



# **METER DATA MANAGEMENT WORKSHOP**

## **DECENTRALIZED SOLUTION CASE STUDIES: SPAIN**

*Monica Gandolfi*  
*Deputy Director – Promotion of Competition*  
*Regulation and Competition Department*

**CEER WORKSHOP ON METER DATA MANAGEMENT**

**Brussels, 19 th of April 2012**

- **OVERVIEW OF GAS AND ELECTRICITY RETAIL MARKETS IN SPAIN**
- **THE EXISTING METER VALUE MANAGEMENT AND STORAGE MODEL**
- **CONSIDERATIONS ON THE EXISTING (AND FUTURE?) SOLUTIONS**



## **OVERVIEW OF GAS AND ELECTRICITY RETAIL MARKETS IN SPAIN**

# The electricity retail market (2010 data)

**Final demand** 244 TWh  
**Customers \*** 27 millions

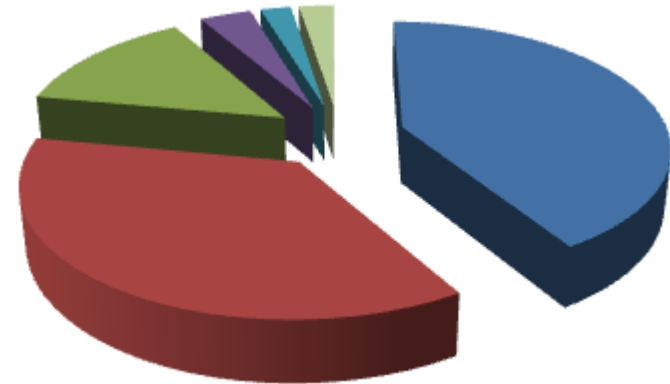
\* Full liberalization since 1<sup>st</sup> July 2009

**DSOs > 300**  
**Active suppliers > 100**  
**The 3 main companies account for more than 90% of distribution and 80% of retail supply**

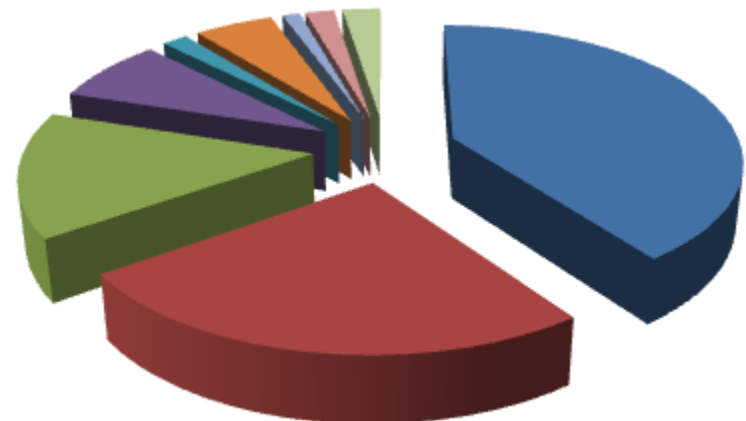
**Legal and functional unbundling**

**7% Switching rate** ↑  
**72% Rate of permanence with supplier affiliated with DSO** ↓

**Distribution market shares (GWh)**



**Retail supply market shares (GWh)**



# The gas retail market (2010 data)

**Final demand** 401 TWh  
**Customers\*** > 7 millions

\* Full liberalization since 1<sup>st</sup> july 2008

**DSOs 6**

**Active suppliers > 60**

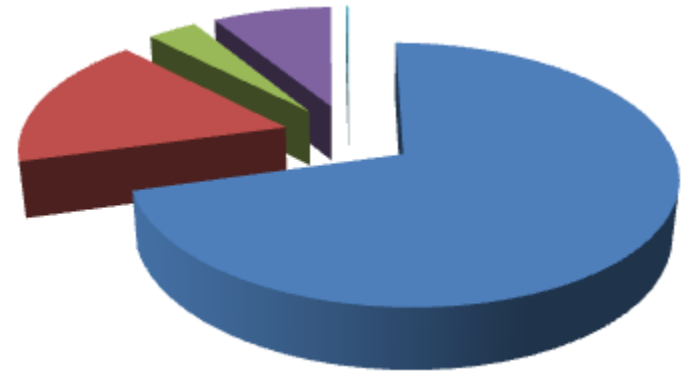
**The main company accounts for  
nearly 70% of distribution and  
37% of retail supply**

