9th Green Standards Week 1-4 October 2019, Valencia, Spain



Connecting the world, together.



Session 2: How international standards can help cities to become smarter and more sustainable to achieve the SDGs

UIT.T Y.4200: Requirements for the interoperability of Smart City Platforms.

Use Cases



The main problem in standards



Jungle of Consortia, Standards, OS-Projects

Which groups actually specify technology, which are just doing marketing & promotion?

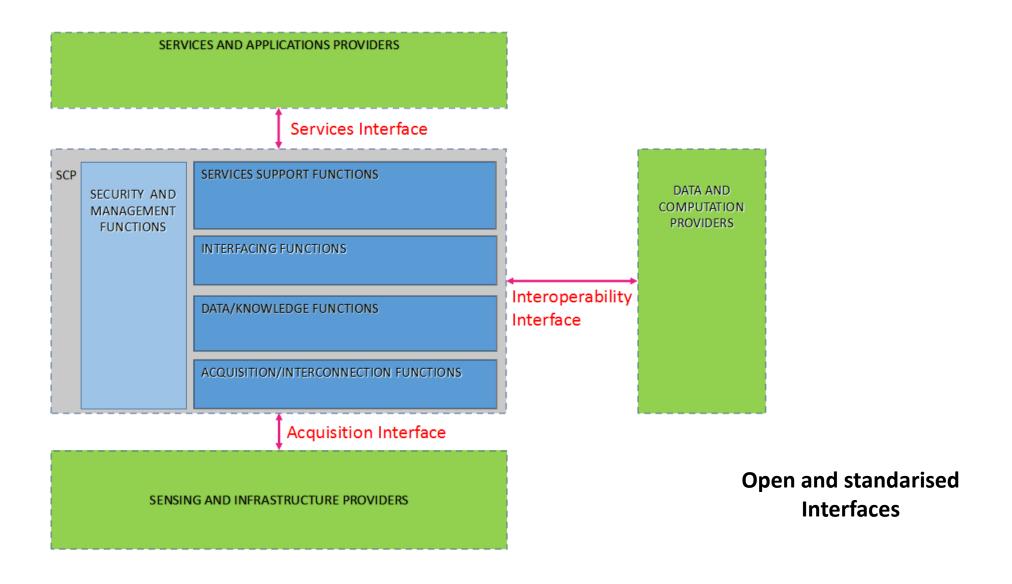
Which technologies are used / will be used in M2M/IIoT?

Which technologies are overlapping or complementing each other?



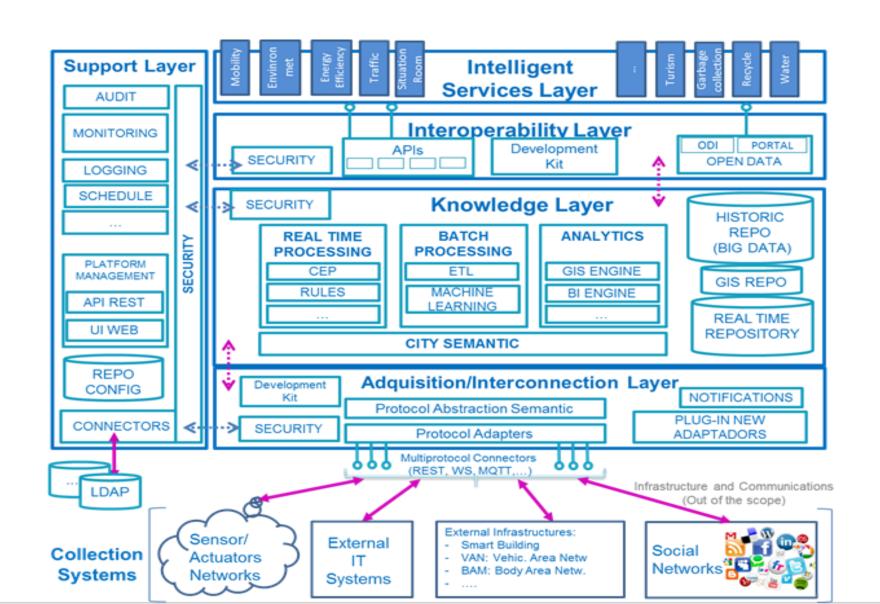


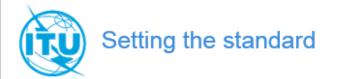
ITU RECOMMENDATIONS: ITU-T Y.4200/4201)





