
Smart Grids Scope, History and Prospects
Update on Smart Metering Activities
Note to the GA
2 July 2009 (v3)

Background

The GA decided to have a high-level discussion on the issue of smart meters and grids at the July GA. The chairs of EWG, CWG and ENP WG supported by a technical team of experts of the three WGs prepared this paper (consisting of two parts) to scope the GA discussion.

The first part “Part A: Smart Grids Scope, History” presents the Smart Grids scope; considers smart meters as part of smart grids; provides an update of relevant initiatives on smart grids including the R&D related activities/initiatives of TSOs and DSOs; considers the issues of relevance for regulators with reference to the Energy regulators’ work programme. The first part takes also account of the main results of the CEER workshop on Smart Grids, held on 29 June 2009, during which some new information was provided by DG TREN (the relevant Commission’s announcement is incorporated in the annex).

The second part “Part B: Update on Smart Metering” presents the differences between smart grids and meters; an update on the state of play of smart metering systems standardisation in electricity and gas at European level followed by the Customer Working Group and solicits the GA approval for ERGEG’s participation in a research project led by industry and financed by the European Commission.

The last chapter draws conclusions and outlines the proposed actions resulting from both parts. GA approval is sought on the proposed recommendations.

The GA is invited to have an orientation debate on smart meters and grids and to decide on the proposed actions on the basis of the conclusions and recommendations included in the last chapter.

Part A: Smart Grids Scope, History and Prospects

1 Why Smart Grids?

Smart Grids are an envisaged change in networks (especially distribution networks) necessary in order to enable the achievement of the 20/20/20 targets, guaranteeing high security, quality and economic efficiency of electricity supply, in the electricity market environment. Distribution networks are designed for radial operation and the presence of generation units at distribution level was not considered in the design at all or only for a neglectable fraction (“fit and forget” approach). Integrating large amounts of distributed generation in actual networks does lead to serious concerns about reliability, quality of supply and voltage control.

According to the IEA, the electricity sector in the EU has an annual turnover exceeding € 112 billion and contributes about 1.5% to the EU GDP. Investment in the sector is approximately € 22 billion per year. According to IEA World Energy Outlook 2007, the electricity investment in Europe will exceed \$1700 billion over the next twenty-five years, roughly equally split between generation and grids (about 25% for transmission and 75% for distribution). A large portion of the European electricity grids were built 40 and more years ago. Renewal is necessary and it is happening continuously as a part of the grid operators’ duties. However, without smart solutions, this renewal will remain a mere replacement of copper and iron, based on old and extant technologies, with no efficiency gains. A lack of smartness in the future electricity grids will eventually lead to inefficient investment decisions, lost opportunities and failure to reach the European energy targets. The effect on customers and society would be detrimental and unacceptable. It follows that there is a clear case for Smart Grids and a window of opportunity for the deployment, in order to improve the “output” from the grid while reducing the total costs.

Accordingly, the third package, in a recital, states that “Member States should encourage the modernisation of distribution networks, such as through the introduction of smart grids, which should be built in a way that encourages decentralised generation and energy efficiency (Recital 27 of the Electricity Directive). There are other provisions on smart grids in the third package (see part 4 – Roles and Responsibilities).

2 Effects of Smart Grids and Regulation

A good definition of Smart Grids is provided by the EU Technology Platform: A SmartGrid is an electricity network that can intelligently integrate the actions of all users connected to it - generators, consumers and those that do both – in order to efficiently deliver sustainable,

economic and secure electricity supplies¹. The term Smart Grids embraces hence the way how the future electricity grids need to be planned, constructed, operated and maintained, in order to deliver the necessary services and applications to the grid users and to actively support the achievement of the EU energy targets. Because of the width and depth of changes in the future electricity grids, it is important to understand and validate effects, benefits and costs.