**Legal and  
functional  
unbundling**

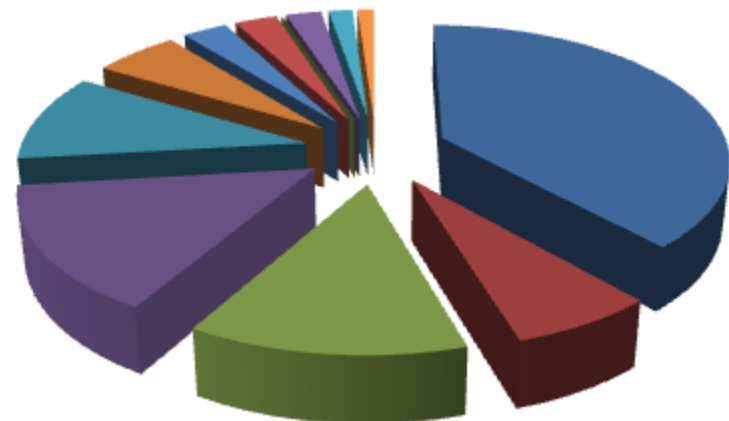
**12% Switching rate** ↑

**70% Rate of permanence with  
supplier affiliated with DSO** ↓

**Distribution market shares (GWh)**



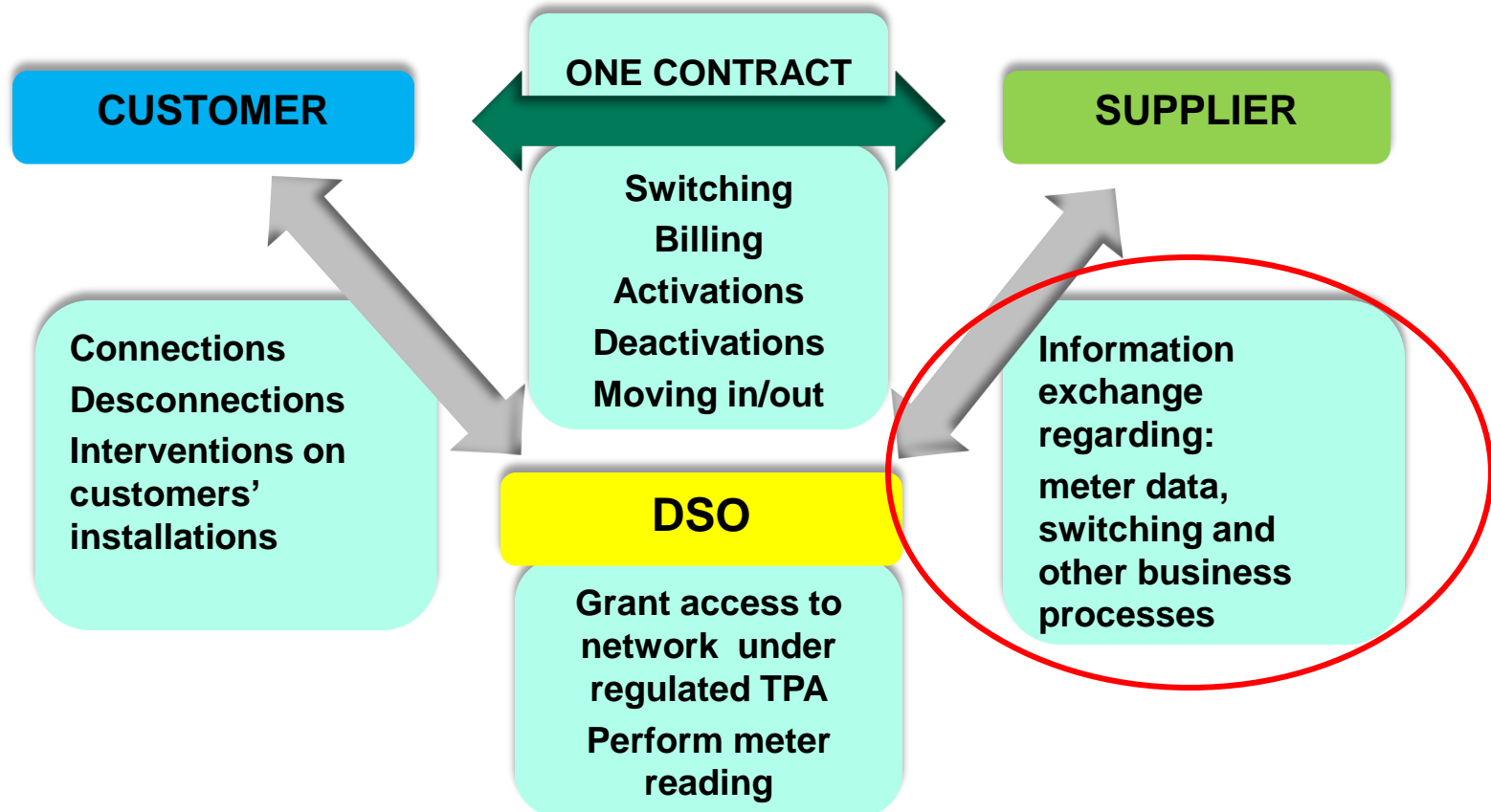
**Retail supply market shares (GWh)**





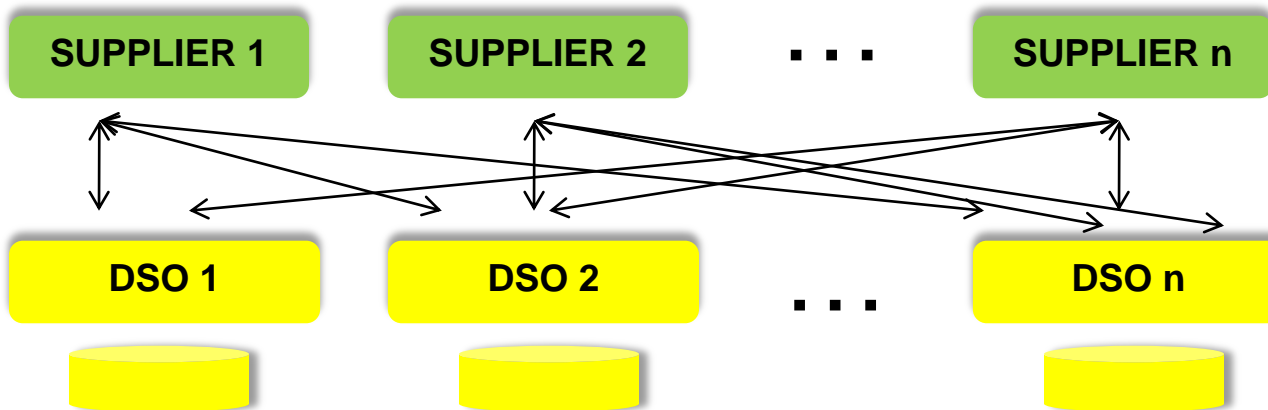
