



Brussels, 8 June 2012

## TO THE MEMBERS OF THE TASK FORCE FOR SMART GRIDS

**Subject: Meeting minutes from the 12<sup>th</sup> meeting of the Steering Committee of the Task Force for Smart Grids**

The 12th meeting of the Steering Committee (SC) of the Task Force on Smart Grids took place on 8 June 2012, from 9:30 AM to 1:00 PM, at the Borschette Conference Centre.

### **Main Conclusion:**

The four Expert Groups reported on the work achieved and their planning for the coming period. The work is progressing in line with the terms of reference for the Task Force and its tasks for 2012.

**Planning: Next SC meeting – 19 September 2012, from 2:00 to 5:30 PM**

Following meetings: 29 November 2012, from 2:00 to 5:30 PM

The meeting was opened by Mr. Vinois.

A copy of the list of participants in this meeting is enclosed.

### **1. Approval of Meeting Agenda and of the Minutes of the 11<sup>th</sup> SC SG TF meeting**

The proposed agenda was approved with no modifications and the minutes of the last meeting distributed to the SC members were adopted with no change. All actions from the last meeting were completed.

### **2. EG1 - Reference Group for Smart Grid Standards. Introduction by the Commission (M. Sánchez, DG ENER) and presentation by Catherine Vigneron (CCMC and secretariat of SGCG) and Willem Strabbing (member of the CG-SG M490 and Managing Director of ESMIG)**

Mr. Sánchez introduced the EG1's mission as to follow up and validate the work/deliverables of the Commission's Mandate to European Standardisation Organisations to set up the reference architecture and a first set of standards for Smart Grids by the end of 2012. The mandate also foresees a definition of the Work Programme beyond 2012.

Mrs Vigneron reminded that CEN/CENELEC/ETSI established the Smart Grid Coordination Group (SGCG) in July 2011. Its tasks are to coordinate the process of the mandate and liaise with European stakeholders. The standards will be developed by the

relevant technical committees. The SGCG is supported by a Steering Committee and four working groups (security, architecture, 'first set of standards' and processes). The SGCG regularly holds face-to-face meetings with EG1. Relations exist with other mandates, namely Smart Metering Mandate M-441 and the E-Mobility Mandate M-468. In this respect, a rapporteur has been appointed to avoid any possible overlaps.

The SGCG currently effectively liaises with international actors, namely with the US (Observer in the group; a White Paper was drafted between two groups to pinpoint global solutions and avoid duplications; a letter of intent ensures standards are compatible) and with Japan (through regular exchange of information).

Mr. Strabbing described the progress of the work and deliverables. The last EG1 meeting was held on 8 March, and work progress is on schedule. The "*Gap Analysis*" and Programme of Work for the M/490 have been validated during previous joint meetings between EG1 and CEN/CENELEC/ETSI. A first draft for the Smart Grid Reference Architecture –developed in collaboration with US standard organisation NIST and the US interoperability panel under the EU-US Energy Council collaboration- has been circulated end of February and commented in March by all EU stakeholders participating in the Mandate. The first draft of the "Use Cases" was also validated. The Working Group '*First Set of Standards*' has issued an updated version of the standardisation work programme for Smart Grids and a list of gaps was identified and agreed on. Work is continuing to deliver the first set of standards by the end of this year. Before summer, members will have to agree on a first draft as well as on the initial content for the work programme for 2013 and 2014.

The International Standardisation Plenary will be held in Brussels on 18-19 June, and the International Conference of Smart Grid Standards will be held in Brussels on 24 January, 2013. These events strive for a wide dissemination of the outcome of the mandate.

Mr Strabbing clarified CEER's question regarding the timeline of deliverables; the work of the SGCG is never truly finished, because it is linked to technology's constant evolution. However, SGCG's deliverable establishing a current set of standards and a list of gaps is expected by the end of 2012. Mr. Strabbing further explained the SGCG is aligning on standards, definition of use cases and architectures.

Following a question from SAP and EDSO, Mr. Sanchez clarified that reference architectures cover the functionalities, but not the market models. The work of EG1 should not be confused with that of EG3. He also highlighted that it is a big success that the EU and the US have achieved similar reference architectures.

T&D stated they support the described approach and that it is important that the process is harmonized between the EU, US, China, Korea, etc.

