

# IoT Standardisation: the approach of the European Commission UPDATE

Achilleas Kemos
European Commission - DG CONNECT
Programme Officer - EU Policies, Network Technologies



### **European ICT standardisation context**

European ICT standardisation strategy

- necessity to anticipate the market
- priority to strategic and achievable policy projects
- clear and concerted business cases.

EU Rolling Plan for ICT standardisation Multi-stakeholders platform on ICT standardisation

identify the needs in interoperability in support of the EU policies →

IoT: deemed to be critical to DSM



## **EU vision : a global Gap Analysis**

#### based on the following objectives:

- Identification of the most promising use cases.
- Definition of their standards requirements.
- Identification of the standards already in place (mapping)
- Identification of missing standards (gap analysis)
- Promote (open) innovation;
- Support "digitization" of verticals and non ICT sectors
- International cooperation, global interoperability



## **Common core of open standards**

#### Encompassing

- Connectivity, middleware, service layer
- Enabling relationships among IoTs verticals.
  - architectural frameworks
  - reference implementations
  - interoperability

Then Work on the ontologies that will enable IoT use cases Requirements (knowledge, knowledge representation) need to be provided by the industry segments themselves.



## ETSI action (signed in October 2015)

(Grant Agreement SA/ETSI/GROW/000/2015-02)

#### Objectives:

- to analyse the status of current IoT standardisation (including M2M, WoT initiatives)
- to assess the degree of industry and vertical market fragmentation;
- to point towards actions that can increase the effectiveness of IoT standardisation,
- to improve interoperability and to allow for the building of IoT ecosystems.



#### **AIOTI Recommendations ...**

... for future collaborative work in the context of the Internet of Things Focus Area in Horizon 2020

https://ec.europa.eu/digitalagenda/en/news/aioti-recommendations-futurecollaborative-work-context-internet-things-focusarea-horizon-2020



#### **AIOTI WG3 - Standardisation**

- IoT Landscape and IoT LSP Standard Framework Concepts, presenting the global dynamics and landscapes;
- IoT High Level Architecture (HLA) that may be applicable to Large Scale Pilots. The HLA takes into account existing SDOs and alliances architecture specifications;
- IoT Semantic interoperability recommendations for IoT LSPs.



## **Large Scale Pilots**

EU initiative in support of the deployment of IoT solutions, by enhancing their acceptability and adoption by users and citizens; and by fostering new market opportunities for EU suppliers.

LSPs need a solid architectural framework

Need to influence standards maintenance and evolution in a favourable direction that take into account the needs of their targeted verticals.



## Large Scale Pilots - call open

- Smart Home, active healthy ageing focus;
- Smart agriculture, "from farm to fork"
- Wearables
- Reference Zones in cities
- Connected cars and ecosystems

<u>http://ec.europa.eu/research/participants/portal/desktop/e</u>
<u>n/opportunities/h2020/topics/2223-iot-01-2016.html</u>



## **Upcoming Events**

European Commission/AIOTI
WORKSHOP ON "IoT STANDARDISATION AND
ARCHITECTURE", Brussels 4 Nov 2015

ETSI M2M Workshop 2015 featuring oneM2M, Sophia 9-11 Dec 2015

<u>http://www.etsi.org/news-events/events/966-2015-12-etsi-m2m-workshop-2015-featuring-onem2m</u>

European Commission
NetFutures Conference, Brussels 20-21 Apr 2016



## Thank You