

## City platform

Horizon 2020

**Smart Cities & Communities Info Day** 

#H2020SCC1

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#### **Platform**

- Avoids vendor lock-in
- Allows the easy reuse (adaptation) of applications and services from city to city
- Vertical interoperability between the sectors and the applications/services
- Cross-domain applications/services aggregate the silos
- Replicability/scalability
- Cities should build their services on top of a platform

#### **General vision** Repository of city apps and services Ann aaA 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 Containers and APIs programme Geo Information Authentication Digital Public Services Vertical Architecture Data Model IoT M2M protocol City services **Public Lighting BIMs** Waste collection eHealth SG **ITS** & EMS Env. monitoring **ALiving** standards standards standards Water standards

Energy

management

Smart

appliances



### State of play

- Industry developed platforms traditionally closed and proprietary
- Experimental platforms
- Some cities (big and mid-size ones) developed their own platforms (and try to "export" them)
- Open well defined interfaces (APIs) down (sectors, sensors) and up (apps, services)
- Stakeholders working towards finding mutually beneficial way forward

Energy

#### The call text



#### Specific challenge

 Demonstrate latest generation ICT platforms based on open specifications.

#### Scope

- At least "very near-to-market" (TRL 7 and more) no experimental platforms
- Latest generation ICT and low carbon ICT systems
- Interoperability between SW modules to allow effective management of components and information flows.
- Urban ICT platforms must be based on open specifications, including data structures and application program interfaces (API) and cater for data and cyber security, privacy and confidentiality.



#### Where to look



 Urban platform within the European Innovation Partnership on Smart Cities and Communities

Requirements
Roadmap
leadership
guide
management
framework
Templates
cities market
implementation



Standards &
Standardization
Reference
Architecture &
Design Principles
Scale

- Previous lighthouse projects
- Standards organisations to develop the needed standards

In proposal text describe the architecture of the platform/ICT solution in graphical and textual format



#### Links

- EIP SCC 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.ru.uni-kl.de/



# Questions?

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