

Final report “The role of DSO’s in a Smart Grid environment”

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Energy

Study “The role of DSOs in a Smart Grid environment” Final Results

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**Smart Grids Task Force
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Project overview



What are the roles and responsibilities of DSOs in the future energy retail market given the developments towards smart metering and smart grids?

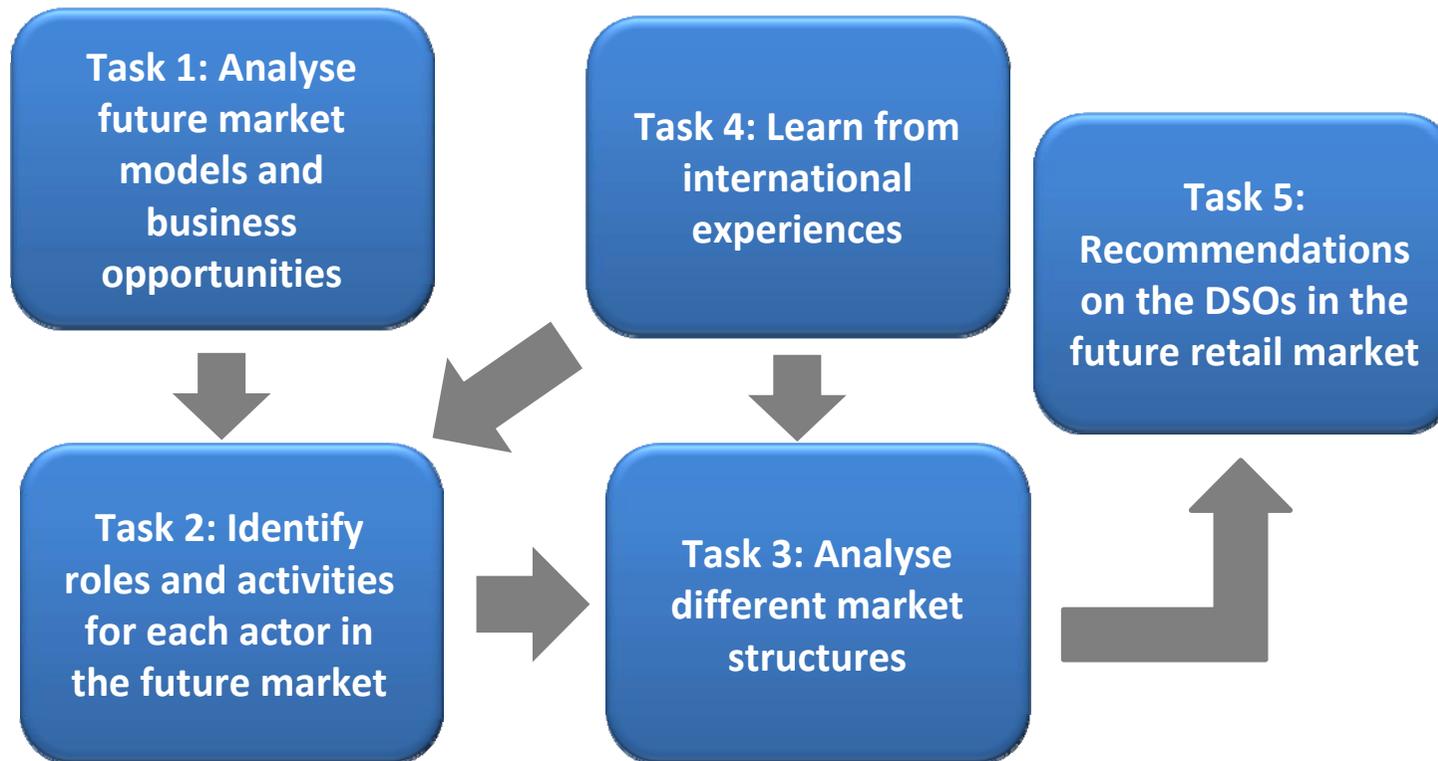


- Contractors: Ecorys/ECN (under FWC MOVE/ENER/SRD.1/2012-409 lot2)
- Interviews were carried out by the contractors (DSO, TSO, Regulators, ICT)
- A group of stakeholders participated in two workshops and provided comments (Eurelectric, Eurogas, EDSO, CEDEC, CEER, BNE, BDEW, consumer associations, academics)

Scope of Study



- Identify roles and tasks of DSOs in the Smart Grids environment
- The study follows the 2012 IEM Communication call on reflecting on future roles and responsibilities of DSOs
- Focus on electricity, but also gas was considered



Services identified



- 5 Smart Grids services have been identified and analysed under different assumptions:

1. Flexibility services
2. Infrastructure provision for Evs
3. Energy efficiency services
4. Ownership & management of meter
5. Data Handling

Monopolistic
vs.
Competitive

Market
Structure
Risks

Recommendations 1



Recommendations Electricity

1. Flexibility services:

- provision of flexibility through competitive market
- coordination between market actors

2. EVs infrastructure provision:

- limited role of DSOs
- possible involvement at initial stage of infrastructure development
- non-discriminatory access to EV infrastructure in order not to prevent market development (e.g. roaming services)

Recommendations 2



Recommendations Electricity (cont.)

3. Energy efficiency services:

- provision of EE services through competitive market
- DSOs to focus on market facilitation

4. Metering equipment and Data handling:

- DSO model → (a) Distinguish between system data and commercial data, (b) Outsourcing of operations (e.g. DSOs platform)
- CDH model → transparent and non-discriminatory, but regulatory & administrative costs



Recommendations 3



Recommendations Gas

1. Limited potential of flexibility services calls for a case by case assessment through a CBA. In this context, potential of coordination between gas and electricity grids should be explored
2. Provision of gas vehicles infrastructure (CNG) should be left to the market. DSOs role to facilitate take-up of the market
3. Possible synergies in smart metering roll-out and data handling between electricity and gas should be exploited





European
Commission



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

http://ec.europa.eu/energy/gas_electricity/smartgrids/taskforce_en.htm