Setting the standard PLATFORM MODEL UIT- T Y.4200 &4201: SMART CITIES (VALID FOR ANY KIND OF PLATFORMS)

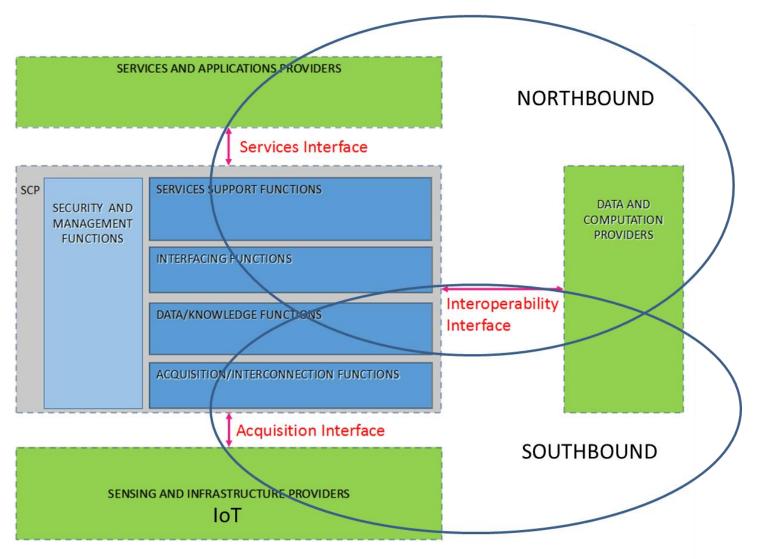


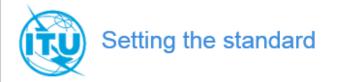


PLATFORMS CONNECTIVITY (SOUTH BOUND)

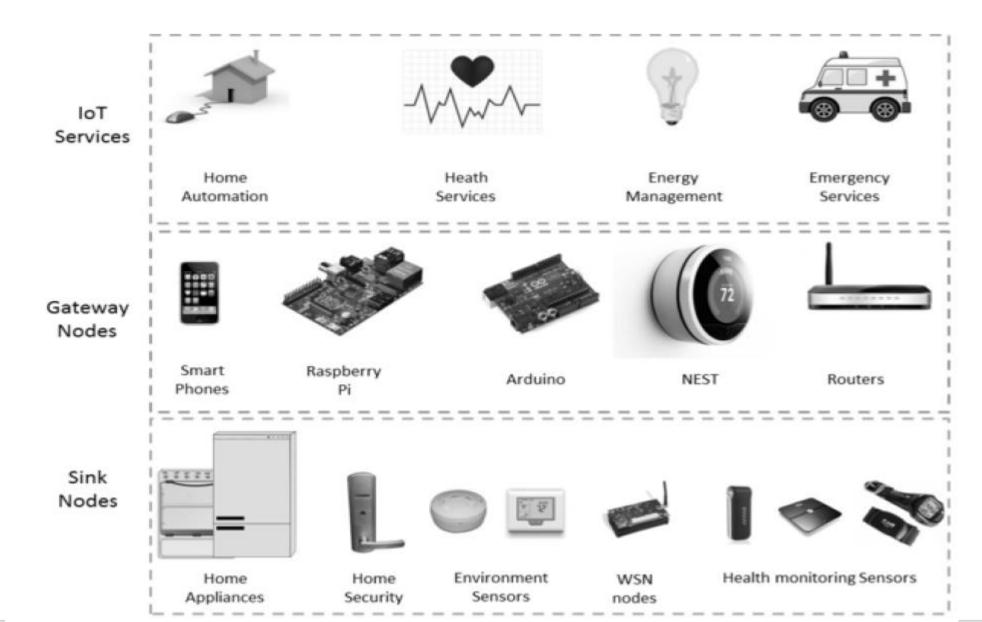
SECRETARÍA DE ESTADO PARA EL AVANCE DIGITAL

