

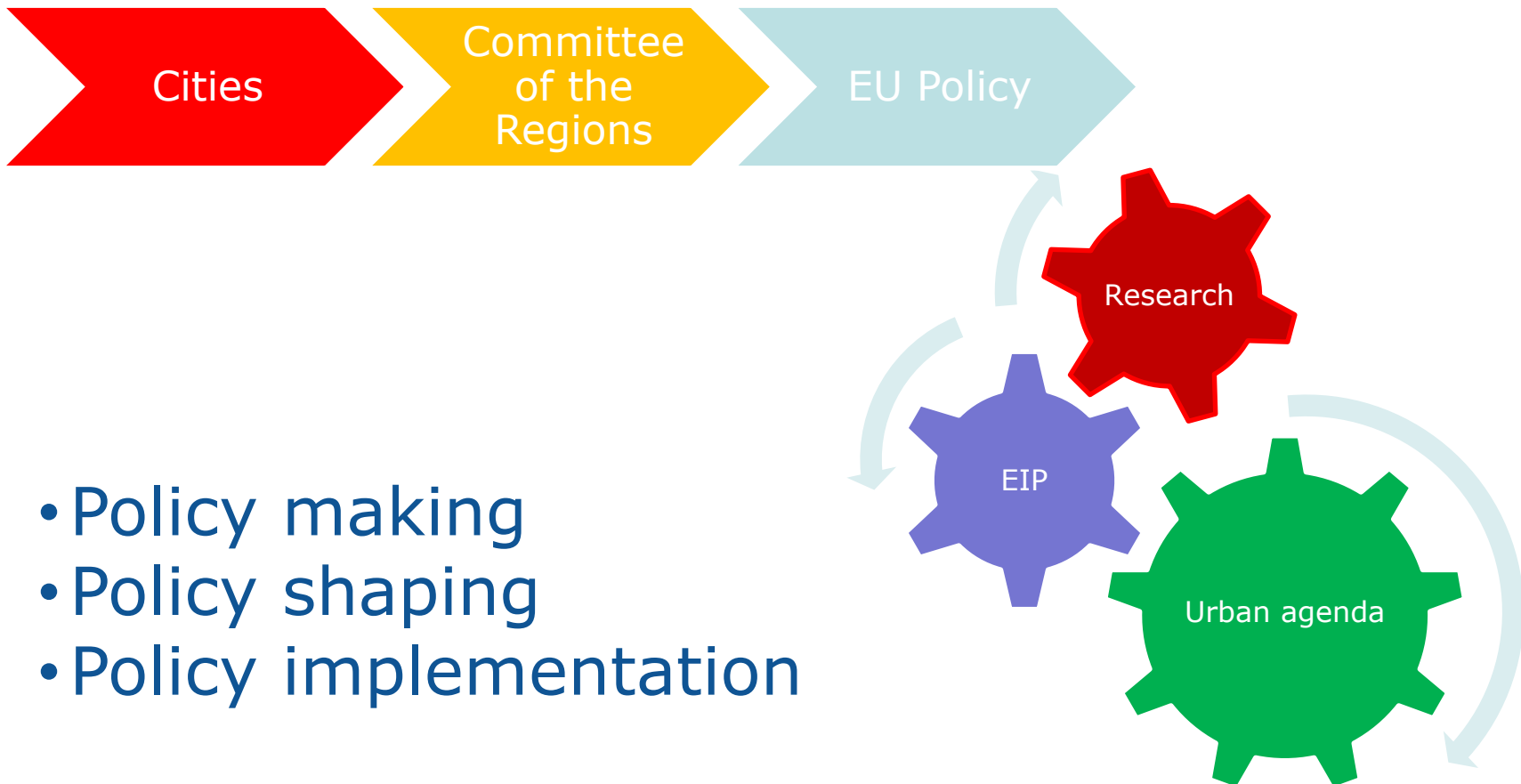


Smart cities Europe

Eddy Hartog, Head of Unit Smart Mobility and Living
DG CONNECT European Commission

