

Policy goals and contribution of the Task Force for the implementation of Smart Grids

Dr. Manuel Sánchez Jiménez

Policy Officer

Electricity and Gas Market Unit

Directorate for Security of supply, Energy markets & Networks

European Commission. Directorate General for Energy



● “Smart Grids”

- ❖ “Smart” coexistence of central and decentralised generation with lower carbon generation and efficient demand/response
- ❖ Load trading and cost optimisation by means of dialog towards time-variable tariffs and variable incentives depending on present load
- ❖ Customer integration based on new interfaces, bi-directional communication and large flow of information

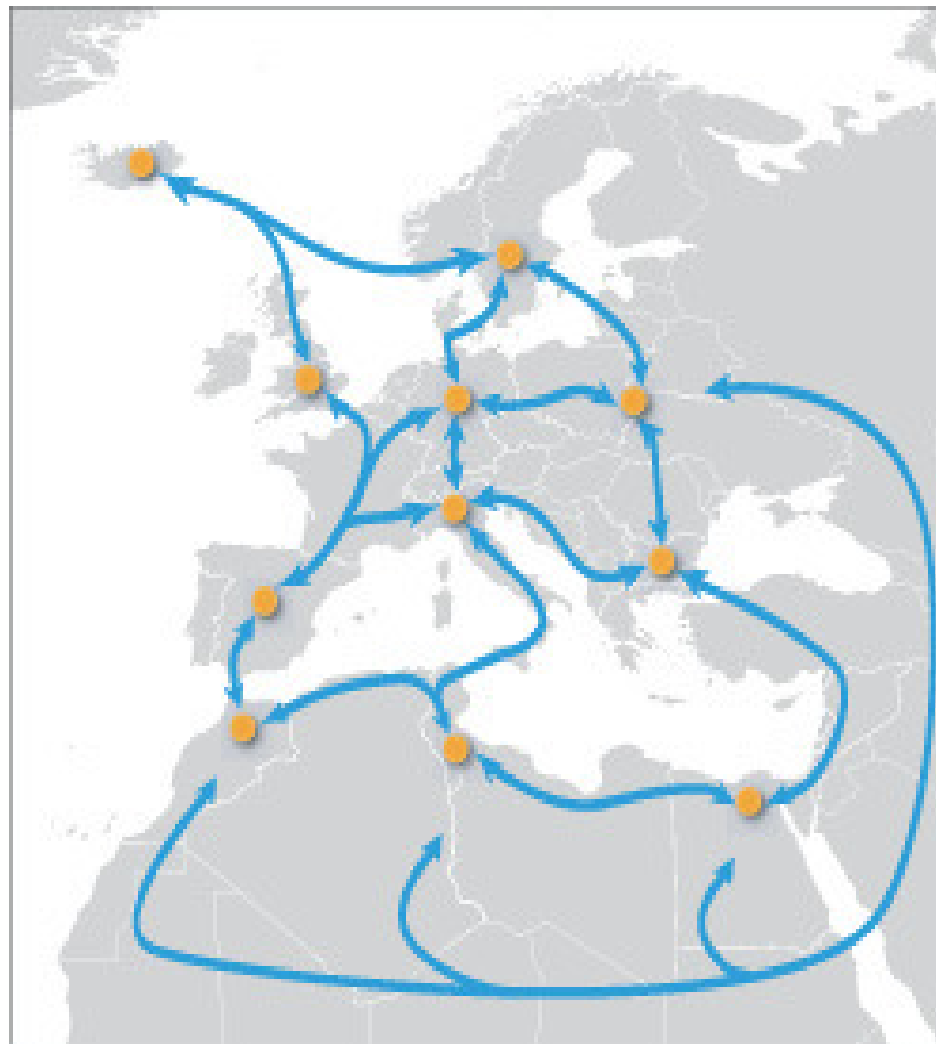


European Technology Platform and Smart Grid Working Groups since 2004



Dr. M. Sánchez. European Commission, Directorate General for Energy
EREG Workshop on Smart Grids. 17 March 2010, Brussels

"Supergrids": Pan-European Smart Grids



Sources: 3E/Greenpeace, TradeWind & Office of Metropolitan Architects (OMA), Imera, Mainstream Renewable Power, Adamowitsch, Supersmartgrid.net, Deserlec



● Challenges and actors

- Why its **large-scale deployment** has not yet happened?. Some reasons:
 - ❖ Limited pilot experiences so far
 - ❖ Limited statistical significance of the quantification of benefits achieved in these experiences
 - ❖ Existing uncertainties regarding the global investments needed, the new market models and the technology needed
- **Key challenges** for the Smart Grid deployment are
 - ❖ Largely of **regulatory nature**
 - ❖ Appropriate **demonstration projects**
 - ❖ Coordination and dissemination of **lessons learned**



● Challenges and actors/cont.

- Network owners and operators are in a position to **initiate the transition towards Smart Grids** and will be responsible for most of the investments.
- This requires the **support of legislators and regulators** to provide the **framework for incentives, criteria and obligations** for “smart” investments.
- **European-scale Public-private partnerships** could provide an important role take the first steps.
- The **3rd Energy Package** provides the appropriate environment for the implementation of Smart Grids across Europe and its provisions support it to a large extent by 2020.



● Why the Task Force? The Drivers

- Present EU policies require Member States to implement **changes to the grids**. Smart Grid solutions embrace the changing structure of **generation, the market and the use of electricity**
- The implementation of more active transmission and distribution systems in the form of Smart Grids is central to the deployment of the **internal market for energy**.
- This evolution is a **complex subject** and requires a coordinated approach addressing **various issues and all the actors**



● Why EU level? The EU added value- 1/2

- The Third Package's provisions for rollout 80% of Smart Meters in Europe by 2020 represent an innovative regulatory framework, unique worldwide, towards the Smart Grids.
- Beyond this first step, there is a need to **develop the European policy and regulatory** directions to drive forward the implementation of Smart Grids.