ITU: ITU-T Y.4200/4201



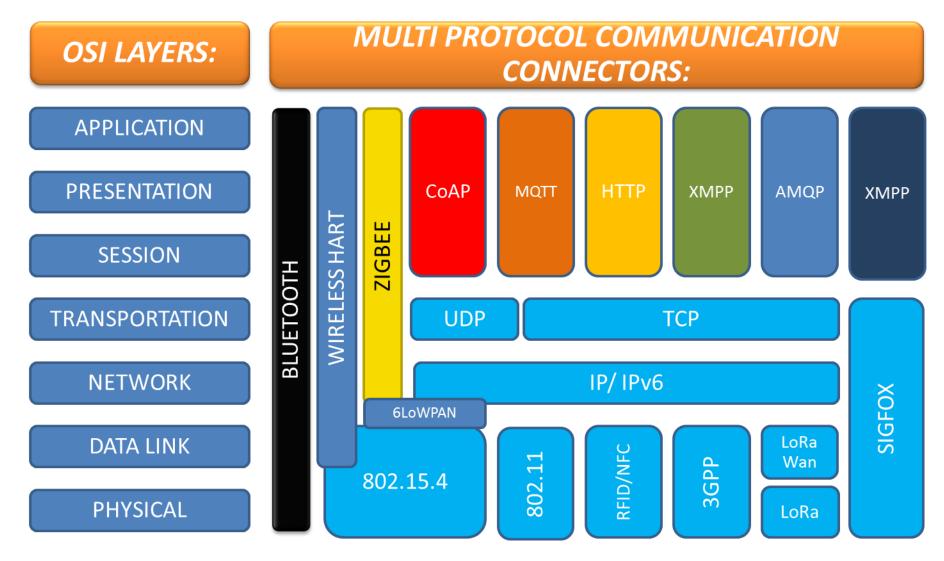


PLATFORMS CONNECTIVITY (SOUTH BOUND)





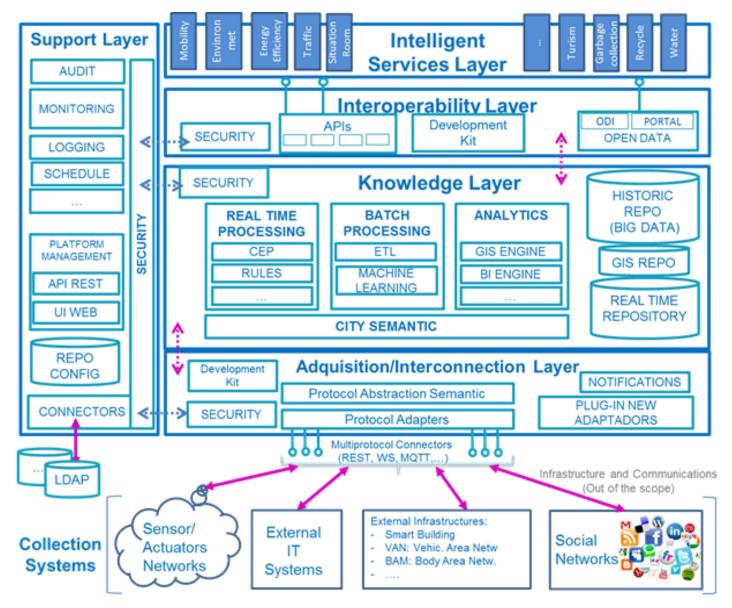
PLATFORMS CONNECTIVITY (SOUTH BOUND)