A successful deployment of Smart Grids will result in a number of positive effects and benefits:

- (1) Reduced carbon emissions and improved energy efficiency:
 - a) directly in the grids, through reduction of losses,
 - b) indirectly by integration of renewable and distributed generation, in compliance with operational security, power system and electricity market efficiency,
 - c) and indirectly by supporting efficient end-use by plug-in electricity vehicles;
- (2) Adequate capacity² of transmission and distribution grids for “collecting” and bringing to the consumers the electricity generated from all sources;
- (3) Uniform grid connection and access for all kind of grid users;
- (4) Enhanced efficiency and better service in electricity supply and grid operation:
 - a) by utilizing ancillary services across transmission and distribution grids,
 - b) with integration of balancing markets across the national borders²,
 - c) through active control, automation and management services in distribution grids
 - d) and by empowering customers through home automation;
- (5) Higher security and quality of supply:
 - a) by well coordinated operation of transmission and distribution,
 - b) with intelligent preventive and emergency control and coordinated restoration,
 - c) by operating the control and synchronous areas as “one EU transmission grid”²
 - d) and with adequate reliability and voltage quality;
- (6) Effective support of the electricity market by:
 - a) load-flow control to alleviate loop-flows (e.g. by phase shifters or power electronics)
 - b) and increasing cross-border interconnection capacities, where it is more beneficial;
- (7) Coordinated grid planning and development through common European, regional and local grid planning² to optimize transmission grid infrastructure;

¹ www.smartgrids.eu

² In transmission this will also depend on the enhanced licensing proceedings and improvements in the implementation of the EIA Directive

Defining metrics for quantification of Smart Grids effects and benefits is a challenging but necessary task in order to be able to perform the cost / benefit analysis, before cost recovery and eventual introduction of incentives for the Smart Grids deployment. This is a high priority and complex issue for regulators.

Furthermore, in the regulatory approach to Smart Grids the costs that are not strictly related to the renewal of networks shall not be internalized into the grid tariffs in an opaque or discriminating way as this would induce an additional and unjustified burden to the customers. Even if customers are indeed themselves interested in e.g. reducing carbon emissions, the part of the Smart Grids deployment costs incurred for that (and other effects external to the grid: for instance the deployment of electric vehicles) shall be dealt with appropriately and relying on other sources like e.g. renewable support or tax schemes, European and national innovation & research funds, industry initiatives, etc. Where appropriate, consideration could be given to spread out over the medium-long term at least some of the extraordinary initial costs, on grounds of inter-generational equity.

3 Roles and Responsibilities

For the effects and benefits of Smart Grids to become a reality, the roles and responsibilities of relevant stakeholders and authorities must be clearly defined and duly committed.

TSOs and DSOs are the prime movers for the Smart Grids deployment. They shall focus their efforts on understanding and taking into account the needs of the grid users and the customers. The Smart Grids deployment projects and processes shall be conducted in a transparent way, supporting and cooperating with the R&D institutions.

Research & Development institutions need to closely cooperate with TSOs and DSOs. In their work, time constraints and “real world circumstances” need to be taken into account. Moreover, improvements and enhancements of existing solutions are an essential activity, equally significant as the new concepts.

Grid users, electricity customers and society are the ones for whom “the job is done” and who benefit from the Smart Grids deployment. *Retail supplier and energy service companies (ESCo)* are the entities that in liberalised market are in strict contact with final customers; as active participation of demand (leading to “smart customers”) is a key feature of Smart Grids, the full involvement of these actors is really crucial to extract the maximum benefit from Smart Grids without jeopardising retail competition.

Electricity industry, equipment vendors and system integrators are those who (will) have the solutions for Smart Grids deployment. Whereas competition drives the industry innovation in the free market, accomplishing that in a monopoly environment of the electricity grids is more challenging. The success will depend on the electricity industry, on the independence of the grid operators and on the adequate regulatory environment.

