



GEODE COMMENTS ON THE THINK DRAFT REPORT –Topic 12- “FROM DISTRIBUTION NETWORKS TO SMART DISTRIBUTION SYSTEMS: RETHINKING THE REGULATION OF EUROPEAN DSOs”

GEODE the Voice of local energy distributors across Europe, welcomes the opportunity to provide comments on this draft report which focuses on Distribution System Operators, DSOs. **GEODE** mostly agrees with the reports' content and supports its main conclusions.

In the coming decades the way we generate and consume energy will change and critical parts of our energy future will be decided. With increasing demand and a greater use of renewables; ensuring security of supply and affordability for consumers, will be an increasing challenge. Crucial for delivering this major shift in our approach to energy will be the development of smart grids that can enable low carbon technologies and utilise innovative technologies and equipment to make the networks more efficient and cost effective. **Much of these improvements, as the report says, will take place as part of the distribution networks. In GEODE we do believe that DSOs are absolutely critical to meeting the energy challenges of the future.**

Innovation is going to be a significant part of the development of smart grids, but in a regulated environment **incentives are necessary to empower DSOs and provide the right mechanisms for these developments. GEODE** fully supports the report view that *“without smart incentive regulation, investments in the grid might not be optimal”*.

GEODE shares most of the draft report conclusions and that, in our view, are recommendable suggestions.

a.- Remuneration schemes for DSOs need to be reviewed: *“A ‘smart’ regulation that efficiently incentivizes DSOs to engage in active system management has to take account of i) changing OPEX and CAPEX structures, ii) the optimal choice among both, and iii) how to incentivize DSOs to be innovative.”*

GEODE strongly supports the need for proper incentives for investments that are a barrier for Smart Grids becoming reality. The Smart Grid as well as the role out of Smart Meters implies enormous investments for the DSOs. Initially, it is likely that the benefits will not match the costs



for the investor. As benefits are shared along the value chain, including the end consumer, the cost has to be distributed as well.

Since the business of the DSO is regulated, **it is very important that the DSO is allowed by the regulator, as the report says, to finance these investments through grid tariffs or other revenue streams.**

Without proper incentives, the timely deployment of the Smart Grid will not happen. It is important that any incentives developed are long term based on a sustainable regulatory strategy.

In this context **GEODE** agrees **regulatory authorities are the key facilitators of a smarter future** – they have to empower DSOs to take an active part in developing smart grid solutions. The development of an adequate framework at national level is essential to incentivize DSOs for Smart Grid and deploy smart meters integrating new and best technologies.

The demand for investments in smart grid technology happens to peak at the same time as the need for renewal of the conventional grid is greater than ever. Most of the conventional electricity grids in Europe were built in the post-war years and have now reached the age when they need to be replaced with modern conventional technology.

With rising demand for security of supply and an economy that suffers greatly from power outages of even a few seconds, **conventional grid investments must not be neglected** in the light of the Smart Grid. Unfortunately, today's regulation tends to focus in deploying the Smart Grid, forgetting the need to maintain the traditional grid infrastructure. In order to ensure both smart technology and at the same time maintaining grid quality, the European energy regulators should create incentives for investments in both types of grids.

GEODE believes that the following criteria should be taken into account by Regulators when setting DSO grid tariffs:

- **Sustainability, future oriented and long run predictability:** is essential as the DSO business has a planning horizon of decades (life time of electricity grid components are 40 years and more) and the challenges are changing in line with the development of the energy policy of the EC to achieve the decarbonisation of the energy market.
- **Investment and innovation friendliness:**
 - To allow investments in technical equipment and ICT infrastructure enabling the implementation of intelligent solutions and to make the necessary reinvestments in the “conventional” components of the grids (transformers, cables).
 - To allow DSOs to strongly commit to R&D and demonstration projects to be part of the creation process of the electricity networks of the future in good time.

As DSOs are prime movers in the deployment of Smart Grids it is essential they are empowered by an adequate regulatory framework to invest in innovative and intelligent technology, Smart



Grids and Smart Meters as well as in conventional components of the grid. DSOs, regardless of their size, need to be incentivised to engage in R & D activities connected with smart grid development.

b.- DSOs tariffs structure: *“there is a need for for distribution network tariff design that (a) provide a level-playing field for all types of grid users, and that (b) do not distort (or minimize the distortion of) economic efficiency.”*

GEODE agrees with the report that the current distribution tariff structure is inherited from the time before de-regulation when tariff structure was a combination of supply and distribution. Development of the DSO tariff structure is needed, in order to improve the cost reflectivity, fairness among customers and incentive effects both for customers’ savings and DSOs’ investments driven by the change of the energy system due to the integration of renewables and distributed generation.