PLATFORMS CONECTIVITY: NORTH BOUND





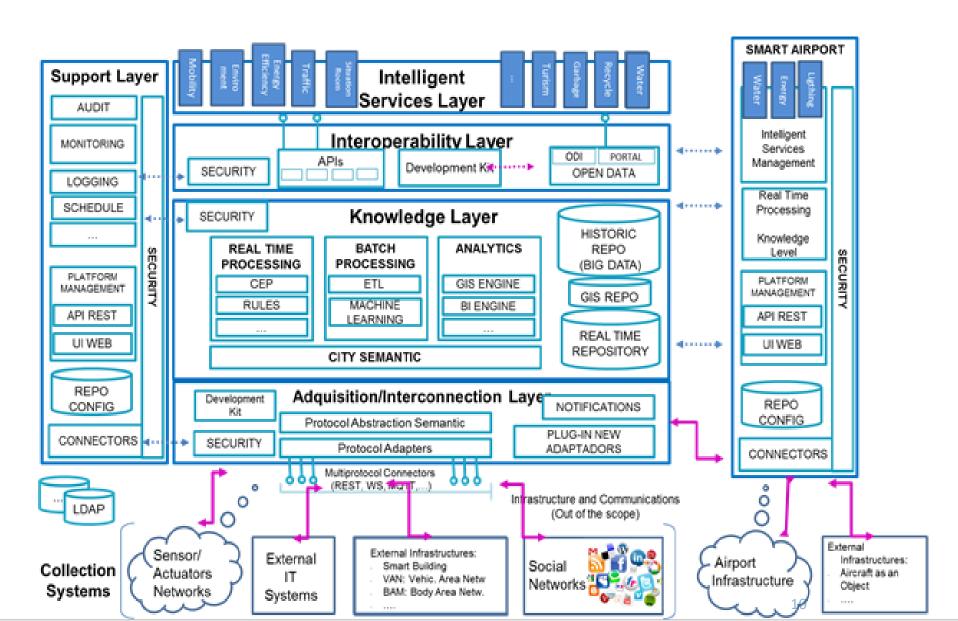
NORTH BOUND INCLUDES HISTORIC DATABASE

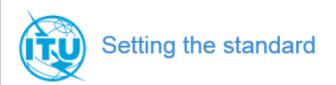
OPEN DATA
APIS FOR SERVICES
APIS FOR THIRD PARTIES
API REST (Req UIT-T Y.4201)

DATA OUTPUT MUST FULLFILL **SEMANTIC RULES**



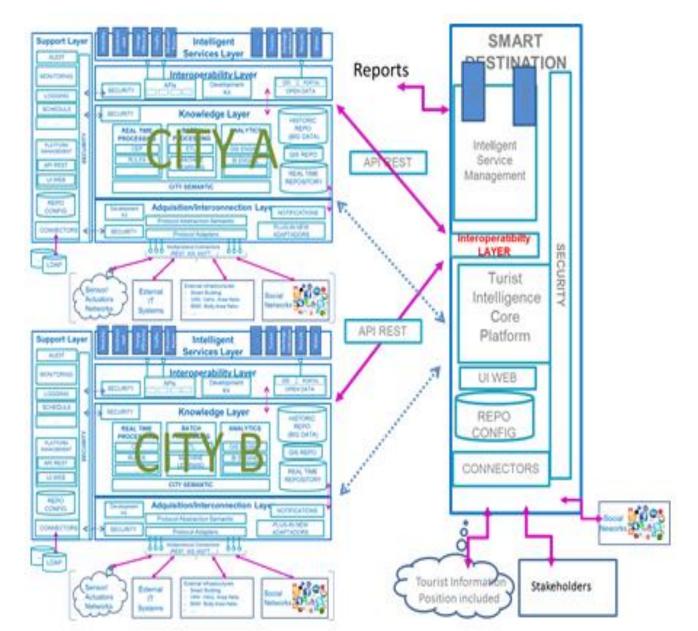
USE CASE: CONECTING SMART CITY PLATFORM WITH EXTERNAL PLATFORM: PORT, AIRPORT, RAILWAY OR BUS STATIONS......