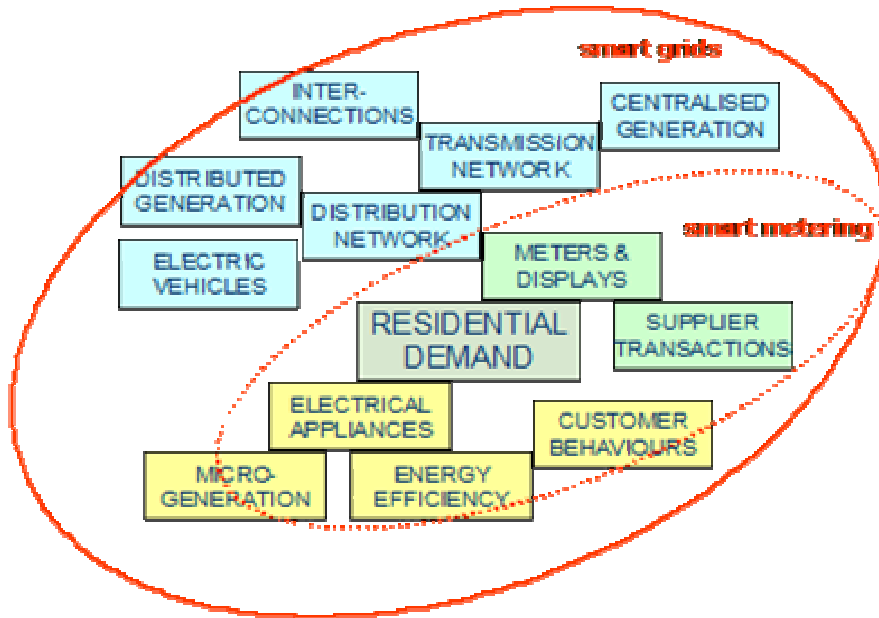
EU authorities, Member States and regulators focus on interests and needs of the European customers and society. Although different national implementations of the European Directive exist, there is a common objective of efficient, sustainable and secure supply of electricity, in a competitive market environment.

With regards in particular to regulators, it is important to note that pursuant to the third package:

- in order to promote energy efficiency, Member States, or when a Member State has so provided, the regulatory authority, shall strongly recommend that electricity undertakings optimise the use of electricity, for example by providing energy management services, developing innovative pricing formulas, or introducing intelligent metering systems or smart grids, where appropriate (article 3.11 of the Electricity Directive);
- in fixing or approving the tariffs or methodologies and the balancing services, the regulatory authorities shall ensure that transmission and distribution system operators are granted incentives, over both the short and long term, to increase efficiencies, foster market integration and security of supply and support the related research activities” (article 37.8).
- Furthermore, the annual work programme of the ENTSOs shall contain a plan on research and development activities (article 8.5 of the Electricity Regulation). The annual report must be submitted to the Agency, which will need to provide an opinion (article 9.2 of the Agency Regulation).

4 Smart Meters and Metering as a part of Smart Grids

Smart Metering enables some features and functionality of Smart Grid, but Smart Grids' scope is much larger than Smart Metering (see the enclosed figure).

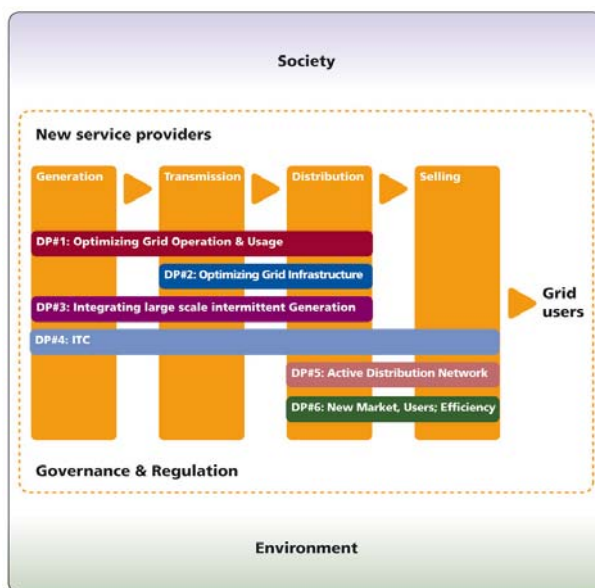


Smart metering systems allow interval metering for both active and reactive energy, consumed and injected into the network, so contributing to more accurate balancing, losses and cost calculation, to promote peak/off-peak prices and to discourage bad practices in the use of the network. New smart metering technologies will provide information on quality of supply at each connection point, so contributing to more effective investments and renovation plans of the grids, thus increasing security of supply. The most important benefit is that due to the accurate information that smart meters can provide on actual time of use, customers will be encouraged to increase their efficiency in consuming energy and be part of demand response plans. Finally smart metering systems can facilitate supplier switching processes and in general increase innovation in commercial offers to customers.

