



**EREGE WORKSHOP ON SMART METERING**  
14 December 2009

**Opportunities and Challenges of  
Smart Metering Roll-out in Europe**

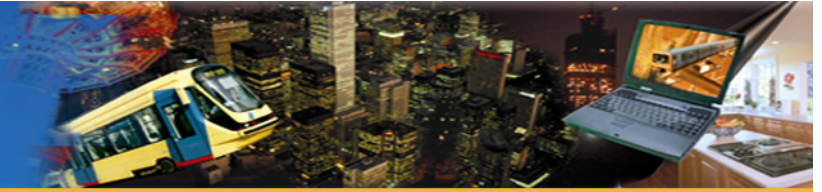
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**1. The roll out of smart meters is a unique opportunity to make distribution grids more intelligent and more efficient**

**Smart Meters are essential in fostering demand-side management on the long run, being one step towards Smart Grids.**

**Smart Meters will improve the customer's knowledge about his electricity consumption (via accurate bills) thereby increasing customer awareness of energy end-use**

**Also, Smart meters will simplify the supplier and customer switching processes and improve quality of service**



**2. However, smart meter roll-out could be hampered by technical barriers**

**Interoperability:** how can the meter openly communicate with systems and other devices across borders?

**Standardisation:** minimum functionalities should be standardised. What should be left to innovation?

**Future proofing:** smart metering systems should be designed to be flexible for possible future changes in technology or application

**Technology:** did Smart Metering technology already reach maturity?

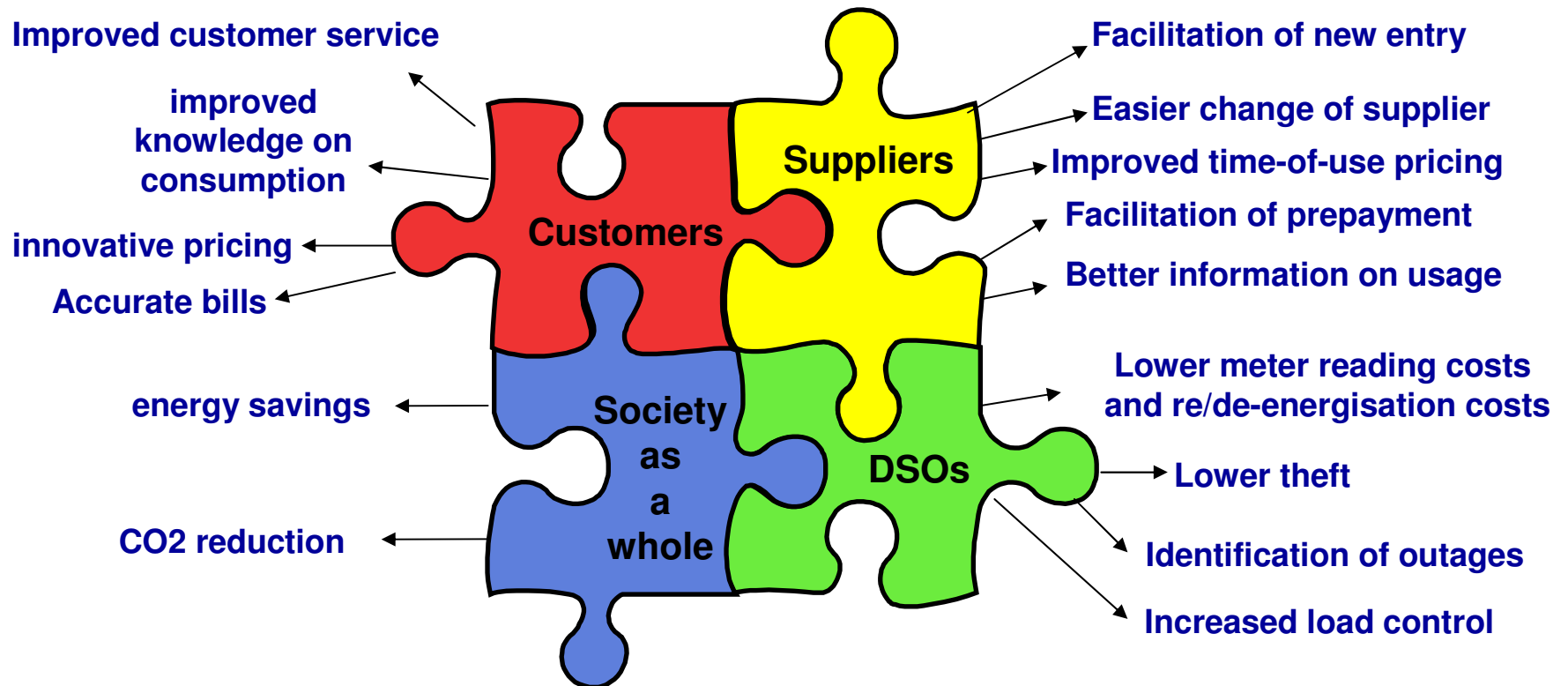


## 2. The management of data generated by smart meters will be a **logistical challenge for DSOs**

- Increasing **back office** work and need for automation investments
- **Need for comptabile IT solutions** between DSO areas to facilitate data exchanges
- **Organisation of data exchange**  
Centralisation? Outsourcing? New market players?
- **Will confidentiality of data requirements** act as a limiting factor ?



### 3. The benefits of smart meters are spread along the length of the electricity value chain...



...so how about the costs?



## **4. EURELECTRIC believes that there should be an optimized Smart Meter roll-out in Europe**

**The 3rd Electricity Directive defines only the general conditions of the roll-out. Specifically:**

- A geographical roll-out should be conducted to gain economies of scale**
- Cost-benefit analysis:** Should it be following the same principles across Europe? Should national particularities be respected?
- Investments:** How can the full net-benefits be transferred to the customer and society?



#### **4. EURELECTRIC's recommendations when defining the basic functionalities of smart meters:**

- We prefer **open standards** (inter-operable)
- We call for **bi-directional communication** of smart meters
- We consider that **stranded investments in past systems** must be taken into account by regulators
- We think that the **EC's 441 Mandate** is a step in the right direction. Next step: data requirements?

**EURELECTRIC will contribute to the European Commission Task Force on Smart Grids along these lines**



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