



# 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 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

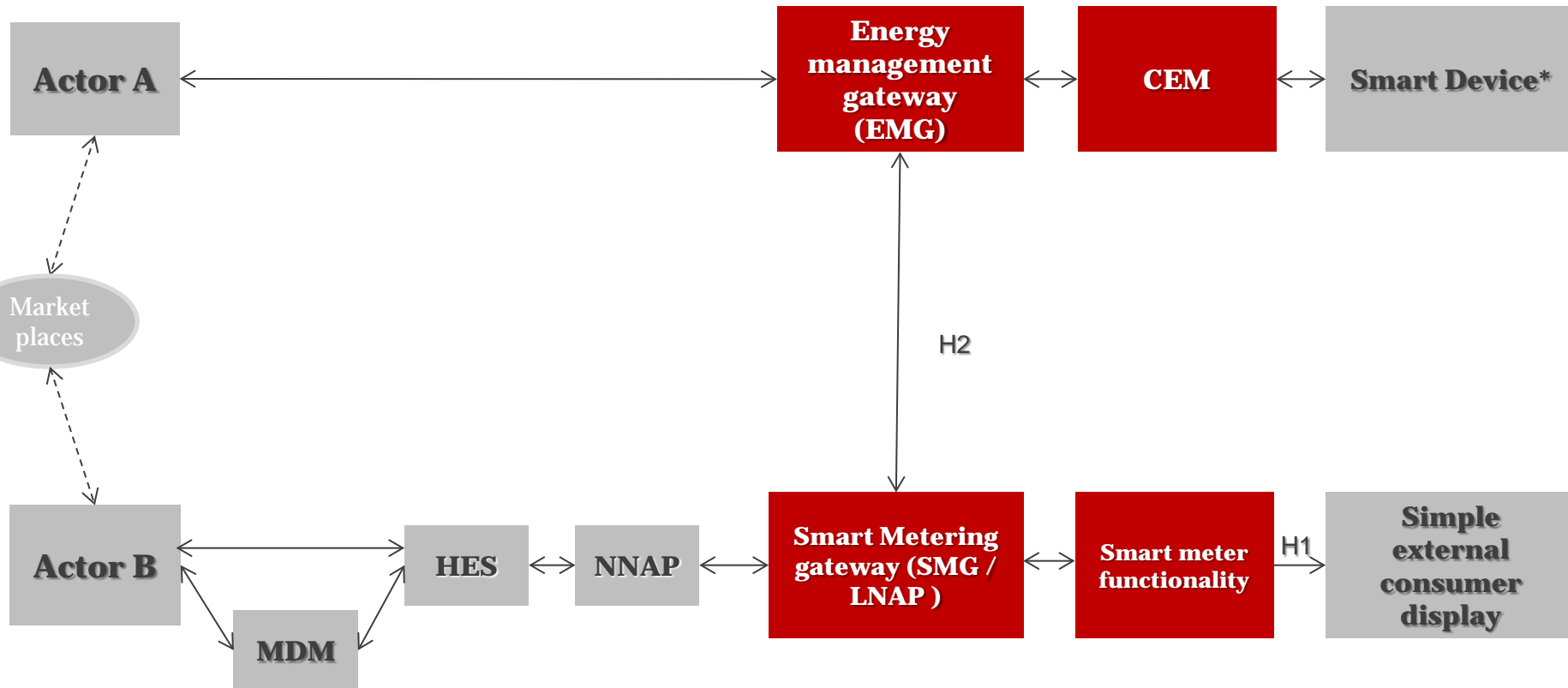
## Cooperation

- 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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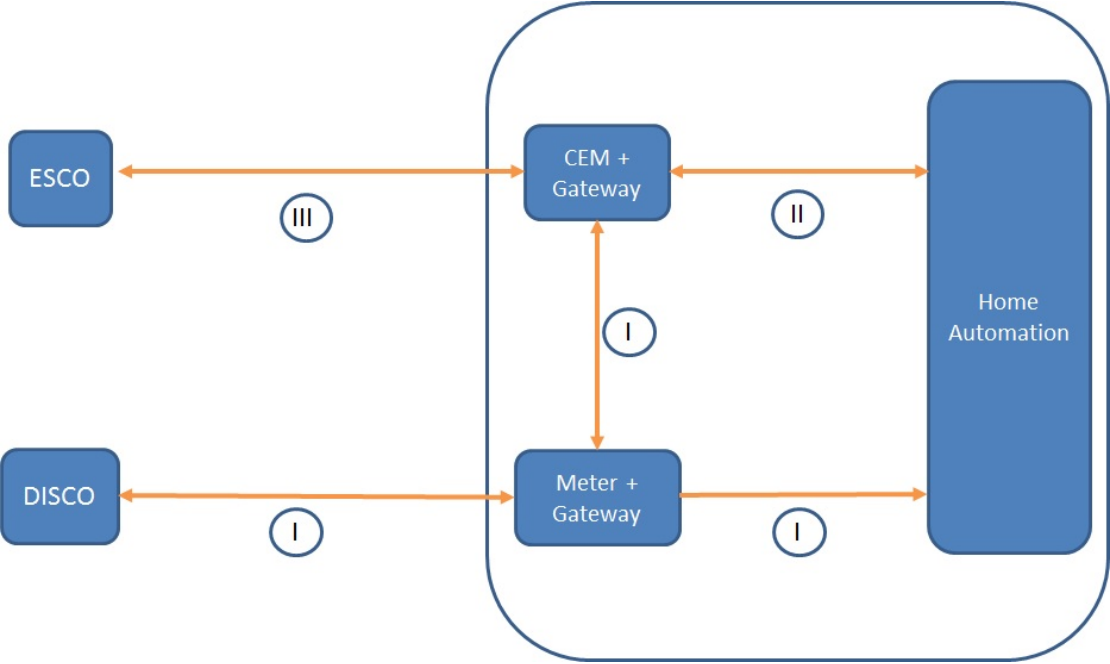
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# Standardization of the smart metering communications architecture (M/441 and M/490)