Setting the standard USE CASE: EXTERNAL PLATFORM WITH SMART CITY PLATFORMS





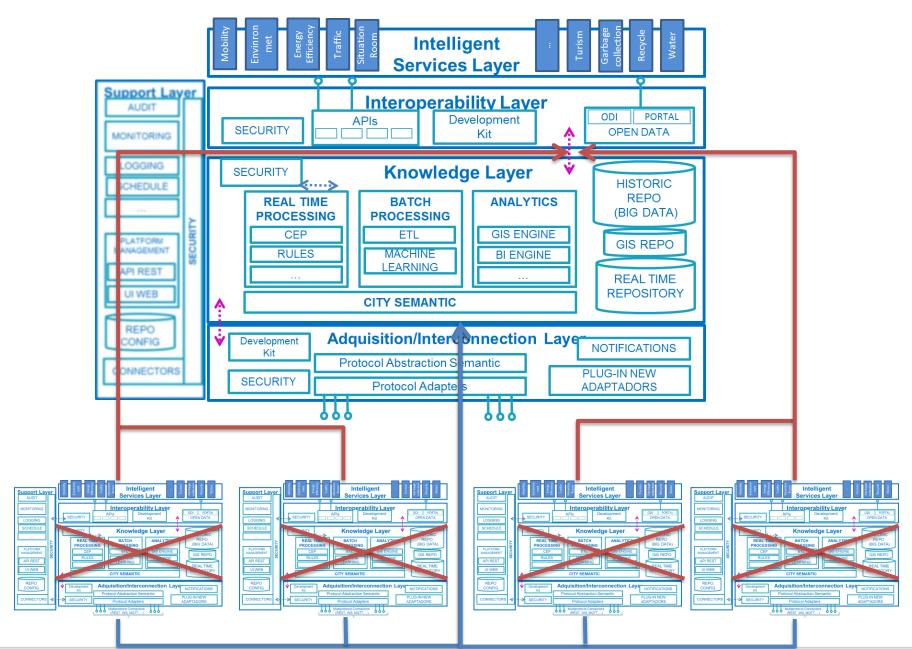
EXTERNAL PLAFORM
TYPICAL PROFILES
(NO SCP REQUIRED)
INTERCHANGING
INFORMATION WITH 2 SCP