5 Work and Initiatives on Smart Grids

Smart Grids has increasingly become a top priority issue in the agenda of Member States and EU institutions. It has been first dealt with in the European Technology Platform Smart Grids promoted by the European Commission, Directorate General Research, since 2005¹. The SmartGrids Vision was discussed at the first SmartGrids General Assembly in April 2006. In order to pave the path towards reaching the Vision, it was necessary to specify the areas of research and deployment required to reach the final goals. This was accomplished in the

Strategic Research Agenda (SRA) published in 2007. A number of lighthouse projects and activities were identified and suggested, that helped to develop the calls for the EU Framework Programme 7 in the area of electricity grids. The representatives of some regulators³ were participating actively and provided substantial support in the EU Technology Platform Smart Grids from the very beginning. The Smart Grids Strategic Deployment Document (SDD) from November 2008 delivers the deployment strategies, a clear timeline of actions and recommendations, taking into account the EU targets to meet the climate challenges and maintain security of supply in an economical way. The SDD is consistent with the recommendations from the Strategic Energy Technology Plan (SET-Plan) for Europe.



The scope and priorities for Smart Grids deployment are illustrated in the accompanying figure (from the Smart Grids Strategic Deployment Document SDD, Nov 2008) and consist of a number of features:

#1: Optimizing grid operation & usage is about decentralized, coordinated grid operation, operational security and market based treatment of electric power flows.

#2: Optimizing grid infrastructure is about building of new and improving and optimizing of the existing grid facilities.

#3: Integrating large scale intermittent generation is about integrating into grid large scale on/off-shore wind generation.

#4: Information & communication technology is about the ICT tasks, standards and solutions.

#5: Active distribution grids is about “activating” the distribution grids towards the degree of automation and operation as it is the case today with the transmission grids.

#6: New market places, users and energy efficiency is finally about putting customer into focus.

Now the attention seems to move from vision and strategic deployment to actual demonstration. A leading role in this change of focus is of EC DG Research that in cooperation with the DG

³ E-Control and Ofgem

TREN proposed the SET-Plan and a set of six European Industry Initiatives, including the one on electricity grids.

Current ongoing work/new initiatives

1) *European energy regulators' WP 2009*

Following the initial information and internal discussion on Smart Grids in 2007 and 2008, ERGEG has defined a task for the Electricity WG within the WP2009, to develop the Regulators' position on Smart Grids. The objective is to conduct all necessary regulatory discussions in relation to Smart Grids, so that solutions and strategies from the regulatory perspective can be elaborated. The first step is to prepare a position paper, which is planned to be submitted for approval to GA in December 2009. The approved document is intended to be sent to public consultation as a result of which a conclusions document will be prepared during 2010.

2) *European Commission's initiatives*

EC (DG TREN) Task Force on Smart Grids: At the CEER workshop on smart grids on June 29 2009 a representative from the European Commission (DG TREN) announced that the Commission intends to establish a Task Force for Smart Grids. The TF would report both to Florence and London Fora. The Commission will chair and provide secretariat for the Steering Committee, which will comprise high-level representatives of nine European institutional and market actors (including ERGEG, ENTSO-E, Eurelectric, GEODE, CEDEC, BEUC, EUREC, EUTC and T&D Europe). The Steering Committee would then select an Expert Group that would consist of 25 experts from main actors and stakeholders at the maximum. Additionally, there could be ad hoc expert groups. The envisaged timetable is such that the invitations to the Steering Committee would be sent in July so that the Committee can start its work in September. The first deliverable would be a common vision (May 2010) and the second Identification of Pilot Projects (Sept 2010). After that it would deliver Strategies and Actions (Jan 2011) and a Roadmap for Implementation (May 2011). The work plan is shown in annex.

European Industry Initiative (DG RESEARCH): The Commission proposed a "Strategic Energy Technologies Plan" (SET Plan) to promote technology development and to accelerate innovation to support energy-climate objectives. The SET Plan was endorsed by the Council in February 2008. It foresees the setup of six new industry-led public-private partnerships, the European Industrial Initiatives (EII) on wind-, solar- and bio-energy, on carbon capture on 4th generation nuclear and on the European electricity grids.

The main objectives of the EII are to research and develop technologies and demonstrate solutions to prepare the evolution of the European electricity grids required to meet the energy and climate targets.

There are so far two contributions to the SET Plan Industrial Initiative on electricity grids. The first one is the TSO initiative presented by seven TSOs (ELIA, REE, RTE, RWE, TenneT, Transpower and Vattenfall). It is envisaged to have coordination within ENTSO-E, which will facilitate participation of other TSOs. The second contribution is a programme presented by six DSOs (CEZ, ERDF, ENEL, Iberdrola, RWE and Vattenfall).

