IoT STANDARDS TRENDS & CONVERGENCE
PLATFORM SPANISH MODEL UIT- T Y.4200 &4201: SMART CITIES (VALID FOR ANY KIND OF PLATFORMS)
CONSENT ITU: ITU-T Y.4200/4201 (ex Y.SCP)
PLATFOMRS CONNECTIVITY (Southbound)

**OSI LAYERS:**
- Application
- Presentation
- Session
- Transportation
- Network
- Data Link
- Physical

**MULTI PROTOCOL COMMUNICATION CONNECTORS:**
- CoAP
- MQTT
- HTTP
- XMPP
- AMQP
- Bluetooth
- Zigbee
- LoLWPAN
- 802.15.4
- 802.11
- RFID/NFC
- 3GPP
- Sigfox
- LoRaWan
- LoRa
- LoRa
- TCP
- UDP
- IP/IPv6
- 3GPP
- LoRaWan
EXTERNAL PLATFORM (NO SCP) INTERCHANGING INFORMATION WITH 2 SCP
**Application Entity (AE):** Application Entity represents an instantiation of Application logic for end-to-end M2M solutions.

**Common Services Entity (CSE):** A Common Services Entity represents an instantiation of a set of "common service functions" of the M2M environments.

**Network Services Entity (NSE):** A Network Services Entity provides services from the underlying network to the CSEs.
Devices in LAN and WAN

oneM2M Release 1

Non Constrained device can be a cellular device capable of hosting the services entity and an M2M/IoT device application (to report location, heart rate, etc.)

Constrained Device can be a Temperature Sensor located in the Home or Business.

Network App. (IN-AE)

Network App is the end user application used to monitor/control the registered/accessible devices and data (monitor the temperature in the home/business, locate and check on an elderly parent, etc.)

oneM2M Key

Entity Types:
AE: Application Entity
CSE: Common Services Entity

Node Types:
IN: Infrastructure
MN: Middle Node
ADN: Application Dedicated Node
ASN: Application Service Node

Reference Points:
Mcc: Supports communication flows between two CSEs
Mca: Supports communication flows between an AE and a CSE
Semantic filter (Real no historic)

ONEM2M?

APLICATIONS TEST

EXTERNAL PLATFORM SUPPORT VIRTUAL LABORATORY (NO MANDATORY SCP)

Standardised open interface northbound

OMA NGSI 9/10 interface

Third parties

Third parties

Standardised open interfaces

Southbound

SEMANTIC FILTER (with historic)
Thanks for your attention.

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