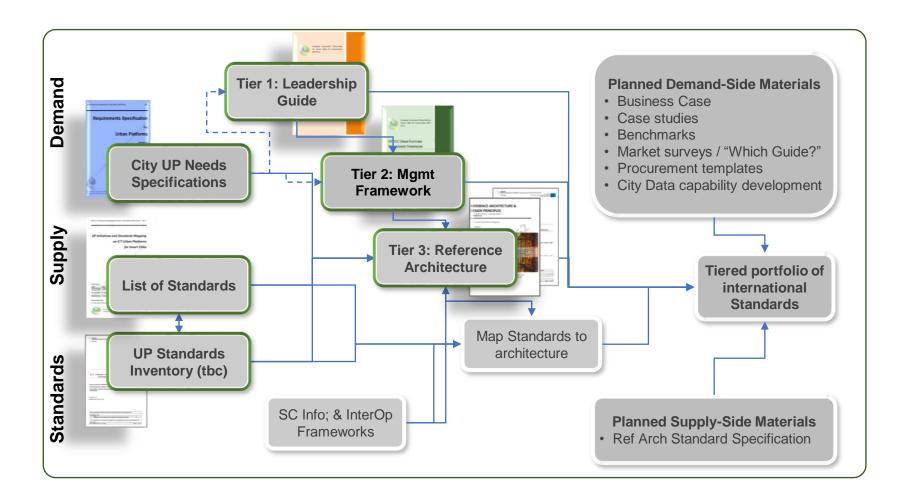
- Collaboration
- Agreed technical specifications
- Best value for market
- Case examples to accelerate

#### ESPRESSO: Develop / execute a strategy:

- · Map standards landscape
- Collaboration amongst standards stakeholders
- Key Technical Specification development
- Overall standards portfolio for UP and actions to sustain



### UP: where in the roadmap...



### Leadership Guide



A short crisp advisory / key action guide for political and professional city leaders



using the power of data to address urban challenges

and societal change

A GUIDE FOR CITY LEADERS

Ver. 02 October 201

#### 3. TIME FOR ACTION: SIX NEXT STEPS FOR CITY LEADERSHIP

Assuming you are persuaded, what do you as a City Leader do nex? Here are the 6 elements of a City Leadership Action Plan which resure that urban platform development and data exploitation connect to city vision, strategy, and political and policy outcomes.