APPLICATIONS: HEALTH, MOBILITY TOURISM

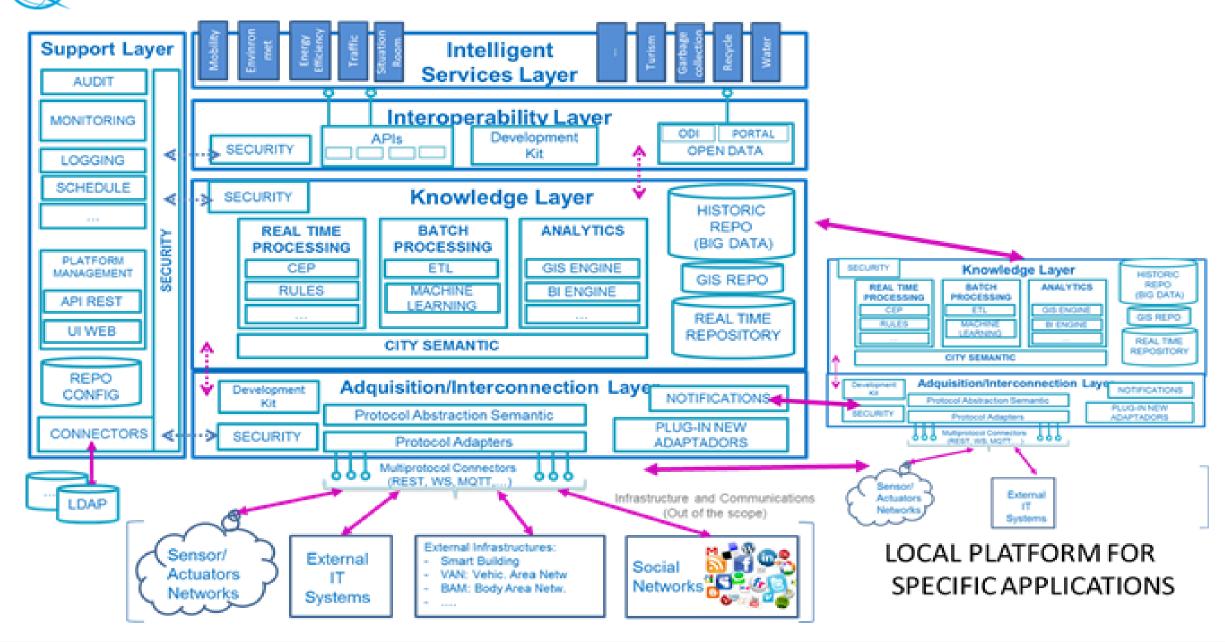
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USE CASE: CENTRALISED PLATFORM. USEFUL FOR RURAL

SECRETARÍA DE ESTADO PARA EL AVANCE DIGITAL



USE CASE: DELEGATE PLATFORM. USEFUL FOR 5G

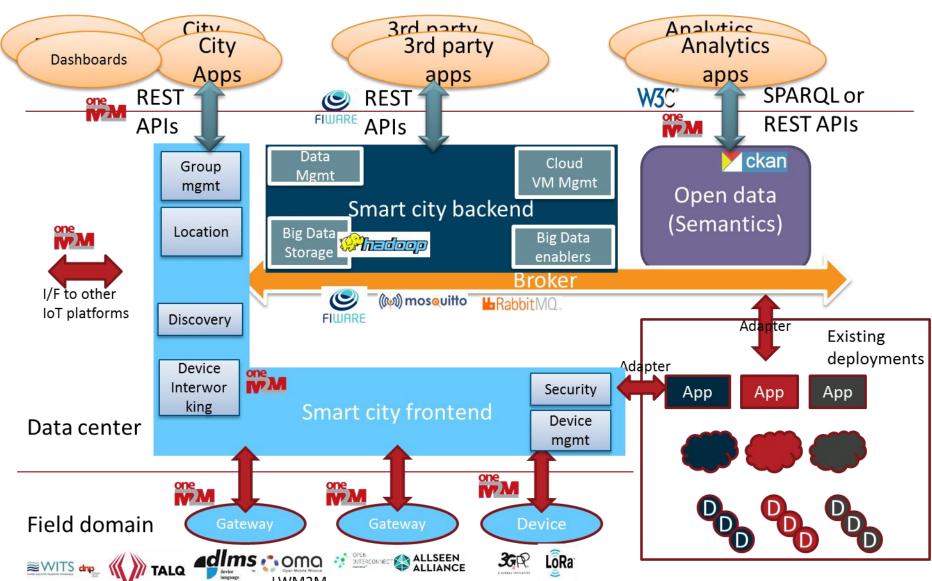




Setting the standard

INTEROPERABILITY IN ACCORDANCE ONEM2M

Cloud apps



16

14







INTEROPERABILTY OF PLATFORMS ALLOWS:

- CREATE NEW SERVICES IN SMART CITIES
- CARRY OUT SERVICES TO OTHER PLATFORMS
- IMPROVE CURRENT SERVICES
- REDUCE COSTS, MANTEINANCE INCLUDED

REQUIREMENTS:

- Open and standardised interfaces
- Semantic rules

ITU-T SG20 IS WORKING ON THAT



Thanks for your attention.

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