The above-mentioned two projects were presented at the FSR workshop on 15. May 2009. The FSR workshop was organised by the Florence School of Regulation commissioned by DG Research and with the support of DG TREN. The TSOs and DSOs present at the meeting agreed to integrate their current contributions into a single coherent initiative. **The network operators agreed that they have set the foundations for the European Industrial Initiative on Smart Grids.**

The workshop concluded that a subsequent meeting to bring together network operators and regulators to better identify the requirements of regulators concerning details of proposed projects needs to be organised. It was also stated that more detailed information should be submitted before such an event so that regulators can come fully prepared to the meeting. It was also envisaged that trilateral contacts between network operators, public administrations and regulators are needed at national level.

Note: The two EC initiatives (new Task Force for Smart Grids to be launched by DG TREN and the workshop with follow-up by DG Research) have not yet aligned the timetables. The Task Force for Smart Grids, which follows to a large extent the organisation and principles of the EU Technology Platform Smart Grids envisages to specify the European Smart Grids pilot projects by September 2010 whereas the DG Research follow-up workshop is planned to be organised in autumn 2009 – there regulators are expected to give their more detailed views on the European Industrial Initiative on Smart Grids.

In response to these initiatives, a draft letter to DG RESEARCH and TREN outlining the main issues of concern from the regulators' point of view, including the recovery of R&D costs through regulated tariffs, is circulated to the GA for approval. **The GA is invited to approve the draft letter to DG Research and TREN.**

The June GA also requested ENP to conduct a quick overview on R&D funding in the EU Member States and current NRA practices. A preliminary snapshot on the R&D funding in Member States and NRA practice is circulated on the basis of a questionnaire prepared by the Workstream Incentive-based Regulation and Efficiency Benchmarking of the URB TF. Due to the extremely short timeframe, the questionnaire is meant to provide only a summary snapshot – the GA is invited to consider whether or more substantial follow-up is warranted and, if so, what additional information should be elicited.

The GA is invited to mandate the URB TF to complement the summary analysis on national practices in R&D funding.

In parallel, regulators sought to explore DG TREN views on R&D activities related to smart grids in a meeting with DG TREN, Mr Christopher Jones, on 24 June. The key elements include: i) massive investments are needed in distribution grids to permit meeting that 2020 targets, an essential prerequisite for the more rigorous demands of the 2050 goals currently being devised; ii) the Commission is not well placed to decide on the technical options – a well-thought-through roadmap or action plan needs to be proposed by grid operators working together with regulators; iii) Commission funds under the Seventh Framework Programme are available but limited to perhaps one or two hundred thousand per year for energy projects and apply to demonstration and pilots, not rollout or implementation; and iv) regulators need to be more fully involved in issues of smart grid development and energy efficiency, the topic of a current consultation by the Commission.

REALISEGRID: The coordinator of the REALISEGRID project invited ERGEG to participate to the Stakeholder Board. This project, funded through the FP7, aims at designing the guidelines for revising the current transmission planning procedures. Heart of the project is a new cost-benefits evaluation procedure of new investments in the transmission grid, allowing to calculate a multicriteria ranking among possible expansion solutions (especially concerning cross border infrastructure). This procedure will be applied to carry out a cost-benefits classification of the most important projects belonging to Trans European Network priority axis "EL.2. Borders of Italy with France, Austria, Slovenia and Switzerland". REALISEGRID will analyze nine out of the thirty-two electricity transmission projects declared of European interest by the European Commission.

REALISEGRID project is one of the current five TSO projects. The assessment regarding the ERGEG participation in the governance structures of these projects - if invited - needs to be undertaken.

The GA is invited to mandate the coordination group to evaluate the participation of ERGEG to the stakeholders Board of REALISEGRID and other current and similar future projects in case an invitation is received. This would imply preparing a proposition on ERGEG participation in R&D projects in the industry.

