The integration of M2M and CEN/CENELEC standards for Smart Metering.

An update on activities

Willem Strabbing
Agenda

• ESMIG’s objectives
• Demand Side Flexibility Architecture
• The market development and barriers
• Next Steps
ESMIG – The European voice of smart energy solution providers

Who are we

ESMIG has been founded by a group of Smart Meters manufacturers but now comprises:

- IT system providers
- System integrators
- Data communication service and product providers
- In home display manufacturers
- Consumer energy management system providers
ESMIG – The European voice of smart energy solution providers
Our objectives

Interoperability

• Development, promotion and implementation of communication standards
• Practical demonstrations
• H2020 projects to create the egg
• Explain and support
Our objectives

Cooperation

- DG-ENER and DG-CONNECT (Smart Grid Task Force)
- ETSI and CEN/CENELEC (Smart Meters Coordination Group)
- Utilities and Network Operators (EDSO and GSMA)
- Support Member States
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Standardization of the smart metering communications architecture (M/441 and M/490)
Demand Side Flexibility interoperability

Data models:
I: Existing CEN/CLC/ETSI combinations (OBIS)
II: New developments by CLC TC205 and ETSI (SAREF)
III: New developments by IEC TC57 and openADR

Protocols: CEN/CLC/IEC and oneM2M

Alignment needed
Integration needed
Demand Side Flexibility demonstration
Demand Side Flexibility demonstration

Advanced Home Energy Management

Retrieve R1

Create R1

AE

CSE

IoT Platform

Energy Service Company

Mobile Network

Concentrated Solar Power

Smart Meter

Consumer Feedback Device

kamstrup

Head-End System

Meter Data Management

kamstrup

Control Switch

Home Energy Gateway

Energate

H1

H2

AE

CSE

Flexibility Platform

G

CyberGrid

Mcc

Mcc

Mcc
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Market outlook

Smart connected appliances

- Strategy Analytics: smart home products and services grow to €123 billion in 2020, with 15 billion in EU.
- BI Intelligence (US market): Smart Home Energy the largest application as of 2015. We are on the edge between early adopters (0-10%) and mass market (10-75%) of smart home devices.
- Leonardo-Energy.org: Consumer Energy Management system penetration raises from 2% now to 40% in 2034
Barriers

• BI Intelligence: “The largest barrier is technological fragmentation within the connected home ecosystem. Currently, there are many networks, standards, and devices being used to connect the smart home, creating interoperability problems and making it confusing for the consumer to set up and control multiple devices”

• Competing standards

• Three separated focus areas in the Demand Side Flexibility Architecture
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Next steps

• Further development and integration of CEN/CENELEC/ETSI standards (Smart Meters Coordination Group and oneM2M)
• Integration of the CEN/CENELEC (COSEM) data model with M2M standards (oneM2M?)
• Alignment of data definitions in the three focus areas (Experts study)

• ESMIG
  • Follow closely Low Throughput Networks developments
  • New demonstrations in 2016 (MWC?, EUW)
  • Support EU Member States
Thank you for your attention

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