● Why EU level? The EU added value – 2/2

- The Third Package's provisions to encourage the long term modernisation of the grids across Europe are to be transposed by Member States.
- Coordination of initial efforts at European level to exploit synergies and consistency among regulatory authorities, regulated companies, end users and technology providers would help.



● The Mission of the Task Force

Advise the Commission on policy and regulatory directions at European level and to coordinate the first steps towards the implementation of Smart Grids under the provision of the Third Energy Package.



● Making it happen - Specific objectives and deliverables

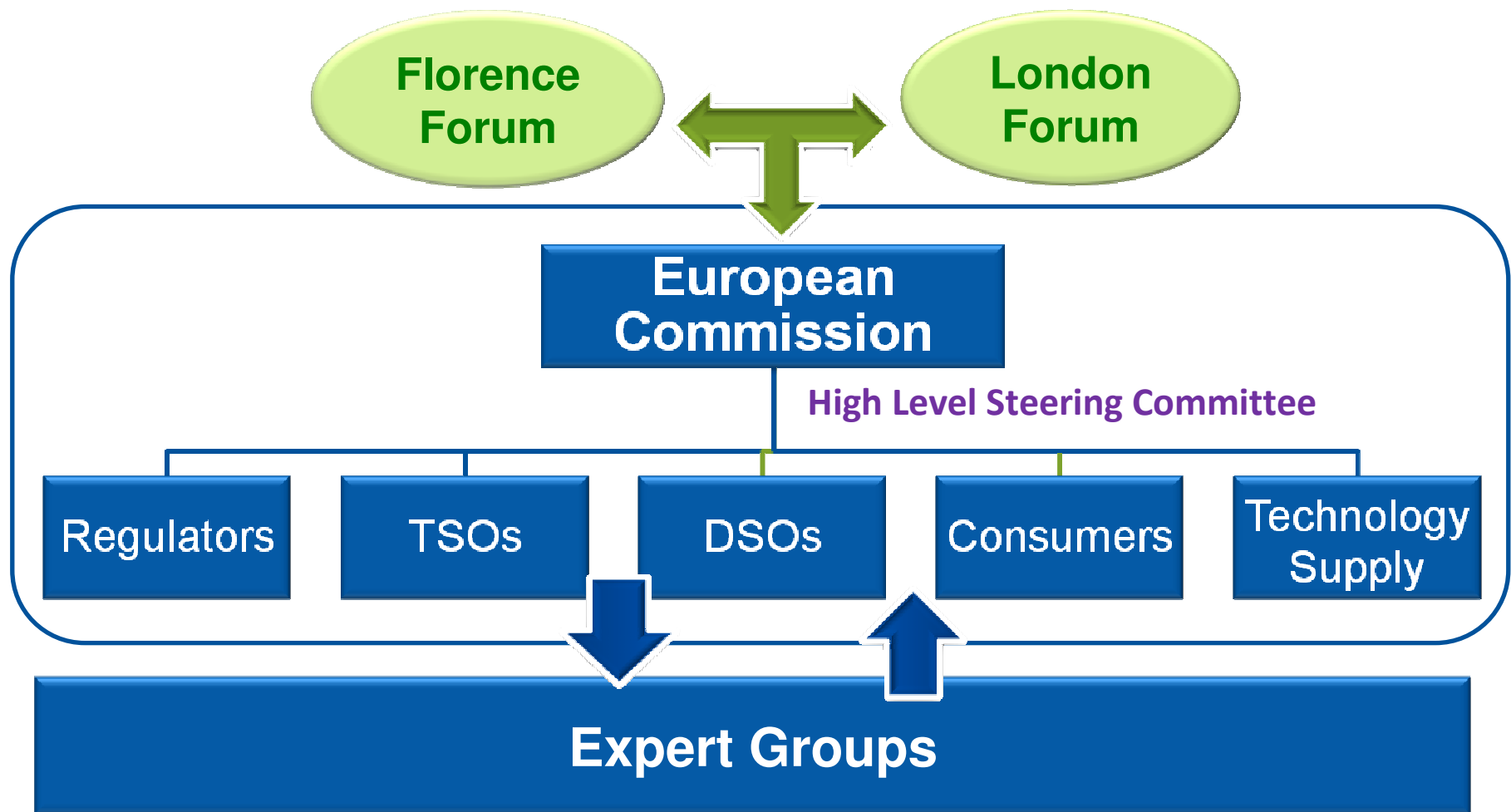
1. Produce a **common vision** in conjunction with institutional actors and key stakeholders for the implementation of Smart Grids.
2. Identify the **strategic decisions and regulatory recommendations** for EU-wide implementation of Smart Grids: policy, functionalities, scenarios and criteria for funding Smart Grids deployment through regulatory means.
3. Produce a **strategic Roadmap** for the implementation of Smart Grids and Smart Meters into the European internal market.



● Main Milestones



- **Task Force for Smart Grids**



● Task Force- Work Programme

Key topics and initial efforts to consider:

- ❖ **Expected services and functionalities**
- ❖ **Empowering consumers**
- ❖ **Supporting power system security**
- ❖ **Regulated and competitive markets**
- ❖ **Implementation and coordination of first steps**



● Initial Expert Groups (till June 2010)

- 1. Functionalities of Smart Grids and Smart Meters.**
- 2. Regulatory recommendations for data safety, data handling and data protection.**
- 3. Roles and responsibilities of actors involved in the deployment of Smart Grids.**





manuel.sanchez-jimenez@ec.europa.eu

http://ec.europa.eu/energy/index_en.htm

