

# CEER Workshop

## Meter Data Management

Decentralized solution (session II)  
The view of local and regional energy companies

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# CEDEC Missions

- **Represent** the interests of 2000 local and regional energy companies in the European Union, with companies' turnover of 100 billion € with 75 million customers (connection points)
- **Exchange** know how and experience on the processes of electricity and gas markets, in every part of the value chain
- [www.cedec.com](http://www.cedec.com)

# Scope

- EU has to reconcile ambitious targets concerning the internal energy market (EU wide competition for energy supply and energy services), and concerning climate issues (renewables and energy efficiency)
- Meter data management is on the crossroads between energy markets and (smart) grids.
- Retail market model determines meter data management model.
- In all member states (except UK) the DSO is also responsible for metering operation and for meter data management, in line with
  - the current market design in Member States;
  - the future role of DSOs in smart grid environment.

# Meter data management model

## OBJECTIVES

- **DSO** must guarantee non-discriminatory access to and stability of the distribution **grid**
- **Metering operator** must guarantee non-discriminatory availability of **data** for energy (service) providers
- **Transparency** of the market model for the customer
- Efficient protection of customer data **privacy**

# Meter data management model

## ROLES

- The **installation and operation of the metering equipment** and the role of **collection and distribution of data** should be in the **regulated area**.
- The introduction of **further market roles**, that create new interfaces (and communication errors) and that increase the cost and coordination effort, **should be avoided**.
- **Customer services** (such as flexible supply rates, visualization of consumption, energy-saving gadgets, etc.) should primarily be provided **by the market**.

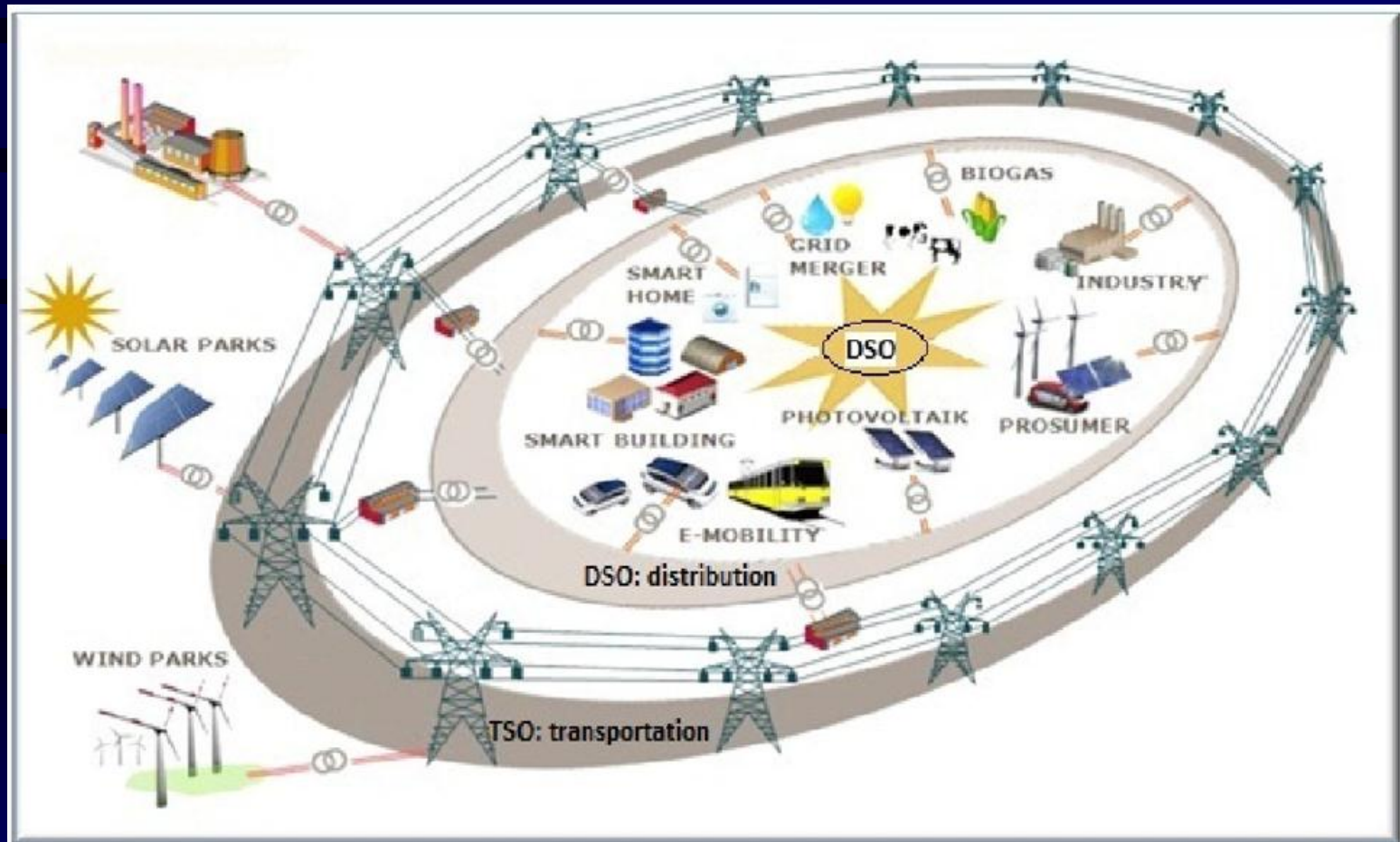
# Meter data management model

## RESPONSABILITIES

- The regulated **DSO** is responsible for installation, operation and maintenance of **metering equipment**
  - In case of a smart meter roll-out (depending on CBA !), DSO is responsible.
- The regulated **DSO/metering operator** is responsible for **data** collection (meter reading), control, communication and delivery (meter value management).
- The **market** has the authority for pricing of energy supply, services "behind the meter" and smart home applications.

*Cf. Task Force Smart Grids : reports of the Expert Groups 2 & 3 in 2011*

# Smart grid market model



# Responsability for the meter data

**DSO has to manage all the consumption flows and increasing injection flows on his grid**

→ DSO plays a central role in the data communication that is necessary to

- manage the smart grid (system optimization, grid services),
- facilitate effective and efficient market functioning
- develop the demand response & energy services market.

→ **Decentralized model is in line with the future challenges for DSOs**



# Responsibility for the meter data

- **Data collection / data distribution**  
The DSO should be central in the entire data collection and distribution, not a separate new market-function (independent metering operator, hub, data communication company, ...).
- **Data communication**  
The operational responsibility for the communication unit should be located in the DSO, as a non-discriminatory service to all consumers, suppliers and other service providers.
- **Data hub ?**  
Can be organized on national level as an additional feature, but DSO stays responsible. Additional layers constitute additional risks for data management and responsibility !
- The communication format and the conditions for non-discriminatory data access should be **reviewed by the regulatory authority**.

# Conclusions

## In the energy market environment

- DSO decisions on grid operation depend on relevant data;
  - DSO / metering operator is responsible for meter data (consumption and production) in different market processes.
- Do not create intermediate parties for data treatment.
- Avoid data inconsistencies, avoid confusion on responsibilities and avoid lack of transparency for the customer.

## In the smart grid environment

- DSO will need and can provide the required data (on consumption, generation, storage) within the distribution grid;
  - DSO will gradually interact more (enabled by more detailed data) with TSO, consumers, (local) generators and (service) suppliers.
- Smart grid services require regulated data, managed by the DSO.
- Given the system critical character of meter data, the DSO should not depend on the availability of data coming from third parties.