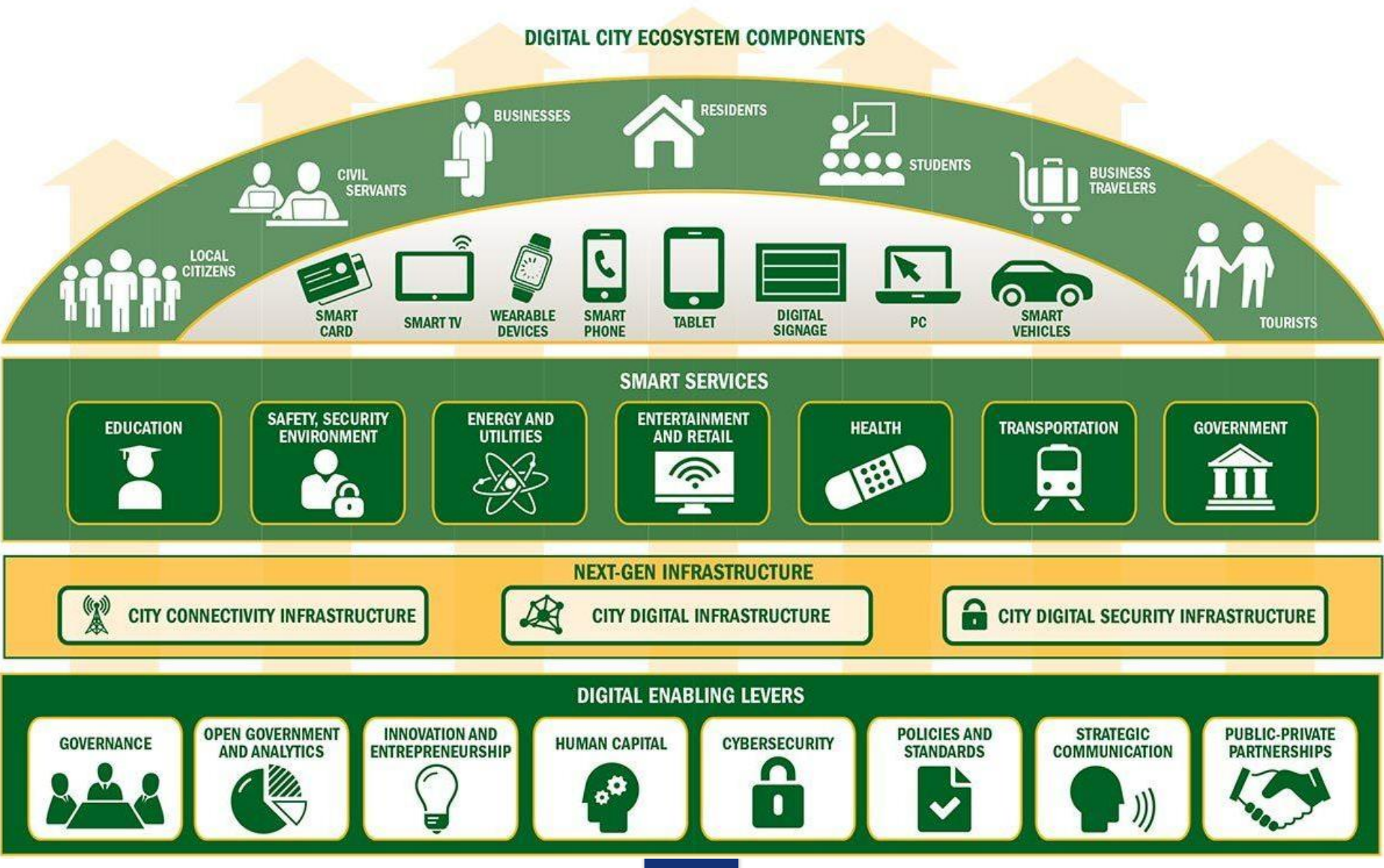
16 February 2017

EU and Smart Cities





Smart city

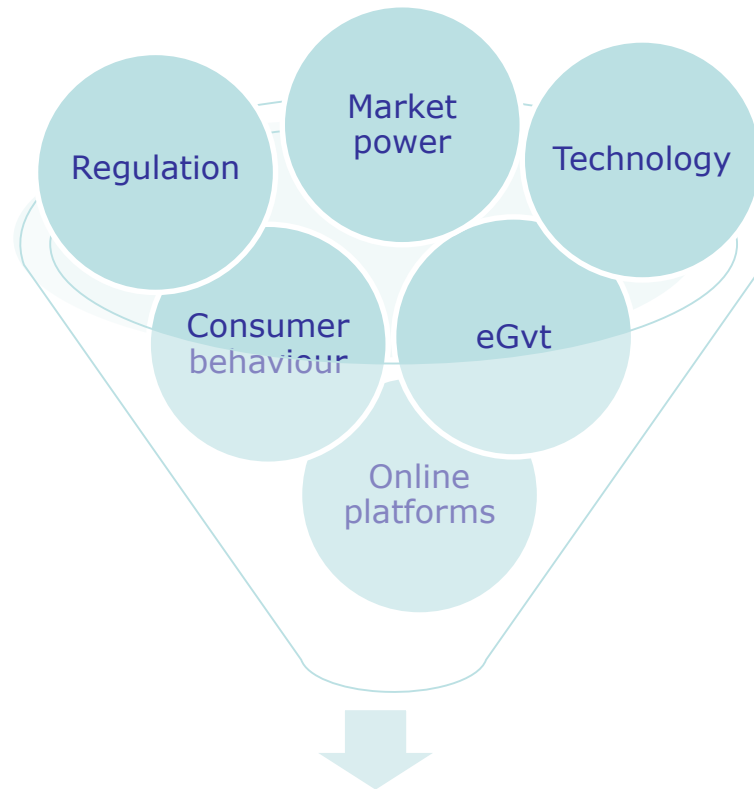


A smart city is a city seeking to address public issues via ICT-based solutions on the basis of a multi-stakeholder, municipality-based partnership.