# Demand Side Flexibility interoperability



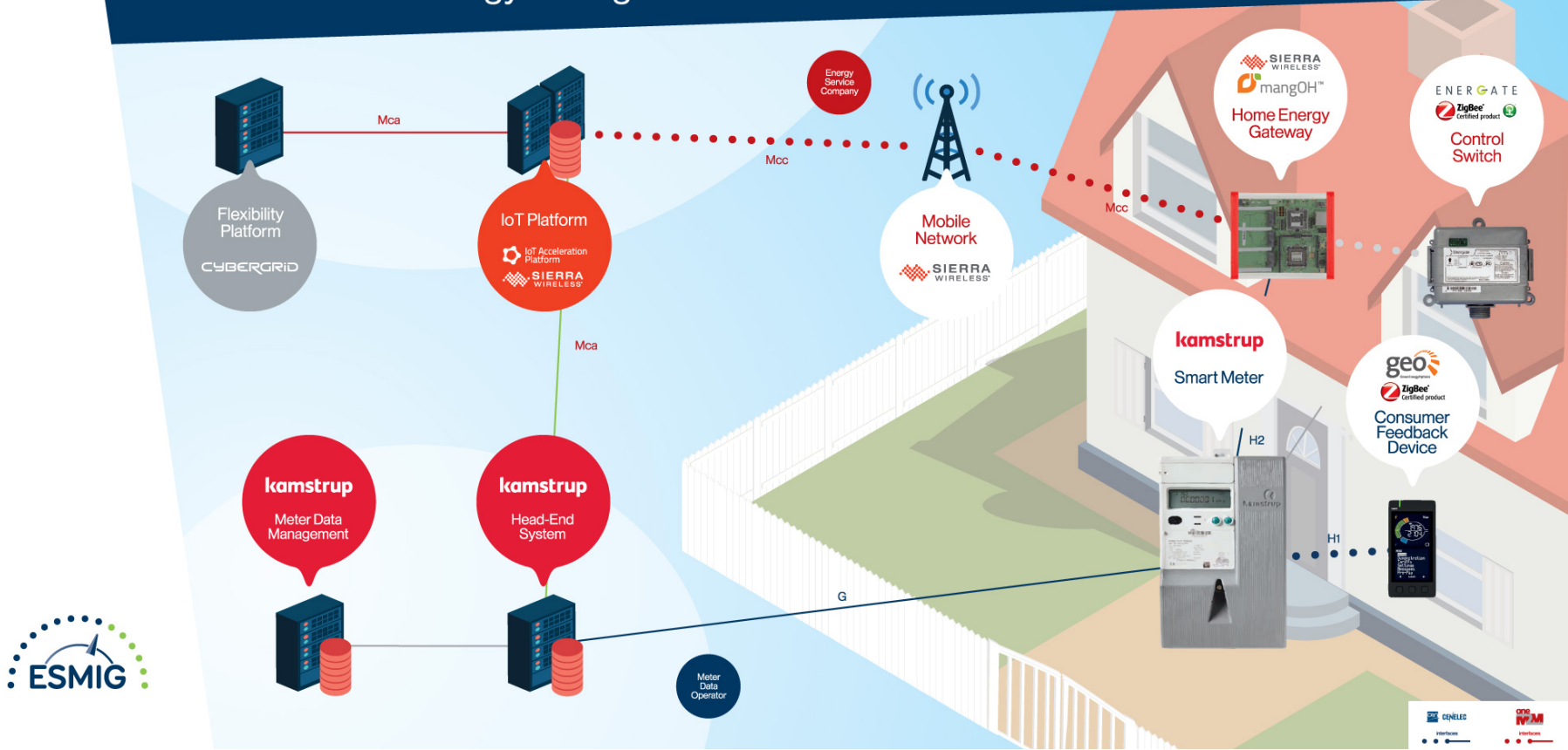
Data models: I: Existing CEN/CLC/ETSI combinations (OBIS)  
 II: New developments by CLC TC205 and ETSI (SAREF)  
 III: New developments by IEC TC57 and openADR

