European Innovation Partnership – the European landscape, main challenges & opportunities

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Integrated approach to complement sector policies

- Focus on the intersection of Energy, Transport and ICT
- Integrate energy, transport, and ICT infrastructure
- Roll-out of mature innovative technologies at large scale
- Innovation driven process
- Serving energy and climate policy
- An integral part of the Urban Agenda
Key European Support

- Mobilising & partnering stakeholders: The European Innovation Partnership on Smart Cities and Communities

- Seed funding for demonstration & market uptake: Horizon 2020
  - Smart Cities and Communities Focus Area
  - Smart Urban Mobility, IoT Pilots, EeB PPP.

- Other funding: e.g.
  - European Structural Investment Funds
  - CEF
  - European Fund for Strategic Investments
1.- The European Innovation Partnership

October 2013: **Strategic Implementation Plan**

Operational Implementation Plan

February-June 2014: **Invitation for Commitments**

October 2014: **6 Action Clusters**

- Sustainable Urban Mobility
- Sustainable Districts & Built Environment
- **Integrated Infrastructures**
- Citizen Focus
- Integrated Planning & Management and Policy & Regulation
- Business Models, Finance & Procurement

370 commitments
3000 partners from 31 countries
Urban Platforms – Connecting Infrastructures

Repository of city apps and services

- App
- App
- App
- App

Open APIs

City Platform

DB

Subset of essential standards

- Authentication protocol
- Containers and APIs
- IoT M2M Architecture
- Geo Information Data Model
- Digital Public Services
- eKPI data model

City services
- Public Lighting
- Waste collection
- Env. monitoring
- Water management
- ...

Horizontal interoperability

Not our priority (N factorial problem)

Vertical interoperability

Other City Platform

Open APIs

BIMs & EMS standards

Smart appliances

SG standards

ITS standards

eHealth ALiving standards
MoU on Urban Platforms - Goals

Develop a set of principles and a joint reference architecture framework to enable interoperability, scalability and open interfaces to integrate different solutions.

Develop a joint data and service ontology to be used by individual Smart cities commercial products and solutions.

Accelerate the adoption of the developed framework by standardisation bodies.

**Comply with any joint standards and framework when developing individual Smart Cities commercial products and solutions.**

**Work with cities** to develop tailored operational frameworks (both for installation and servicing phases) based on different business models (e.g., own city infrastructure, cloud-based solution, etc.)
MoU on Urban Platforms

Industry Initiative facilitated by the European Commission

1st signatures in Berlin – May 2015

Ambitious objectives:

• **By 2018, create a strong EU city market for Urban Platforms**
• **By 2025 300m residents of EU cities use Urban Platform**

2- H2020: Lighthouse projects

Conditions:
• Cover 3 areas:
  - District of Smart Buildings
  - Energy at district level
  - Low carbon ICT
  - Electro-mobility
• Part of CoM Action Plan (annex)
• ICT platforms based on open specifications
• Funding for scaling-up and replication from other parts (ESFI)
• TRL 7 and more – Innovation is integration of technologies and new business models
H2020: Lighthouse projects (cont)

- **Consortia** - cities
  3 lighthouse cities
  at least 3 follower cities
  the 6 from different MS/AC
  Lighthouse only once
  geographical coverage

- Consortia should also include
  industry (in particular local SMEs) and RTD

- At least 2 years of performance monitoring
- Describe detailed replication plans
- Contribute to the data collection systems
H2020: Lighthouse projects (cont)

• Non-eligible Costs:
  Construction, retrofitting, insulation purchasing EVs, standard ICT, conventional RES, appliances

• Eligible costs:
  Integration of storage and RES, BEMs, ICT Platforms, economic research, replication plans, training,

**Funding:** between EUR 12 to 18 million

Innovation Action
Opening 8 December 2015
Deadline: 5 April 2016
HORIZON 2020 – Selected cities in **Lighthouse projects** in 2014 Call
3.- European Fund for Strategic Investments

EU guarantee
EUR 16 bn*

European Fund for Strategic Investments
EUR 21 bn

EUR 16 bn

Long-term investments
circa EUR 240 bn

EUR 5 bn

SMEs and mid-cap firms
circa EUR 75 bn

Possible other public and private contributions

Total extra over 2015-17:
circa EUR 315 bn**

* 50% guarantee = EUR 8 bn from Connecting Europe Facility (3.3), Horizon 2020 (2.7) and budget margin (2)
** Net of the initial EU contributions used as guarantee: EUR 307 bn
More information

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

Towards Open Urban Platforms for Smart Cities:

European Fund for Strategic Investments:

H2020 Participant Portal:
Thank you!

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