## **THE METER VALUE MANAGEMENT AND STORAGE MODEL**

# The Spanish retail market design: stakeholders' roles



# The decentralized solution for information exchange between suppliers and DSOs

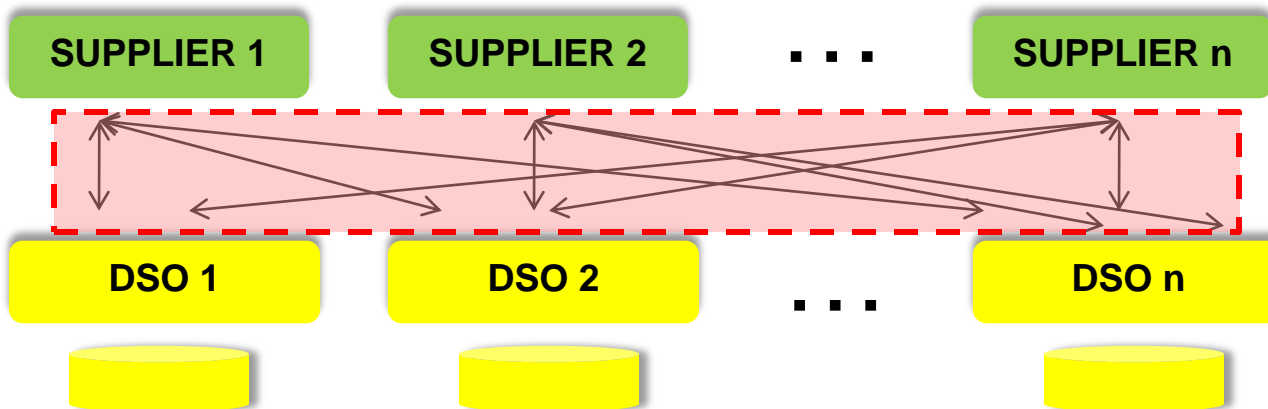
## THE SOLUTION IN THE ELECTRICITY MARKET