GEODE wants to outline –as the report does- that current energy based DSOs tariff structure does not reflect the cost of the grid and therefore has to be reconsidered. Now is the right moment when Smart Meters and Smart Grids provide technical possibilities to develop new tariff structures.¹

GEODE underlines that there is no unique solution fits all in Europe when discussing tariff structures. It is, essential that the DSOs are allowed to develop their tariff structure without unnecessary restrictions. Therefore **GEODE** fully supports report statement that there is *“neither the need nor a solid justification for an EU-wide harmonization of the regulation of DSOs”* (Page 24 of draft report).

However **GEODE** stands for the following **general principles for the DSO tariffs** to be defined:

- Tariffs are cost reflective, intelligible and transparent
- Customer has genuine opportunities to affect the distribution charge
- Tariff structure encourages distributed generation, demand response, and efficient use of energy from distribution system perspective

¹ GEODE is working on a position paper on the Development of DSOs tariff structure to be published before summer 2013



- Tariff structure enables sufficient and predictable revenues for DSOs investments also in the future
- Tariffs are technically feasible to implement (metering and control)
- Tariff promotes well-functioning electricity markets
- Tariffs support the energy and climate policy
- Tariff structure does not conflict with the regulation and legislation

To ensure that DSO tariffs provide incentives for overall energy efficiency of distribution, it has to be guaranteed that the tariff structure encourages customers to optimize their load profiles so that the utilization rate of the distribution network capacity is as high as possible. This objective is not met by the current energy based pricing structures, but the power based component has to be included in tariff structure.²

c.- DSO tasks and responsibilities: *“The regulatory challenge here is to clearly define the roles, boundaries and responsibilities of DSOs (...)”*

GEODE believes that in order to create competition and encourage efficiency, the future smart electricity market must allow a high degree of flexibility when it comes to the different actors and their tasks. Although many new roles on the market, such as commercial storage providers and “prosumers” should be unregulated, **it is necessary to define a number of key responsibilities for the market actors.**³

The DSO handles all grid issues and provides information to other market actors while the supplier is the primary point of contact for the customer in non-grid related day-to-day matters. This ensures best service and greatest benefit for customers, because supplier and DSO can offer customer services for their core competencies and enhances customers’ ability to participate in the market.

² See attached study conducted by Lappeenranta University of Technology (Finland) on *“Tariff scheme options for distribution system operators”*

³ See attached Geode position paper on electricity market design. September 2012



As different models for customer service are applied in Europe today, **GEODE** believes that **each Member State should be allowed to choose which model suits their market best**, taking into account local circumstances and therefore fully supports draft report statement that *“the decision about whether to include such tasks into the DSOs’ portfolio should be left to national authorities (page 47)⁴*.

Before deciding about a change of the market model a thorough examination of consequences in combination with cost-benefit-analysis for every Member State is required. It is clear that a system change introduces additional costs. To contrast these costs with the expected benefits is the task of the CBA. Only if the benefits outweigh the costs is a change advisable.

d.- Cooperation of tasks between the DSO and the TSO: “The increasing amount of DER establishes a need for a clearly defined differentiation and cooperation of tasks between the DSO and the TSO.”

GEODE agrees that the TSO and the DSO needs to have a constant information exchange in order to settle energy balances and to ensure efficient grid planning. The report considerations in this respect should be taken into account, in particular, in the drafting process of Network Codes and therefore no further common principles are needed at EU level.

GEODE welcomes the DSO should accomplish additional task and take further responsibilities while retaining responsibility for metering as the meter is the logical end point of the DSO electrical grid.

However **GEODE** does not see the need for stricter unbundling requirements and disagrees with report in that respect. In our view what it is essential for a well-functioning retail energy market is that the provisions of the third energy package, e.g. regarding unbundling or regulated retail prices, are fully implemented into national legislations. There is no justification to ask for stricter unbundling rules today when already adopted legal provisions in the Third energy package have not been implemented in some Member States. Once implementation has taken place in all EU

⁴⁴ See attached GEODE report “Bringing Intelligence to the Grids. May 2013”



Member States, a thorough analysis of the existing unbundling rules and market function could be assess to identify further needs, in combination with adequate cost-benefit-analysis.

In addition to that **GEODE** believes it is essential to have exemptions for small utilities like stated in the 3rd energy package.

Brussels, 24 May 2013