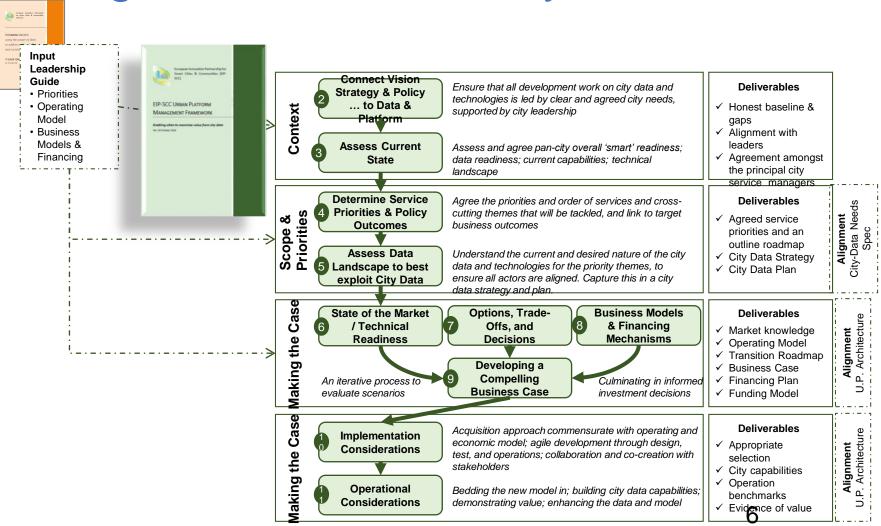
- 1. Establish data priorities. What are the most pressing city challenges, and indeed opportunities (e.g. housing, energy management, single customer view, sharing economy) that you want to address? Are these 'data rich' policy areas, and if not, can you fill in the gaps with less common forms of data? Can you choose a mixture of quick wins and 'gainst to stay' over the longer term? Can you establish what you need to do with the data, and present an emerging but well-evidenced case to other parties if that data sits outside of your own organization? Is there need of a city data strategy?
- Build clear value cases. For both quick wins and the giants, it is essential to set out in clear terms the social, environmental, economic and pure financial gains that exploiting city data will deliver.
- Scenario plan the models for the broader city data operating environment. There are various aspects to scenario planning, which will need to be iterated as stages 5 and 6 are activated. These are as follows:
  - A federated set of datastores or a single central repository within your city.
  - A city data platform that is part of a wider collaborative network running city-to-city or city-to-region.
  - The choice between adopting an open source model which promotes public collaboration, rapid iteration and frequent releases of software; or an open stondord's model which applies publicly available specifications which do not discriminate in terms of data format and vendor software, and which ensure interoperability.
  - Whether to work with a larger supplier, bringing with them a fuller range of services, or, as is the most likely outcome from adopting an open source model, to work with a plurality of smaller, more nimble (and perhaps local) businesses.
  - How you configure your data storage and options (i.e. to what extent you will manage on on-site operation or manage data in the cloud).
- 4. Set the foundations for good, proactive governance. Your authority has the role of city data convenor, and there are other key actors who can be classed as data publishers, owners, aggregators and enrichers, and who come from both private and public sector alike. What governance arrangements are required to secure the supply of data, proper treatment of it, and focus on political and policy priorities?
- 5. Establish business models and financing. What are the business models your city authority and work with? Develop an investment strategy involving both industry and public grant. What is the operating model over the longer term will the city be the principal data trader to fund the city data operating environment, or is this best achieved through a public-private partnership.
- 6. Exert personal influence across all of the above. As city leader you need to ensure that through good governance and drawing on your own organisation, you are able to chart the course to proactive city data leadership and value generation. This means having clear outlines for resource management across organisational boundaries, and goals to achieve around both how data is used to achieve positive outcomes, and also around the development of supporting data infrastructure.

#### Six Next Steps for City Leadership

- 1. Establish data priorities
- 2. Build clear value cases
- 3. Scenario plan the models for the broader city data operating environment
- 4. Set the foundations for good, proactive governance
- 5. Establish business models and financing
- 6. Exert personal influence across all of the above

### Mgmt Framework – city toolkit

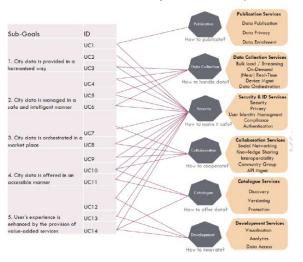




### Standards Mapping



#### Consistent with City-Needs Spec; an inventory of standards initiatives



#### **SDO Activities evaluated**

- 1. IEC
- ISO
- 3. ISO/IEC-JTC1
- 4. IEEE
- 5. ITU-T
- 6. OneM2M
- 7. Open Geospatial Consortium
- 8. CEN/CENELEC/ETSI