**BILATERAL  
COMMUNICATIONS  
WITH DIFFERENT  
ELECTRONIC INTERFACES**

**EACH DSO KEEPS ITS OWN  
DATA STORAGE**

## THE SOLUTION IN THE GAS MARKET



**BILATERAL  
COMMUNICATIONS  
WITH COMMON  
ELECTRONIC INTERFACE**

**EACH DSO KEEPS ITS OWN  
DATA STORAGE**



# Standardization of communications for some processes

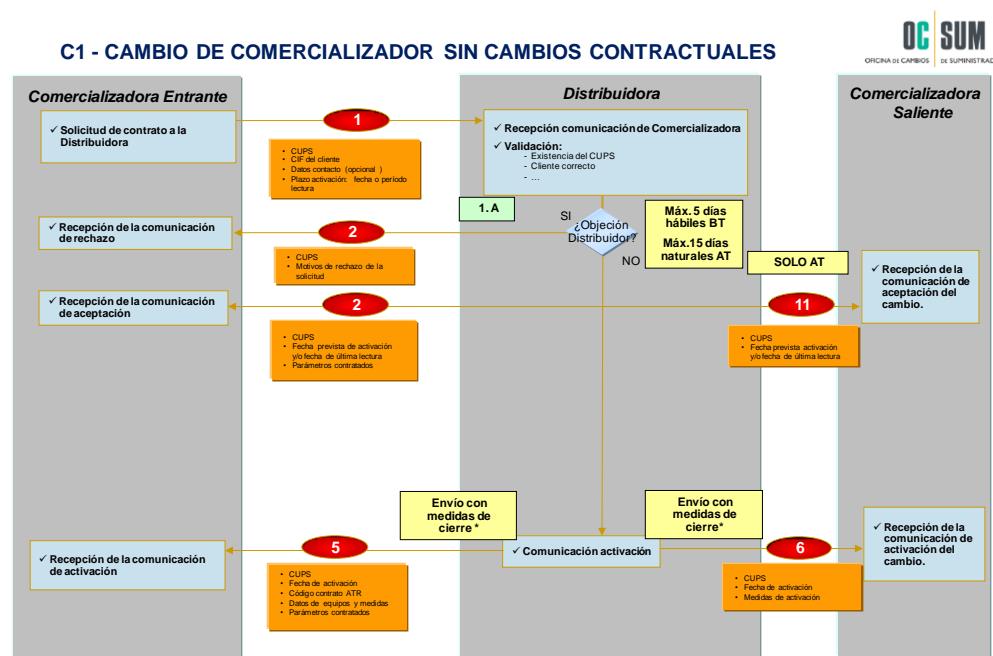
- In both gas and electricity markets:

- ▶ Agents have voluntarily agreed on detailed standard information flows regarding: minimum contents of messages, actions to be taken, rejection causes, etc.
- ▶ Agreements mainly apply to: switching, activations, deactivations and disconnections and are updated on an ongoing basis
- ▶ The switching office (OCSUM) supervises switching and communications between agents
- ▶ Existing regulation only establishes general rules for these information exchanges

## Example of information flowchart for a simple electricity switching process

(Published in OCSUM web page)

OCSUM is a company established by regulation (RD 1011/2009), whose shareholders are suppliers (70%) and DSOs (30%) – it is subject to CNE's supervision



\*Excepto en solicitud de activación a fecha fija (de carácter voluntario por parte de los Distribuidores y sólo posible con Iberdrola Distribución), en cuyo caso se enviará la última lectura en lugar de la lectura de cierre si no se dispusiera de esta en la fecha del cambio.