### **3. EG2 – Expert group for Regulatory Recommendations for Data Protection and Data Privacy in the Smart Grid Environment. Presentation by the Commission (Laurent Beslay, JRC)**

Mr. Beslay reported on the on-going work of EG2. He reminded the two deliverables EG2 will have to produce: a proposal for a Data Protection Impact Assessment (DPIA) template for Smart Grids to guarantee the protection of personal data for individuals throughout the EU, and a cyber-security assessment framework to guarantee the appropriate management of vulnerabilities and threats.

The Article 29 Working Party will be consulted in the course of October on the DPIA template.

The first workshop took place on 11 May. The first half day was dedicated to the DPIA template. In this respect, a presentation was given by a representative of the Article 29 Working Party, who shared lessons learned during the previous development of the RFID DPIA, namely relating to language barriers between the regulators on the one hand and the industry on the other; the fact that the DPIA should not be considered as a checklist but as a process; the need to advertise the process internally and externally; and the fact that applications will always be used in unexpected ways.

The DPIA template will be based on the following five pillars. All members will have to analyse and foresee the possible elements composing the five building blocks envisaged for the DPIA template on smart grid system. Originally based on the RFID PIA framework, these five steps will be fine-tuned and validated in order to develop a DPIA template specifically tailored for smart grids:

- Necessity test and criteria for applying a DPIA template.
- Characterisation of application in the smart grid and smart metering systems processing personal data.
- Identification and assessment of the relevant risks
- Identification and Recommendation of controls
- Documentation of Resolution and Residual risks

Each part was attributed to a team of two contact persons. Contributions from all members of EG2 are expected by 13 June. The first complete draft will be discussed at the next meeting of the EG2 on 25-26 June.

The submission of the final template to the Article 29 working Party is foreseen for the third week of October 2012. Art. 29 Working Party is already involved in the process, as they will be present in WS2.

As for the cyber-security assessment framework, it can be divided into three sub-deliverables:

- The identification of Best Available Techniques (see point 3.f and 18 of the Commission Recommendation adopted on 9 March) for smart metering systems based on the analysis of the list of *minimum functional requirements*.
- The identification of Best Available Techniques for smart grid systems based on the *reference architecture*.
- An evaluation of available methodologies for a trustworthy sharing of vulnerabilities and threats analysis of smart grid and smart metering systems among stakeholders

The Workshop of 11 May focused on the review of possible technological solutions and on the identification of Best Available Techniques (BATs) for the common minimum functional requirements as defined in the Commission Recommendation of 9 March 2012. Three presentations were delivered on 11 May regarding the cyber-security assessment framework. JRC presented the European reference network on critical infrastructure protection (ERN-CIP) and C-WIN activities. The activities of the Smart Grid Coordination Group and M-490 were presented, as well as the activities of DG INFSO's Expert Group on Security and Resilience of Communication Networks and Information Systems for Smart Grids.

The next workshop will focus on the DPIA template, the table of BATs and on reference architecture. A visit will also be organized to the experimental platform of internet contingencies (EPIC).

First inputs on existing implementations of the 10 common minimum functional requirements were collected. It was underlined that interaction and interdependence between some requirements will have to be detailed.

Work progress is on schedule for the moment. Next Steps:

- 13 June: contributions expected for the DPIA template.
- 20 June: contributions expected for the cyber-security assessment framework.
- Before 26 June: A synthesis provided to EG2 members.
- 26 June: Next EG2 meeting to take place in Ispra.
- End of June: First draft of DPIA template and of cyber-security assessment framework to be developed.
- 20 September (depending on availability of rooms): EG2 meeting in Brussels.

Answering a question from Vaasaett, Mr. Beslay stated that indeed synergies exist between EG1 and EG2, and overlaps should be avoided.

Following questions from DG SANCO on market models and the involvement of Article 29 Working Party, Mr. Beslay underlined that EG2 has not focused on market models and that two representatives of Article 29 Working Party are present as overseers in the group, and a presentation was given by an article 29 WP representative on RFID DPIA.

#### **4. EG3 – Expert group for Regulatory Recommendations for Smart Grids Deployment. Four models under definition presented by each Rapporteur**

EG3 key deliverables are the following:

- Definition of reference market models, of options for viable business models and suitable instruments for accelerating the roll-out of Smart Meters and foster the deployment of Smart Grids
- Investigation of the potential implications for the regulatory frameworks to efficiently facilitate the roll-out.

The four models under definition were presented by each Rapporteur:

- Werner Friedl (e-control) replaced Gareth Evans (Ofgem) to present the baseline scenario (Business As Usual -BAU)

The Business As Usual (BAU) group is made up of CEER members of EG3 and further volunteers from EG3. This model represents the BAU situation. However, there is no single BAU market model across all Member States.