3) Other initiatives

A Smart Grids Forum was established in spring 2009 and intended to be chaired by Professor Ronnie Bellmans from the Catholic University of Leuven. The Forum would serve as a meeting place, a catalyst, to bring together the stakeholders and to coordinate the developments without trying to set the agenda for the individual stakeholders. It would consist of TSOs, DSOs, energy generation, equipment suppliers, ICT-metering, suppliers, traders, power exchanges, regulators and end-users. ERGEG was approached and it was agreed that EWG Chair would represent the regulators in the advisory board and Mr Tahir Kapetanovic would be the expert to participate in the practical work, which implies e.g. meetings every or every second month.

III. Part B: Update on Smart Metering Activities

The purpose of this part is to update GA Members on the state of play of smart metering systems standardisation in electricity and gas at European level followed by the Customer Working Group and to solicit their approval for ERGEG's participation in a research project led by industry and financed by the European Commission.

It is also important to note that under the 3rd package, the implementation of intelligent metering systems may be subject to an economic assessment of all the long-term costs and benefits to the market and the individual consumer including which timeframe is feasible for their distribution. Such assessment shall take place within 18 months in the electricity (3 years in the gas) after the entry into force of the Directives. Subject to this assessment, Member States shall prepare a timetable (with a target of up to 10 years for electricity, no target is set for gas) for the implementation of intelligent metering systems. With regard to the electricity market only, where roll-out of smart meters is assessed positively, at least 80 % of consumers shall be equipped with intelligent metering systems by 2020. The Member States, or any competent authority they designate, shall ensure the interoperability of those metering systems to be implemented within their territories and shall have due regard to the use of appropriate standards and best practice and the importance of the development of the internal market in electricity.

1 **What are the differences between smart grids (electricity) and smart metering (electricity and gas)?**

Distinguishing between smart metering systems and smart grids has become complex since the coming up of various initiatives at national and European level which are actually, or pretend to, involving both issues. **An effort of distinction cannot be averted for European regulators since issues at stake (legal background, market players, and regulators' implication) are not the same as smart grids even though both innovations could intermingle.**

Although the concept of smart metering covers both electricity and gas, the concept of smart grids refers so far to electricity only.

Operating distribution networks is a monopoly and therefore a regulated activity, whereas for meter systems operation there are two market organisations in Europe: the regulated metering model, where the grid operator or a regulated meter service provider have the monopoly of providing meter services and the liberalised metering market model, where the metering service is open to competition.

Minimum functionalities of smart metering systems are already defined at European level and deal primarily with remote meter reading (Advanced Meter Reading systems). Both Directive 2006/32/EC on energy end-use efficiency and energy services and Annex A (§1-i and §2) of 3rd Package Directives require for final customers to be provided with meters that reflect their actual consumption and give information on the actual time of use frequently enough for them being able to manage their own consumption. These requirements apply for both electricity and gas and they do not impose intervening on the distribution network infrastructure. As a consequence, AMR and metering systems in general are not necessarily run by DSOs. These functionalities will allow for customers no more estimated bills or staying-in for home readings, as consumption data will be collected on various possible timeframe, but frequently enough to reflect actual consumption, and will be sent directly to customers. New services will also become available, which relate to suppliers' offers as a greater range of tariff packages including for peak/off-peak energy will be available based on the knowledge of accurate consumption. These meters' functionalities could be more advanced than most meters' functionalities in Europe, they nonetheless can be, and actually are, put in place without any evolution of the distribution network into smart grids.

As far as electricity is concerned, meters can also serve as a part of a platform offering other functionalities than remote reading and thus provide an essential stepping stone to smart grids in the future. Combined with Advanced Metering Infrastructure (AMI) including two-ways communication systems, meters/Customer Premises Equipment (CPE) can embark additional functionalities that do not deal with remote consumption reading, but with remote control and relate to network operations and DSOs' customer services. These services could range from remote activation/de-activation to remote lowering or rising of subscribed voltage. This implies meters/CPE do not only collect and send consumption data but also receive orders from the inside and the outside and communicate with customers. These functionalities are those described in ERGEG's report on smart Smart metering Metering with a Focus on Electricity Regulation⁴. It is also the scope presently covered by the Customer Working Group in its work on smart metering systems: metering and customer services.

This Advanced Meter Management (AMM) system could become part of smart grids although it should not be confused with them. For example, devices and communication infrastructure in use for AMM could, coupled with sensors, serve for DSOs to more efficiently operate their networks by communicating real-time information on the state of play of the grids. They could also facilitate the installation of micro-generation capacities, or ease the balancing of the grids.

