High-Level Meeting
"Interoperability to create the Internet of Energy"

Brussels, 11 May 2017

#IoEn17

Meeting's Objective

The aim of this high-level meeting is to discuss how interoperability of communication and data exchange can ensure that Europe will benefit from the new opportunities that the Internet of Things will create in the energy transition. When energy production is increasingly done locally and information and communication technology is increasingly present in homes, the integration of renewable energy sources and promotion of energy efficiency in the electricity system should benefit from smarter homes, buildings and appliances. Preparing for modern, flexible and robust energy systems the meeting should address the opportunities offered by linking smart home and energy technologies, considering the many initiatives that are ongoing, and should contribute to building an Internet of Energy that promotes sustainability, benefits consumers and creates new business opportunities.

Agenda (Draft)

Venue   European Commission, Charlemagne (CHAR) building (Lord Jenkins)
Rue de la Loi 170, 1000 Brussels, Belgium
For information on how to get there please check here

9.30 – 10.00   Registration & Welcome coffee

10:00 – 10:30   Keynote Speeches

Dominique Ristori, Director General for Energy (DG ENERGY) on Digitalisation of the energy system and the importance of interoperability in the smart home and smart grid

Roberto Viola, Director General for Communication Networks, Content & Technology (DG CONNECT) on the Internet of Things and its impact on the energy system

10:30 – 10:50	Keynote Presentation

Jens Strüker, SÜWAG Foundation Professor of Energy Management, Fresenius Hochschule and Managing Director of the Institute of Energy Economics (INEWI)

10:50 – 11:15	Coffee break

11:15 – 12:30	Panel 1: What can public authorities do to ensure interoperability?

Participants:
- Elena Santiago Cid, Director-General CEN/CENELEC
- BEREC (speaker tbd)
- David Boswarthick, Director of the energy sector, ETSI
- Virginie Renault, Director of the Mission 'Third Industrial Revolution' at the Council of the region Hauts-de-France;

Moderator: Pearse O'Donohue, Acting Director for Future Networks, DG CONNECT

12:30 – 14:00	Lunch break

14:00 – 15:15	Panel 2: What interoperability is needed to develop the smart home of the future that is for the benefit of consumers?

Participants:
- François Borghese, Schneider Electric
- Bosch Smart Homes (speaker tbd)
- Jean-Michel Orsat, CTO Somfy
- Paul Murdock, Landys-Gyr
- Joachim Kolling, BMW
- Karsten Ries, CEO, Develco

Moderator: Mechthild Wörsdörfer, Director for renewable energy, research and innovation and energy efficiency, DG ENERGY

15:15 – 15:45	Coffee break

15:45 – 17:00	Panel 3: What interoperability is needed for an efficient smart grid that fosters innovative energy services?

Participants:

- Nicolaj Nørgaard Peulicke, Head of IT and digitalization, Energinet.dk
- Oliver van der Mond, Managing Director, Lemonbeat (tbc)
- Sigfox (speaker tbd)
- DSO (speaker tbd)
- Pawel Bakun, Director of Orange Energy, Orange Polska S.A. (tbc)
- Peeter Pikk, Board member, 220Energia OÜ
- Ernesto Ciorra, Head of Innovation ENEL

Moderator: European Commission (name tbd)

17:00 – 17:15   Conclusions and next steps

European Commission (name tbd)

Some Background Information

The European Commission (EC) has been working towards digitising of the Energy sector for a number of years already addressing not only legislation, but also spearheading a number of EU-wide initiatives to help overcome the technical and other barriers in the take up of smart energy solutions. The Smart Grids Task Force is one of such intiatives set up by the European Commission in 2009 to advise on issues related to smart grid deployment and development. It is chaired by the European Commission and consists of several Expert Groups which focus on specific areas (standards, regulatory recommendations, privacy, data protection, cyber-security, industrial policy, data formats and procedures, demand-response, etc.). Their work helps shape EU smart grid policies.

The EC has been working towards interoperability of solutions and standardisation and fostered the creation of a common reference ontology (interoperability language) called SAREF (Smart Appliances REFerence ontology). SAREF was done with the participation of a broad representation of stakeholders. It became a standard of ETSI and OneM2M (the Global initiative for Internet of Things standardisation) in 2015. SAREF allows any appliance in the smart home to communicate to any energy management system. This enables the flexibility of homes and buildings and facilitates the demand-response (flexible demand-side) mechanism of the smart grids. SAREF was demonstrated in commercial products (such as washing machines, tumble dryers, PV systems, etc.) at the IFA in Berlin in September 2016. The ETSI/OneM2M standard has evolved to a second version in which SAREF was modified to become modular and ready to incorporate multiple sectors such as Energy, Environment and Buildings (already standardised) as well as Automotive, Smart Cities, AgriFood, Health, Water, etc. (on the roadmap).

In order to fully enable, on a technical interoperability level, the smart grid and its demand-response mechanism the European Commission launched a study on Ensuring interoperability for enabling demand side flexibility. It is currently working towards the aligning of SAREF with all other involved main standards in the Smart Grid architecture (as defined by the SGTF) and will enable the most important use cases of the demand-response. The theoretical work of the study will be finalised by summer 2017. A working demo with commercially available products will be demonstrated at the European Utility Week from 3 to 5 October 2017 in Amsterdam.

Within the general framework of the Internet of Things and 5G, the EC is looking at cross-cutting aspects related to interoperability, standardisation, security and privacy to take advantage of Smart Energy in cross-vertical application areas such as mobility, building automation, smart living and smart cities. The digital and the energy services of the European Commission are preparing a joint initiative under its strategy for 'Digitising European Industry' to fully seize these digital opportunities in key industrial sectors and to contribute to a Digital Single Market. The Internet of Things, Big Data, Cloud Computing and Artificial Intelligence are the most prominent drivers for Digital Transformation. A new initiative on Internet of Things large scale pilot focuses on smart homes and smart grids, it will allow to address uptake and investment barriers, and lead to synergies across sectors, knowledge transfer and common technological developments and standards. It will support platforms and applications across sectors by joining and aligning with the already running large scale pilots in Smart Cities, Transport, Health & Well-being, Wearables, Farming, and Manufacturing.

Contact details

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