Characteristics

1. Smart governance
2. Smart people
3. Smart living
4. Smart mobility
5. Smart economy
6. Smart environment

City in frontline of change



Citizen in city

EU and SMART CITIES



"We are already a leader in smart cities"

EU pillars on SMART CITIES



URBAN agenda

- Innovative actions
- Digital Transition Partnership
- Urban Innovative Actions
- 12 priority themes
- Pact of Amsterdam



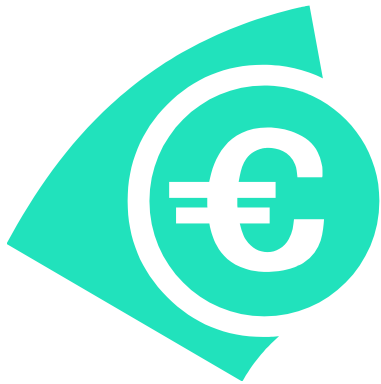
Eur Inn Partnership

- Connectivity
- Mobility
- Energy
- Market place

EU funding for SMART CITIES

ERDF:

- Research €61 billion
- Use and quality of ICT 13 billion
- Low-carbon economy, incl urban mobility 39 billion



EIP market place: €3 million

9 Lighthouse projects: €18-25 million each



EU action

**EIP SCC
Marketplace**

Urbact

**Lighthouse projects
(H2020)**

Green Digital Charter

CIVITAS

COVENANT OF MAYORS

Urban Agenda

European Energy Award (EEA)

Global Parliament of Mayors



EU Commission Initiatives in SMART CITIES

DG CONNECT - MOVE - ENER [EIP SCC](#); [Lighthouse projects](#)

DG CONNECT [CITYkeys](#); [GDC](#); [Espresso](#)

DG ENER [CONCERTO](#) [CoM](#); [EEA](#)

DG ENV [EGC](#)

DG MOVE [CIVITAS](#)

DG REGIO [URBACT](#); [Urban Agenda](#)

DG RTD [Nature based solutions](#)

JRC [PoM](#)

Joining &
Sharing

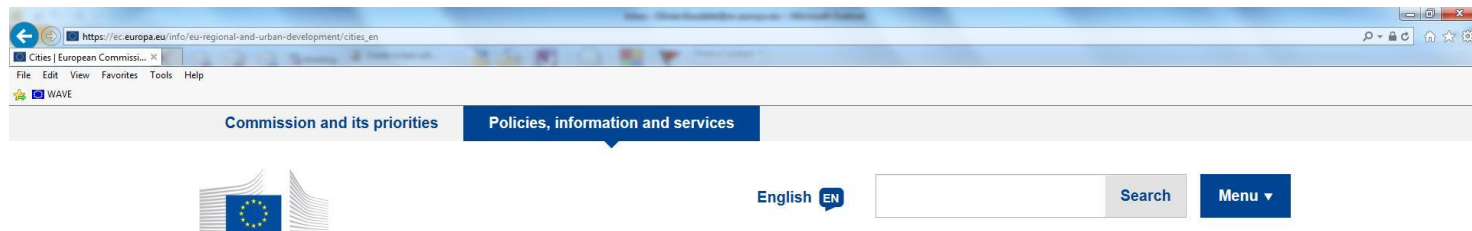
Portals:

Public → DG REGIO [One stop shop](#)

EC-internal → [Connected cities](#)

Data → [European data platform](#)

One-stop-shop cities (DG REGIO)



Cities

See how the Commission helps cities achieve EU objectives. Learn how cities can gain and share knowledge. Get information on funding and other support.

Urban agenda for the EU

The urban agenda brings together city governments, national governments and the European Commission to improve urban policy.

Action for cities

The Commission plays an active role in initiatives to address urban issues.

[Sustainable Urban Development](#)
[Smart Cities and Communities](#)

Knowledge for cities


EU databases such as the urban data platform promote knowledge sharing and better policy-making on urban issues.



European
Commission

SHARING INSIDE

Inter-service "Connected cities" portal



Connected Cities

Following in 1 stream Leave this group

Overview Content People Projects Reports Calendar Actions About Share Manage

YOU CAN CUSTOMIZE THIS PAGE

It's quick, easy, and you can change it back anytime you'd like. Be sure to describe the purpose of this place so others know what to do here. Create a call to action that grabs visitors' attention and gets them involved. Show that this place is active by adding a few widgets to highlight activity, content, and people.

Customize

Categories

- EIP
- Energy
- Environment
- Mobility
- RTD
- Smart Cities
- Smart Stories
- Urban agenda

Smart Cities on Connected

Items tagged with smart cities

- Sofia to host the 2017 General Assembly of the European Innovation

Welcome to the CONNECTED Smart Cities!

A **smart city** is a place where the traditional networks and services are made more efficient with the use of digital and telecommunication technologies, for the benefit of its inhabitants and businesses. Smart cities are innovative, making traditional networks and services more efficient through the use of digital technologies, creating more inclusive, sustainable and connected cities for the benefit of inhabitants, public administrations and businesses. Smart cities have the potential to improve the quality of life, while ensuring the needs of present and future generations with respect to economic, social and environmental challenges.

