Response to ERGEG Public Consultation on Smart Grids

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Answers and comments to your public consultation ref E09-EQS-30-04

Section 1 - Introduction

1. Statement globally agreed as unbundling, new players, new business models and increasing relative weight of intermittent centralized and decentralized renewable sources are definite challenges that will require new innovative approaches in the field of the supply side.

2. The document is rather complete and address most aspects of what "Smart Grid" will mean. However we suggest the following complements
- It will be a progressive evolution from the current situation therefore we would talk about smarter grids rather smart grids or grid.
- There will be paradigm shifts in the way not only electricity supply is planned, operated and mainained but also electricity consumption is properly monitored and controlled in order to be optimized and smoothed.
- Their implementation will have an influence on network operators' mission but also on end-users behavior.
- Smarter grids will include local micro grids which will be interconnected to others, within a global picture.
- Not only large intermittent generation will exist; every end user (building, industry, homes ....) will dispose of local micro renewable generation and energy storage capacity of which the future electrical vehicles; the energy storage aspect with its impact is not listed visibly enough..
- Smarter Grids priorities must include all means for end-users to manage, monitor, store and optimize their net energy consumption and its associated costs.
- Consumers and more generally every energy user will need to have a much more active role.

3. Yes we agree notably with elements such as time of use tariffs, incentives for energy efficiency at end use, peak shavings, incentives for improved power factor etc.

Section 2 - Drivers of smart grids

4. Are rather missing
- Energy storage capacities of which electrical vehicles
- Basics for safe and reliable electricity end use
- Future electrical vehicles recharge needs for which smarter grids are almost a prerequisite
- Key role, at all levels, of real time monitoring and control of the balance between an optimized net demand and the potential responses from the local grid.

Section 3 - Smart grid opportunities & regulatory challenges

5. Yes definitely; if we want to go further than only distribution network automation, the user centric approach is fundamental, with all its added value coming from energy efficiency measures and load shedding and peak shaving of its net demand to the local grid.

6. They should develop inovative offers for their customers as described in § 3.3.3. Regulation should lead them to act as catalysts.

7. Consumers and prosumers will need to dispose of all means to manage, monitor, store and optimize their energy net consumption and the cost of what they need to buy, with the adequate level of relialability and full safety conditions.

8. Consumers / Prosumers will require to be in control of their net energy demand and its cost. Measurements by usage, monitoring of the real time consolidated demand and the automation of the control of the final appliances are key. We do not believe in the remote control of the final appliances. Not only electricity supply and the networks need to be planned, operated and mainained but also consumers / prosumers will need to manage in real time their electricity consumption and optimize it.

9. The current situation is impacted by the extra generation capacity to face the peaks of the demand. A radical behavior change of the end users, made possible thanks to the technologies offered by the electrical and electronic as well as ICT industries will completely change the picture. Smarter grids are essential to address the European Energy Efficiency and CO2 emissions targets. Furthermore, they are prerequisite to a massive development of the electrical vehicles. Costs, on a like for like basis in term of demand and primary energy price, can't be higher.

10. Regulators need to care as well about the need for end users to change behavior and invest in measuring, monitoring and controlling tools.

Section 4 - Priorities for regulation

11. Yes obviously.

12. Benefits for end users are rather missing (ex: Flexibility of tariffs , end use energy efficiency, flexibility of supply, integration of local renewable sources....etc.)

13. Reference documents are either European or US origins. Japan and may be few other asian countries should be looked at as well.

14. Incentives need to be developed and made available for all stakeholders to move and change.

15. There will be significant changes in the way key functionalities will be managed, operated, checked, tested .....etc. Smart Grid is too much a buzz and fuzzy today.

Comprehensive standardization program is mandatory with an approach as holistic as possible to facilitate offer development and implementation.

16. No; the paper is quite comprehensive.

17. No opinion

18. The European roadmap to 2020 should take into account the potential benefits with its implementatioin timing of the Energy Efficiency measures (see Electra report ....), the renewable sources European deployment plan and the smart features of the future electrical chains (Smarter Grids) like smart metering tools, smart control systems for buildings and homes ...etc. Furthermore, players' behaviors are critical and performance indicators of their change should be set up.