2 Update on standardisation mandate to CEN, CENELEC & ETSI in the field of measuring instruments for the development of an open architecture for utility meters involving communication protocols enabling interoperability

On 12 March 2009 the European Commission/DG Enterprise issued a standardisation mandate # M/441.

The general objective of this mandate is to *create European standards that will enable interoperability of utility meters (water, gas, electricity, heat), which can then improve the means by which customers' awareness of actual consumption can be raised in order to allow timely adaptation to their demands.*

⁴ Smart Metering with a Focus on Electricity Regulation, 31 October 2007, E07-RMF-04-03

In order to elaborate the work of the mandate, a *Smart Metering Standards Cooperation Group* has been set up. After ERGEG's request sent to the European Commission on 26 January 2009, ERGEG became part of the cooperation group. A dedicated team is set up with volunteers from AEEG, BNetzA, CRE, E-Control and Ofgem coordinated by ERGEG's liaison on this topic, Mr Ferruccio Villa (AEEG) under CWG umbrella.

The first meeting of the Smart Metering Standards Cooperation Group took place on 25 May 2009. Two ad hoc groups were constituted, the first one is dedicated to *communication standards*, the second one focuses on *additional functionalities*. ERGEG is part of these two ad hoc groups.

Both ad hoc groups have to prepare input for the second Smart Metering Standards Cooperation Group meeting (that should take place end of September) to elaborate a timetable on how to achieve the mandate's requirements. This timetable would then be communicated to the European Commission/DG Enterprise to launch the drafting of standards.

3 Update on Open Meter Project

Before the European Commission/DG Enterprise issued the mandate # M/441, another initiative was launched at European level on a very similar topic, which may have created some confusion in the field of standardisation of smart metering systems.

In January 2009, an initiative, officially named "The Open Public Extended Network Metering Project" and known as "the Open Meter Project", started its activities. It is driven by a consortium of research centres, universities, meter manufacturers, suppliers, network and metering operators and is coordinated by Iberdrola (www.openmeter.com).

The project is co-financed by the European Commission/DG Research under the name "open access standard for smart multi-metering services" as part of its research cooperation programmes #7 officially announced in the Official Journal of the European Union of 30 November.

Objectives and timeliness are similar to those established in the standardisation mandate given by the European Commission/DG Enterprise as the initiative aims *at setting open standards to guarantee the interoperability of systems and devices produced by different manufacturers and to enable active customer participation to energy markets.*

Mandate # M/441 also invites the Open Meter Project *in so far as it is relevant for the development of standards requested by this mandate to take part in the work.*

The participants to these projects are the same as those seated around the CEN, CENELEC and ETSI standardization table. CENELEC is a project partner as well . A joint workshop will take place on 8 July 2009 and ERGEG has been invited to attend this event (not as a speaker).

On 17 March 2009, the Open Meter Project consortium's coordinator (Iberdrola's representative) sent a letter of invitation to CEER/ERGEG to join their Panel of Users and Stakeholders. This panel is created in order *to receive and process valuable contributions and feedback from outside the Open Meter Project itself* (Board Members may refer to the letter in Annex).

As a first reaction, CEER/ERGEG Secretariat declined this offer because of the general lack of information on this issue at that time, and of CEER/ERGEG's internal rules not to participate in consortium with the industry in order not to appear as giving its assent to positions not produced by CEER/ERGEG.

Due to the intermixing between the standardisation mandate and the open meter project, Mr Ferruccio Villa and the CWG Chair wanted to get more insight in the open meter project and the invitation to join the advisory panel of users and stakeholders. A meeting was arranged on 29 May 2009 with the European Commission/DG Research/Unit K2 energy conversion and distribution systems (Stefano Puppini, Patrick van Hove) to learn more about this project. **DG Research strongly recommended CEER/ERGEG to join the advisory panel of users and stakeholders.**

GA Members are kindly invited to consider a favourable answer to the Open Meter Project's request to join the advisory panel of users and stakeholders in order for CEER/ERGEG to get a full overview of the main initiatives in the area of standardisation of smart metering at European level, and to get the opportunity to have their say in this topic.

