ESPRESSO -
A systEmic Standardisation apPRoach to Empower Smart citieS and cOmmunities

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Reference persons: Bart De Lathouwer, Coordinator

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ESPRESSO and The Urban Platform

ESPRESSO and European Innovation Partnership for Smart Cities and Communities

The Urban Platform as an enabler for Smart Smart City initiatives, based on open standards, avoiding vendor lock-in and increased competition

Connect, Collect, Comprehend, Create

ESPRESSO has on board:
4 Standard Developing Organisations: DIN, ETSI, OGC, bSI
2 Cities: Rotterdam and Tartu
ESPRESSO and The Urban Platform

ESPRESSO and European Innovation Partnership for Smart Cities and Communities

- Capability Map
- Information Systems Architecture

Based on:
- **Open Standards**, Market & vendor agnostic
  - Open Standards create Markets
- **No prescription of solutions nor technologies**
- **Modular**, Incrementally achievable
- Capability and layered based
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Information Systems Architecture (the complex hamburger slide)

Only usefull for Technicians.

KISS!
Information Systems Architecture
The Minimal approach*

* MIM, OASC
Seeking Interoperability, +16000 standards identified
Pivotal Points of Interoperability (PPI*)
In combination with MIM

Access Services and Domain Services

Data Lakes

Device Zone

Data Zones

Appl Zone

Pivotal Points of Interoperability (PPI)

HTTP, MQTT
IP, REST, JSON, ...

OneM2M
CityGML
LoD, ERD
SQL, SPARQL
JS, Python

Bluetooth, ZigBee
LoRa, IP, 6LowPan

Other

* Martin Burns, NIST