EG1 (2011) reported on the high level services and functionalities that should be taken into account in a smarter grid. Decisions should be taken regarding what

services and functionalities are required to develop the existing market model, and some changes need to be brought to the current roles and responsibilities.

The report will outline the key market model features of the 3rd package, considering three fundamental layers (physical, information, business/transactional), with the target to provide a useful base case from which to consider the new ideas put forward by the other three groups. Mr. Frield stated that the first draft was distributed on 7 June. The document will be sent to the Commission on 15 June.

- Gunnar Lorenz (Eurelectric) presented the 'DSO as a market facilitator'

Mr. Lorenz stated that DSOs are in the driving seat of smart grid development and should invest on the basis of security of supply and market needs. He developed the following principles:

1. DSOs will be responsible for facilitating a level playing field on which suppliers and other market parties offer innovative 'active demand' services to customers; they physically distribute the energy and focus on grid stability and security of supply; they play the role of neutral market facilitators.
2. The customer participates in the smart grid environment via innovation in technology, products and commercial contracts.
3. Suppliers focus on developing products and services tailored to many different customer preferences.
4. A smart meter is defined as an intelligent endpoint of the smart grid. With massive DER and EV employed at customer and small producer sites, it will contribute to system integrity, and security of supply (active network management, etc.)
5. "Data communication services" in smart grids is critical for core services. Standardisation is key here.

Mr. Lorenz described a few key features of the model: Easy access for the market; decoupling of market facilitation from DSO consolidation and enhanced flexibility; existence of different options in this model (data is stored in one central data hub, or data is stored in decentralized data hubs, or hybrid configuration centralized/decentralized)

He stated that the communication infrastructure required for critical core services should be part of the smart grid infrastructure (and thus under public control and ownership). A Telco could however be selected to build and operate this infrastructure and services

Partnership options were overviewed, and the following benefits were put forward: confidentiality and neutrality; a single party is able to use both technical and commercial data to its full extent; new business opportunities; elimination of transaction costs; critical information is controlled by a regulated entity; clear responsibilities in public/private cooperation; simple partnership options with telecom operators; and model is aligned with M490 – ensuring consistent ICT developments.

In response to a question put forward by e-control on ownership of critical services, Mr. Lorenz stated this has to be seen at company level but that some highly critical information need a secure line.

To the question raised by ENTSO-E, Mr Lorenz answered that for the moment this subgroup is focusing more on the retail market than on the wholesale market, but that a link between both markets and both network operators is necessary. Mr. Vinois underlined the importance of the interface between DSOs and TSOs.

- Alicia Carrasco (SEDC) presented the "3<sup>rd</sup> part data facilitator'

Mrs Carrasco started by presenting the recent developments in Ontario: a two-tiered IT central model that introduces SM and TOU. Benefits achieved are the introduction of economies of scale; high services levels; consistent data/access amongst stakeholders. The basis of a Central 3rd Party is an open Data Facilitator Centralized platform that provides processed data to SG stakeholders

Mrs Carrasco explained the reasons for a centralized architecture, the possible models for a centralized architecture (centralized agent of communication; centralized agent of communication and data manager), as well as the challenges it entails (who holds the data?; decide which services and responsibilities should be provided by the central data hub; define a consumer-focused and dynamic smart grid market model infrastructure for the whole electricity chain; clarify the difference between the 3<sup>rd</sup> and the 4<sup>th</sup> models).

Mrs Carrasco also underlined the models developed in Denmark (supplier centric market model) and in Italy (centralized agent of communication and a data manager).

CEER stated their benchmarking report identified decentralized and centralized (Italy, UK, Denmark) solutions.

- Jessica Stromback (Vaasaett) presented 'new parties for distribution of transaction and services'

The aim is to create an outside the box market model to support new parties for distribution of transaction and services. New parties in the energy market may be an independent party, which allows all other parties access to required data for the creation of demand and distributed generation services and coordination. It is still undecided to what extent the party should be a regulated entity. It includes data from a range of devices and creates a 'language and protocols' through which new devices can easily join. It manages access to all data from communication devices in place and allows access to this data to an appropriate level for each party in a secure and unified manner.

Mrs. Stromback underlined the following guiding principles: open and secure data access point; decentralized, hierarchical, interconnected; competitive, interoperable; different service offers; need to comply with one standard for agreed use cases.

Mrs Stromback provided an overview of the types of data, the technical communication structures (example: GP System Messaging specification for Management of Mobile-NFC Services) and the services areas.