| Application Layer  |  |
|--------------------|--|
| Standard           | Description  |
| ISO/IEC 9545:1994  | Refines the description of the application layer contained in the basic reference model for OSI (ITU-T Rec.<br>X.200 / ISO/IEC 7498-1). Provides a framework for coordinating the development of existing and future<br>application layer recommendations and standards. Is provided for reference by application layer<br>recommendations and standards. The purpose is to facilitate a coherent and modular approach to the<br>structuring of specifications for application layer behavior.               |
| ISO/IEC 13249      | Information technology - Database languages - SQL multimedia and application packages  |
| ISO/IEC 27034      | ISO/IEC 27034 offers guidance on information security to those specifying, designing and programming or<br>procuring, implementing and using application systems, in other words business and IT managers,<br>developers and auditors, and ultimately the end-users of ICT. The aim is to ensure that computer<br>applications deliver the desired or necessary level of security in support of the organization's Information<br>Security Management System, adequately addressing many ICT security risks. |
| ISO/IEC 30128:2014 | ISO/IEC 30128.2014 specifies the interfaces between the application layers of service providers and sensor network gateways, which is Protocol A in interface 3, defined in ISO/IEC 29182-5.  This International Standard covers  description of generic sensor network applications' operational requirements,  description of sensor network capabilities, and  mandatory and optional interfaces between the application layers of service providers and sensor network gateways.                         |

#### **Mapping Activities**

- 1. Reference Architecture Urban Platform
- Technical Infrastructure
- 3. Data Management
- Data Access (API Connector to get access to Data)

Regional / NSOs

4. World Smart City community

1. AENOR

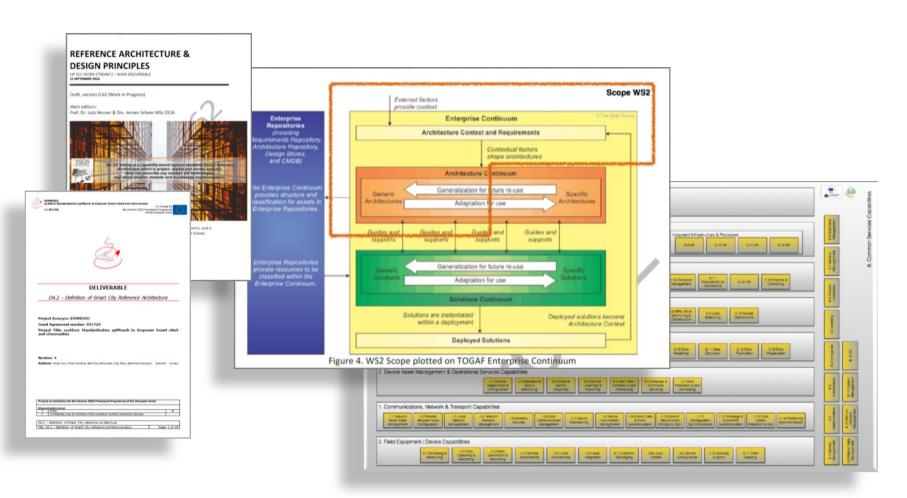
2. DKE/DIN

3. OASC

- 5. Smart Data (Enriched Data)
- 6. Smart Services
- 7. Security and Privacy

### Reference Architecture(s)





29th June Standards Development Organisation (International & Nation) Workshop

## EIP—SCC European Innovation Partnership on Smart Cities and Communities

#### **UP AC Agreed Forward Plans**

These actions result from the 20<sup>th</sup> June EIP Urban Platform workshop. They do not as yet include the outcome of the 29<sup>th</sup> June Standards workshop

#### **Urban Platform Roadmap**

- 1. Re-mobilise UP Gov'ce Group to strengthen cross-sector alignment
- 2. Test Ldrshp Guide in cities with politicians
- 3. Run **Mgmt F'work** workshops to ready cities (exploiting networks like DE SC Forum; E'cities; etc)
- 4. Improve **MF** adding also 'operation and governance guide'
- 5. Improve Ref Arch and align with planned DIN PAS
- 6. Manage end June BXL Standards Workshop
- 7. Mobilise across SCC01s, and collect examples of success stories, and UP justifications
- 8. Cost, benefits, value case development
- 9. Develop further templates / tools
- 10. Apply for financial assistance under INTERREG Europe for capability creation
- 11. Ready EC / Initiative for ISO Nov conference
- 11. Ongoing comms
- 13. Pavilion Event needed?

### Portfolio of existing / desired documents