This **collaborative space** will allow colleagues from different DGs and agencies to work together on the Commission contribution to smart cities. We will do that from the [Urban agenda for the EU](#), including the [Fact of Amsterdam](#), and the [European Innovation Partnership on Smart Cities and Communities](#) and the [Amsterdam declaration](#). Smart is about **joining and sharing**, this is why colleagues are encouraged to share their meeting and mission reports here and draft policy documents together. You will also find on this space links to relevant websites and individual units within the Commission working on smart cities.

Key documents

- EIP Strategic Implementation Plan 2013
- Declaration of Amsterdam
- Urban Platform Memorandum of Understanding
- Smart Cities: Regional Perspectives
- State of the European Cities Report 2016

Key places

- DG REGIO Unit H1
- DG ENER Unit C2
- DG MOVE Unit C1
- DG MOVE Unit C3
- DG CONNECT Unit HQ
- EIP Water
- EIP Smart Cities and Communities
- EIP Market Place on Cities and Communities
- Cities: See how the Commission helps cities achieve EU objectives

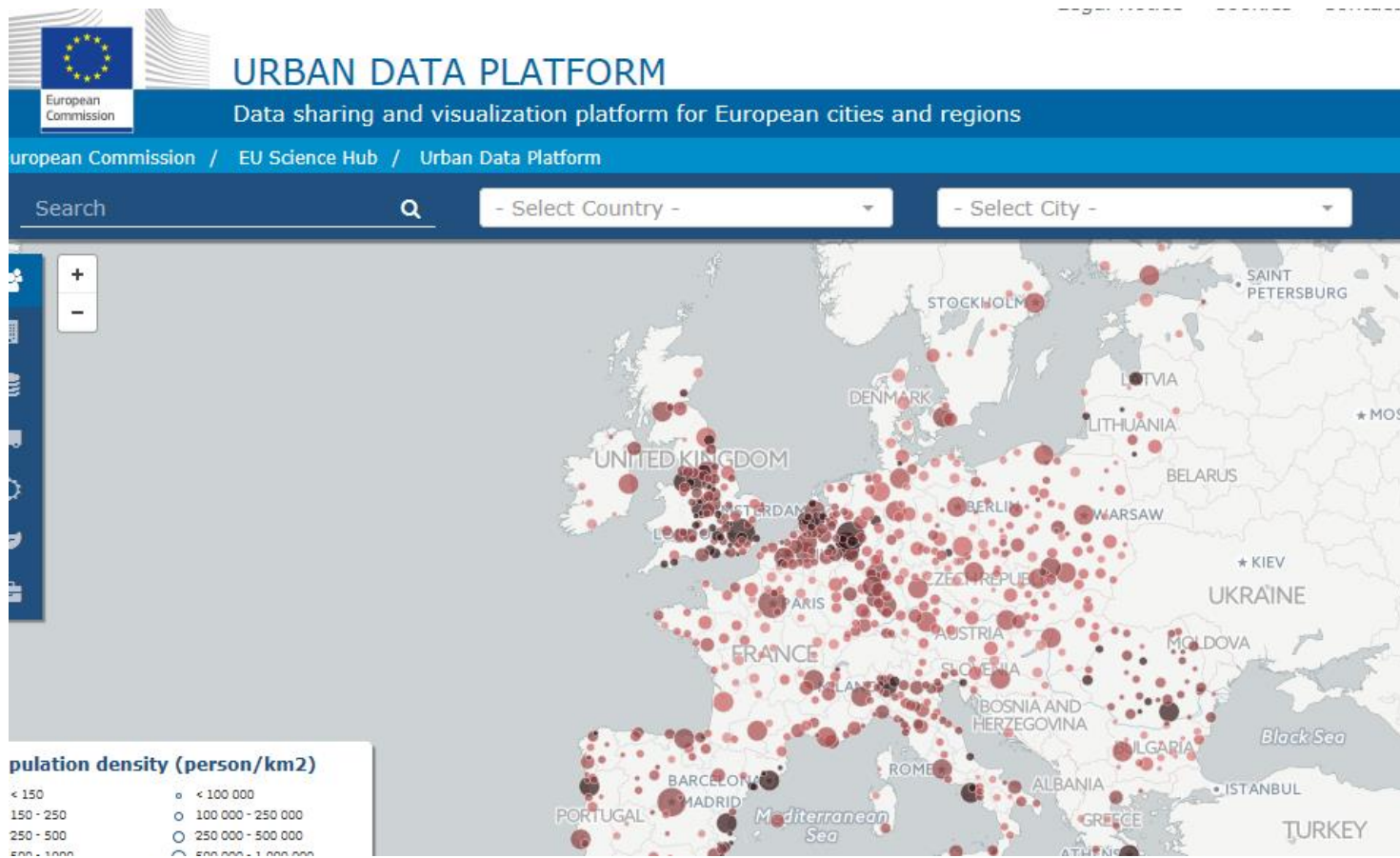
Join the discussion & give us your feedback!