The following benefits were underlined: creates a single source of standardized, guaranteed and secure data access; the Data Access Point Manager will use a standardized interface for ease of use by multiple parties for multiple services; lowers the cost of deploying Smart Grid demand side services and integrating distributed generation by avoiding investment in multiple gateways in a multi-service situation;

increase the scope and number and security of services which could be developed and supported by creating a single point of access to all required information through a secure means for all concerned parties.

Mr. Sánchez concluded these four presentations by highlighting that a few models could be suitable for industry to provide technology. He also underlined the challenging timetable ahead (drafts to be provided by end of June and input to be introduced in the Communication on the Internal Energy Market), which considers a systematic assessment of the benefits for consumers for each model. After the London Forum, the aim will be to achieve a final consensus on the potential market models and the final report.

The next meeting of EG3 will be held on 27 June from 9 AM to 5:30 PM.

#### **4.4 – EG4 – Smart Grid Infrastructure Deployment. Presentation by the Commission (C. Filiou, DG ENER)**

Mrs. Filiou reported on the on-going work of the Expert Group 4. She reminded of the main objective of this group, which is to establish, on an informal basis, a process and an operational evaluation methodology for identifying projects of common interest (PCIs) in the field of smart grids. This is to be done within the framework of the proposed Regulations on guidelines for trans-European energy infrastructure and for telecommunications networks.

It was noted that the energy regulation, covering high voltage/medium voltage smart grids has a number of technical requirements and specific criteria that the PCI proposals will be checked against; whereas the telecom regulation, addressing distribution networks below 10kV, has been left open and therefore rather flexible.

During the discussion, and replying to comments by EDSO, the Commission explained that both regulations strictly address deployment and mature technologies, and no R&D or small pilots, and the respective assessment framework for proposals that has been tabled was accordingly developed. Therefore, the Key Performance Indicators (KPIs) work performed under the EEGI, even though the technical contributions to this respect by its highly experienced members are much appreciated, differs from EG4's in terms of scope, scale, and timeframe.

On the discussion on the presence/absence and difficulty of reaching the technical requirements and criteria for PCI, some felt that there was not enough clarity (EDSO), or even transparency (CEDEC), particularly with respect to the differences between the two regulations. The Commission clarified that the PCI evaluation framework drafted in EG4 merely translates the requirements and the criteria, where available, given in the specific regulations – the later are currently being negotiated in the European Parliament and the Council. In order to eliminate confusion, light up the common points, complementarities and highlight the specific criteria and differences of the two regulations, the Commission will produce and distribute a table with the adequate information.

CEDEC stressed that the timeline for submission of proposals, even though now extended without prior notice, is very ambitious given the complexity of the issues involved. The Commission reminded the participants that the extension was agreed in the EG4 in order to refine the methodology and account for the delay in expressions of interest for testing the methodology which was drafted by the EC-JRC and for proceeding in the formulation of concrete project ideas.

All were reminded that the first preliminary list of PCIs is scheduled to be drawn by the end of 2012, while the submission of proposals should be made by 3 September- this refers to both energy and telecommunication infrastructure guidelines. The Commission urged the participants to respect the timetable and to come forward with project ideas and not to miss the opportunities presented by the two Regulations.

The Commission noted that following the last meeting of May 11, progress has been made and volunteers have come forward to test drive the PCI assessment methodology while first project ideas are emerging. The next EG4 meeting is scheduled for the 4 July 2012, with the presentation of PCI project ideas, of the application of the tabled KPIs to test projects aiming at the finalisation and adoption of the project evaluation framework. The proposals received will be presented at the 4<sup>th</sup> EG4 meeting, scheduled 13 September 2012, and this will kick start the evaluation phase of the PCI proposals.

Finally it was clarified to the participants that the recently published public consultation for the identification of potential non TYNDP PCI under the energy infrastructure does not concern smart grid project proposals. The questionnaire for submission of information on smart grid project proposals will be published once adopted by the Smart Grid Task Expert Group 4 on infrastructure.

#### **5. Any Other Business & Closing Remarks.**

The Members were reminded of forthcoming events related to the work of the Task Force. Namely:

- International Standardisation Plenary, Brussels, 18-19 June (by invitation only)
- Information Day on all trans-European energy infrastructure priorities, 26 June
- International Conference of Smart Grid Standards, Brussels, 24 January, 2013

**Next SC meeting – 19 September 2012 and 29 November 2012 from 2PM to 5:30 PM.**

**Manuel SANCHEZ JIMENEZ**

**Constantina FILIOU**

**Valerie LORGE**