4 Update on WP 2009

Smart metering for both electricity and gas is at core of CWG's concerns. RMF TF prepares a status review on the regulatory aspects of smart metering for both electricity and gas based on a questionnaire sent to all members. This status review is for September GA approval and will be presented at the 2nd Citizens' Energy Forum.

III. Conclusions and proposed next steps

Smart Grids - covering also smart metering subject to the key differences outlined in part 2, section 1 - is a paradigm shift in the way how the electricity grids are today and how they will become in the future: user and customer centric, service oriented, accommodating needs and providing adequate solutions, supporting the migration towards and shaping of the carbon-free economy and society. To accomplish that, participation of regulators is indispensable. It is important to note that at present no regulatory provision or element of regulation prevents any kind or component of Smart Grids. The following practical steps are considered necessary:

Continue the work within the WP 2009 towards completion of the Position Paper of European Energy Regulators on Smart Grids by Dec 2009 followed by a Conclusions Paper by Sept 2010; the results of the currently ongoing internal discussions, answers to the questionnaire on R&D, etc. are valuable inputs and would be considered appropriately in this work. Use the results from the ERGEG workshop on Smart Grids of 29 June 2009, in order to acquire an in-depth understanding of the stakeholders' views on Smart Grids – this is another important input for the work within the WP2009.

1. After the finalisation and publication of the Consultation Paper it is **proposed that an ERGEG conference on Smart Grids is organized** during the public consultation period.
2. It is important to actively support the DG TREN and **participate in the establishment of the new Task Force for Smart Grids**, nominating ERGEG experts to the TF and then to closely and proactively participate in all the related activities; the exact timetable and precise steps can be decided upon the receipt of the official invitation to ERGEG which is expected in the next weeks. Furthermore, the relationship of the two EC initiatives - the Task Force for Smart Grids and the European Industrial Initiative on Smart Grids - needs to be clarified.
3. **Preparations for the next meeting related to the European Industrial Initiative on Smart Grids need to undertaken.** Such a meeting is scheduled for September 2009 and it is proposed that the established coordination group (EWG, CWG, ENP WG with their experts) prepare on the basis of the provided information the regulators' position: preliminary comments to the DSOs' document exist and could form the basis for giving a reply to DG Research as soon as a joint TSOs-DSOs document will be delivered (expected end-July).

4. **Participation in the Smart Grids Forum** needs to be continued as already agreed and decided before.
5. GA Members are kindly invited to consider a favourable answer to the **Open Meter Project's** request to join the advisory panel of users and stakeholders in order for CEER/ERGEG to get a full overview of the main initiatives in the area of standardisation of smart metering at European level, and to get the opportunity to have their say in this topic.
6. The GA is invited to mandate the coordination group to evaluate the participation of ERGEG to the stakeholders Board of **REALISEGRID** and other current and similar future projects in case an invitation is received. This would imply preparing a proposition on ERGEG participation in R&D projects in the industry.
7. The GA is invited to approve **the draft letter to DG Research and TREN.**
8. The GA is invited to mandate the URB TF to complement the **summary analysis on national practices in R&D funding.**

The above mentioned tasks should be undertaken taking into account that the Agency in the future will need to provide an opinion on the ENTSOs annual work programme, including a plan on research and development activities. It is therefore important not only to develop a common view between regulators at present, but also to take into account that this is an area where regulators, through the Agency, will need to cooperate in the future.

Concluding, it is important to emphasize that although Smart Grids in a narrow sense are about the evolution of the electricity networks, the important issues related to the customers and to the coordination of R&D funding need to be elaborated in cooperation and with support of the CWG and the ENP.

This way it will also be guaranteed to take into account all aspects of importance within the scope of the electricity grids and in the areas affected by the grids, always developing and presenting the ERGEG and European energy regulators view on Smart Grids in a coordinated manner and with "one voice".

Annex – New announcement from DG TREN

Mr Sanchez, Policy Officer of DG TREN (Directorate C, Unit C.2) announced at the CEER workshop the EC intention to constitute, chair and provide the secretariat for a “Task Force” on Smart Grids, articulated in two levels:

- Steering Committee, based on high level representation from 9 European institutional and market actors (ERGEG; ENTSO-e; EURELECTRIC, GEODE, CEDEC, BEUC, EUREC, ETC, T&D Europe).
- Expert Group, based on max. 25 experts from main actors and stakeholders

The following schema represents main milestones.