} Alignment needed

Protocols: CEN/CLC/IEC and oneM2M Integration needed

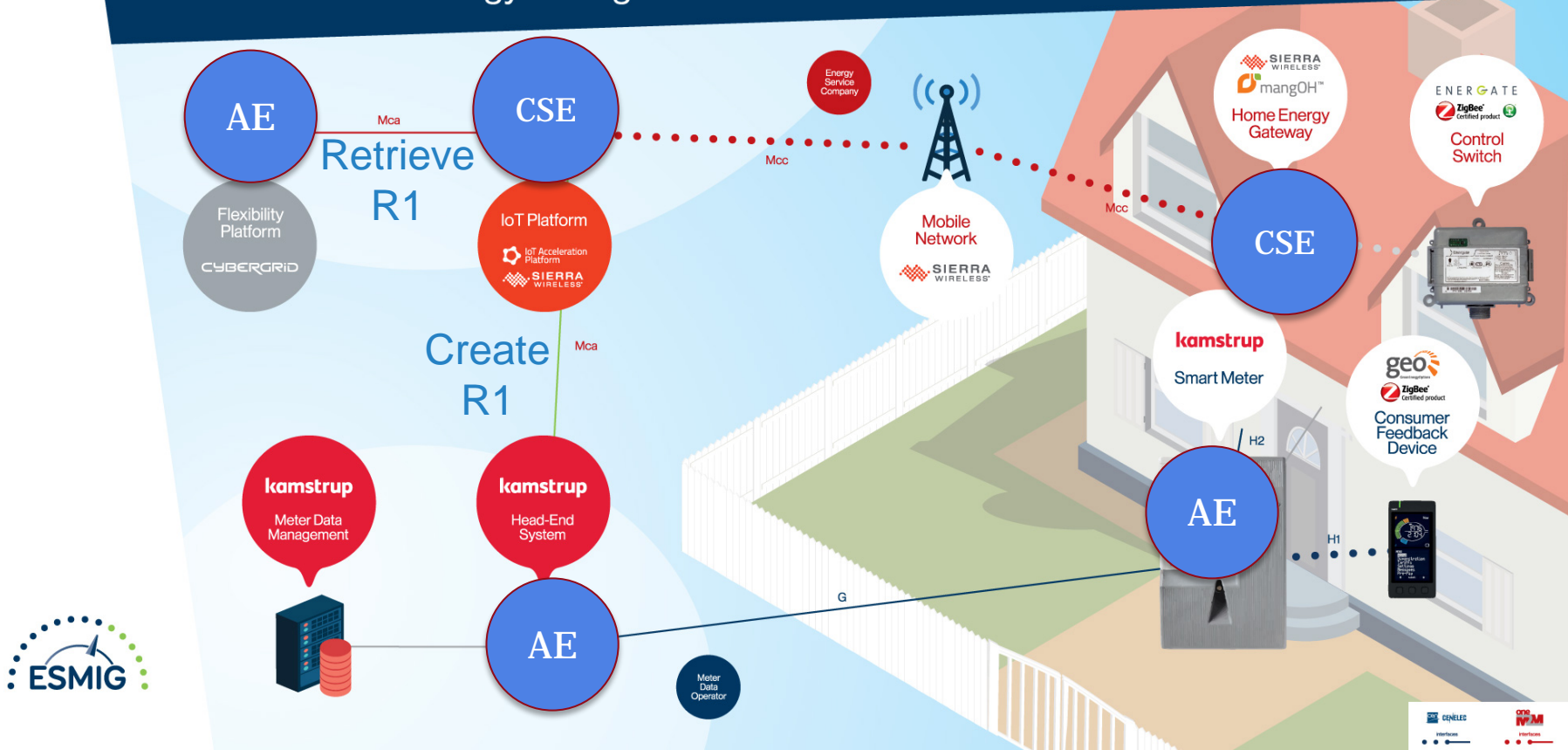
# Demand Side Flexibility demonstration

## Advanced Home Energy Management



# Demand Side Flexibility demonstration

## Advanced Home Energy Management



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# Market outlook

## Smart connected appliances

- HIS: from 1 million yearly sales in 2014 to 223 million in 2020. Penetration: 31% in 2020.
- 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

Willem Strabbing – [wstrabbing@esmig.eu](mailto:wstrabbing@esmig.eu)

**ESMIG** - Boulevard A. Reyers 80 - 1030 Brussels, Belgium

DDI: +32 (0)2 706 82 71 - [secretariat@esmig.eu](mailto:secretariat@esmig.eu)

[www.esmig.eu](http://www.esmig.eu)