- **History**

- ▶ *In 2002 introduction of first legal provisions on access to meter point data, but access grounds were not well defined*
- ▶ *Several competition cases emerged between 2007 and 2009 in electricity – Spanish Competition Authority*
- ▶ *Partly as a result of these cases regulation became stricter – perceived as a tool to foster competition and prevent discriminatory use of information by DSO*

- **Royal Decree 1011/2009 – homogenous regulation for gas and electricity meter point data**

- ▶ *DSOs have the obligation to keep a data base of all meter points (SIPS) to allow for:*
  - *online consultation, without limits, of the data base*
  - *reception and validation of switching requests and other information exchanges*

*Failure to comply with this obligation is regarded as serious breach of law*

- ▶ *All suppliers and OCSUM have the right to unconditional and free access to SIPS*

# The content of the meter point data base (SIPS)

---

- Existing regulation establishes in detail the minimum data set to be included in the SIPS
- Technical data
  - ▶ *Unique meter point identification code*
  - ▶ *Exact location of the meter point*
  - ▶ *Voltage, network tariff, maximum authorized power, etc.*
  - ▶ *Monthly consumption over the two previous calendar years*
  - ▶ *Contracted power*
  - ▶ *Date of last supplier switching*
  - ▶ *Date of last reading*
  - ▶ *Non-payment indicator*
  - ▶ *Etc.*
- Customer data
  - ▶ *Specification of whether owner is natural or legal person*
  - ▶ *Name and address of meter point owner*
  - ▶ *Use of the meter point if natural person*

- **Access to SIPS**

- ▶ *Customers have the legal right to free access their consumption data in the SIPS*
- ▶ *They can forbid DSOs to make these data accessible to suppliers:*
  - ➔ Explicit written request to DSO
  - ➔ Request to be registered in the DSO data base and OCSUM must keep a copy
- ▶ *Customers cannot prevent his/her identification meter point code from being revealed in case of non-payment*

- **Decision of Spanish Highest Court of Appeal (December 2010)**

- ▶ *SIPS regulation on private data exchange declared compatible with private data protection legislation*
- ▶ *SIPS regulation considered as proportionate and necessary to the aim of securing the right of consumers to switch supplier*

The logo consists of the letters 'CNE' in a white, serif font, centered within a dark teal square.

CNE

## **CONSIDERATIONS ON THE EXISTING (AND FUTURE?) SOLUTIONS**

# Advantages and disadvantages of the existing decentralized solution

## IS THE BILATERAL DECENTRALIZED SOLUTION + MANDATORY REGULATION ACCEPTABLE?

### PROPORTIONALITY

No alteration of DSOs data bases  
Less intrusive than introducing a new central hub system

### COST EFFICIENCY

Existing system perceived as most cost efficient by DSOs  
However, no CBA carried out to see whether central hub could be more cost efficient

### GOVERNANCE

Clear ownership, management and financial structure of existing meter point data base

### TRANSPARENCY

Potential lack of transparency and room for discriminatory behaviour  
Need for increasingly detailed and complex regulation

# Regulatory proposals to improve access to SIPS and switching procedures

- **Inquiries and complaints received by CNE indicate that there is room for improvements**
  - ▶ *Not well defined roles and responsibilities for all agents*
  - ▶ *Room for some discretion by DSOs as meter data providers and market facilitators*
  - ▶ *Lack of specific time frames for some business processes*
  - ▶ *Etc.*
  
- **The CNE has recently launched proposals to improve access to SIPs and switching procedures**
  - ▶ *Communications procedures to be established according to public and homogeneous formats incorporated in detailed regulations (to be proposed by CNE, taking into account OCSUM proposal)*
  - ▶ *Establish detailed obligations and time frames for both suppliers and DSOs in relation with switching and other business processes*

# Possible drivers for a potential move towards a centralized solution ?

---

- Competition developments have been a major driver towards existing regulation of free and unconditional access to SIPS
- So far, most efforts dedicated to improve regulation/standardization rather than change current decentralized solution
- Possible future drivers towards a centralized solution:
  - ▶ *New entrants' needs?*
  - ▶ *Further complaints and competition problems?*
  - ▶ *Changes related with the introduction of smart grids and demand response?*
  - ▶ *Others?*





# **METER DATA MANAGEMENT WORKSHOP**

## **DECENTRALIZED SOLUTION CASE STUDIES: SPAIN**

*Monica Gandolfi  
Deputy Director – Promotion of Competition  
Regulation and Competition Department*

**CEER WORKSHOP ON METER DATA MANAGEMENT**

**Brussels, 19 th of April 2012**