Want to stay updated, click on Follow > inbox

Upcoming Events

- Urban Agenda - Digital Transition - Meeting with (ext) coordinators
Now (Ends 2/6/17 12:30 PM)
- Cities in Transition
1/25/17 8:45 AM
- Agoria Smart Cities Forum & Award 2017
1/26/17 10:00 AM
- Unleashing Innovation in Smart City & IoT
3/30/17 9:00 AM

European data platform

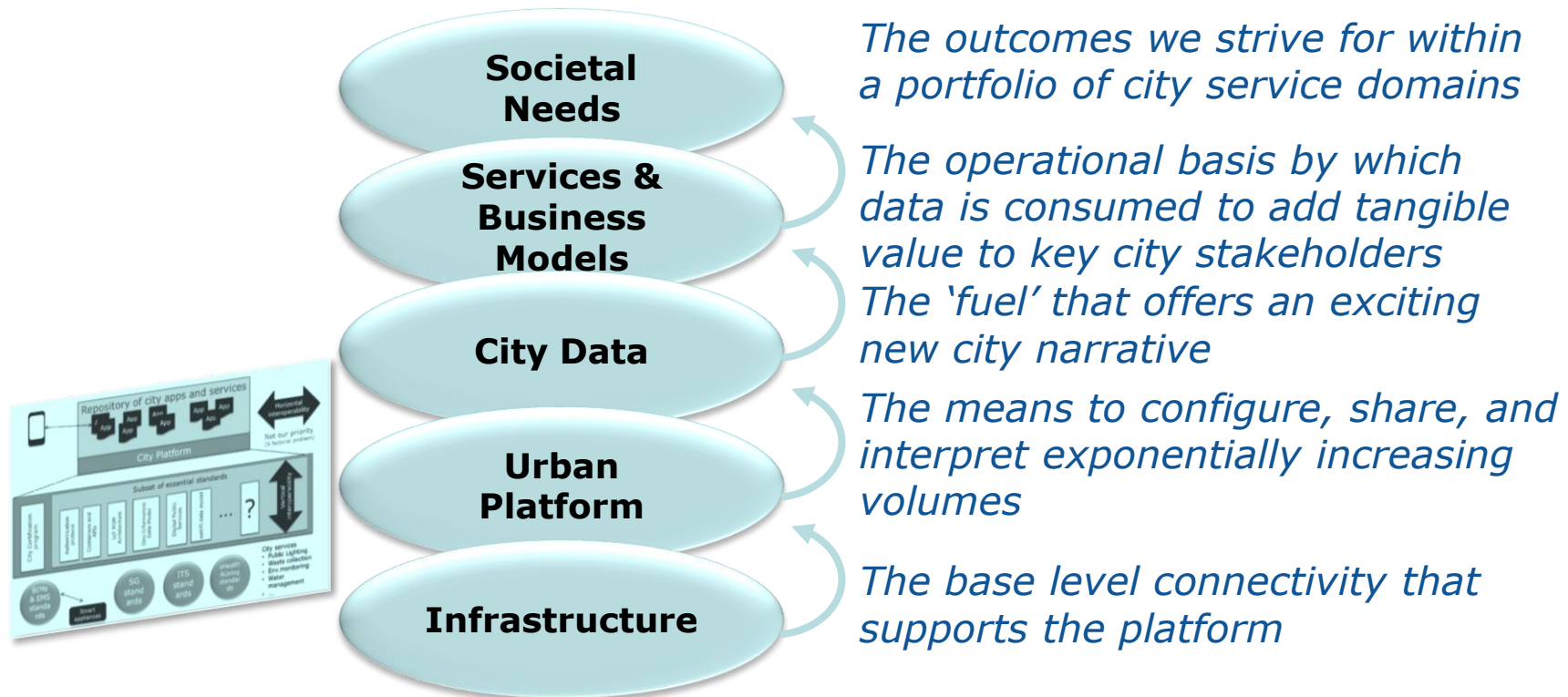


Focus areas

- **Interoperability, portability**
- **Data access and (re-)use**
- **Measurement**
- **Reusability of solutions**
- **Demand aggregation**
- **Level playing field**
- **Exchange of experience**
- ...

Platforms?

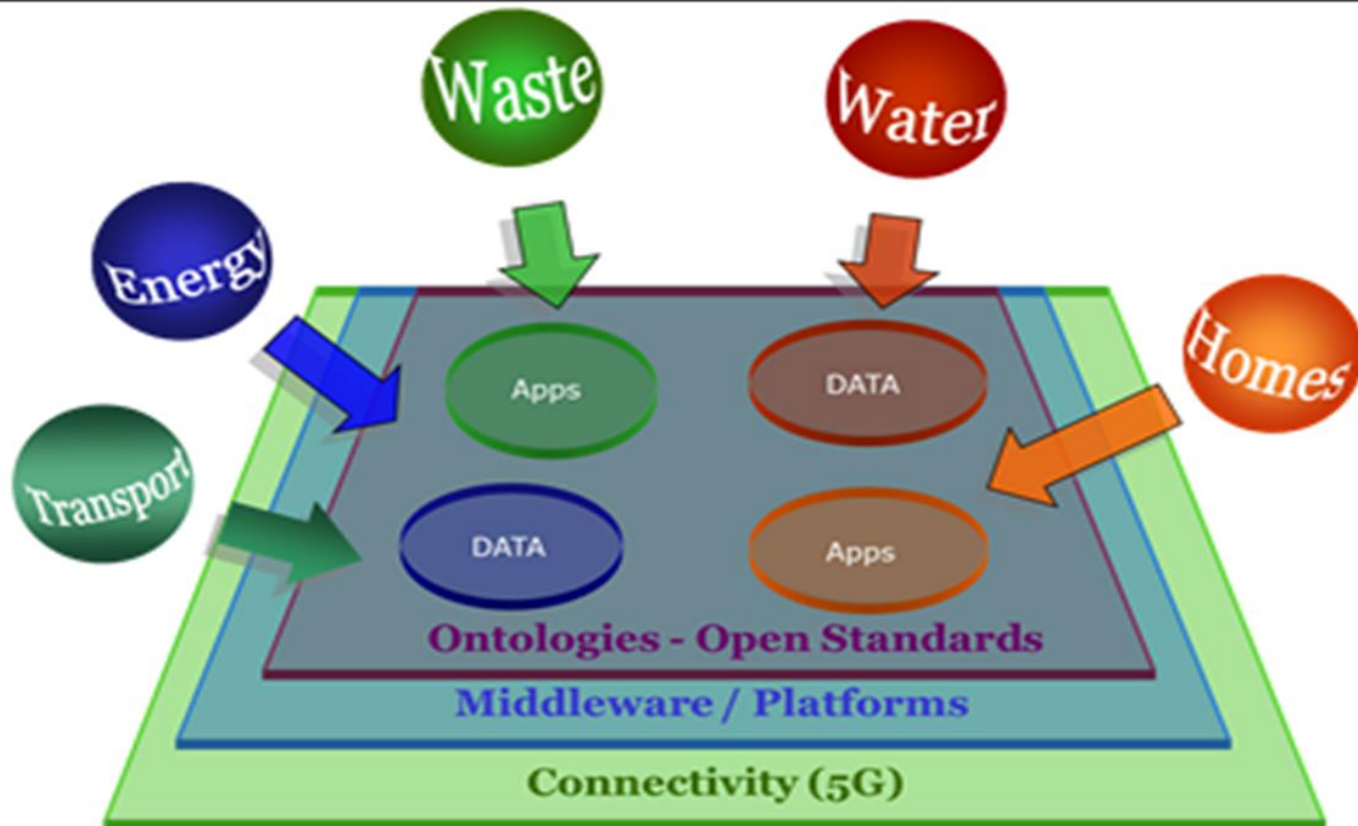
The Urban Platform is an important part in an evolving integrated solution architecture



We take a **city-needs-led** approach: not the "tail wagging the dog"



Smart Cities - Smart Homes - Smart Living



Cross-actor, cross-sector, cross-instrument + innovation

European
Commission

- GDPR, Privacy Shield, ePrivacy

- NIS Directive, eIDAS

- EU platforms, collaborative economy

Public policy & regulation

- EU free flow of data

- EU Consumer Protection

Technology

- Blockchain
- Cyber
- Personal data stores
- Supercomputing
- AI / data analytics
- 5G
- IoT

SMART PLATFORMS

Providers

Market actors & forces

- Buyers & Sellers
- Givers & Receivers
- Sectors 4.0

Self-regulation, standards

- Smart Grids Taskforce Guidelines
- SAREF

- Urban Platforms MoU
- Extended Vehicle or alternative data models
- Smart Meters data models

Some tangible results



Pact of
Amsterdam

EU Urban agenda

Action
plans

Urban
innovative
actions
Next call:
14/4/2017

Digital
Transition
Partnership

12 Priority Themes



INCLUSION OF
MIGRANTS & REFUGEES



AIR QUALITY



HOUSING



URBAN POVERTY



CIRCULAR
ECONOMY



CLIMATE
ADAPTATION



ENERGY TRANSITION



URBAN
MOBILITY



DIGITAL TRANSITION



PUBLIC
PROCUREMENT



JOBS & SKILLS
IN LOCAL ECONOMY



SUTAINABLE USE
OF LAND AND
NATURE-BASED
SOLUTIONS

- Guidance package
- KPIs
- 6 nations assessment

- Citizen engagement manifesto
- Guidelines on GDPR

Business Models

Integrated Planning / Policy & Regulations

6 Action Clusters

Integrated Infrastructures and Processes

Sustainable Urban Mobility

Sustainable Districts & Built Environment

❑ +4,300 partners

❑ 370 commitments

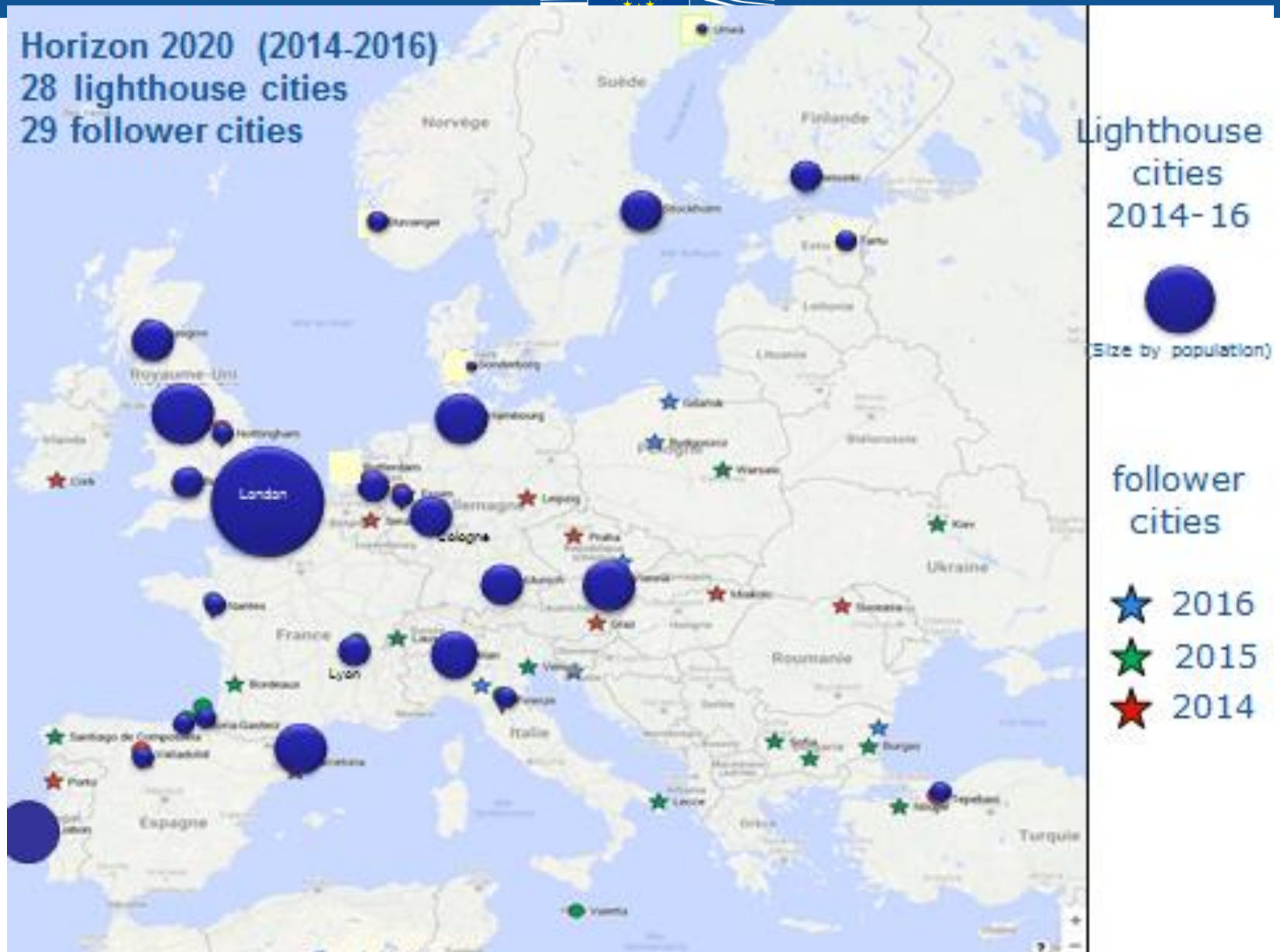
❑ 31 cities

Deliverables

Timeline

- Leadership guide + reference manual
- Demand aggregation (Lamp posts)
- Urban platforms

Results



MobiWallet developed

- ✓ *A unified payment platform*
 - ✓ **for any urban transportation mode**
 - ✓ **pay via any smartphone**
 - ✓ **access special offers, discounts and other advanced, customized services in real time**



Figure 1. Key concepts of Santander pilot

- ✓ *4 pilot cities across Europe: Santander (Spain), Florence and Pisa (Italy), West Midlands (UK) and Novi Sad (Serbia)*



ICT and efficient Water Management



20% of water is wasted during distribution because of leaks

5 – 10% water consumption reduction



Water Efficiency

Over 3 % of electricity consumption **by water pumps**

5 - 12 % energy costs reduction



Early event detection

Smart Cities

Orientation to the Citizens: PROSUMERS



Better pumping strategies

Socio-economic impact

Mobility

Cloud

Apps



Influence a change in consumers behaviour

Smart phone application
Pricing Strategies

Click for video

A practical example

The “Humble Lamppost”



A practical example

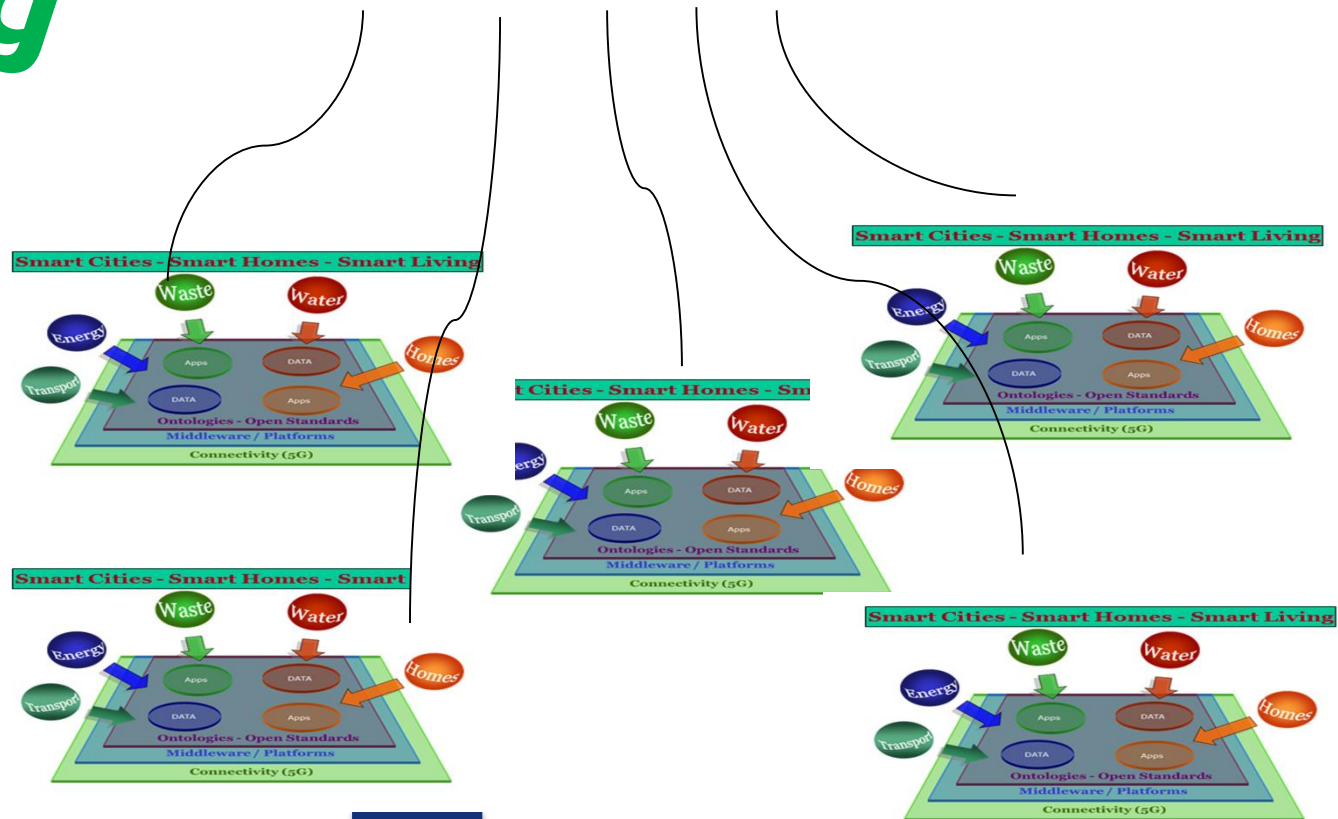


Steering Towards Green and
Perceptive Mobility of the Future

Joining & sharing

What next (1)?

Platform of platforms?

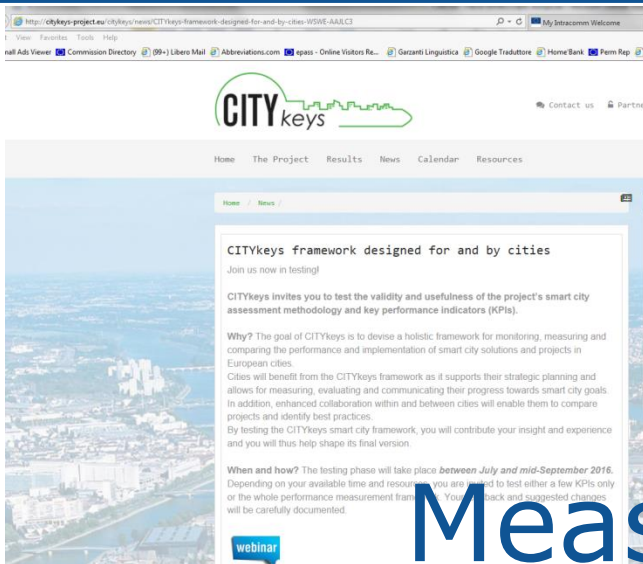




What next (2)?

Global leadership:

Think local, act global!



What next (3)?

Measure success

Observable indicators &
meaningful objectives



Thank you!

Urban platform: <http://www.urbanplatform.com>

Urban data portal: <https://data.europa.eu/euodp/en/data>

EIP Smart cities: <https://eu-smartcities.eu>

SIGN THE CITIZENS MANIFESTO: <https://eu-smartcities.eu/node/2949>



@EU_ICT4Cities

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