PROJECT FINAL REPORT

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Project acronym: **SMARTGRIDS-ETPS-III**

Project title: **Secretariat of the technology platform for the electricity networks of the future SmartGrids-ETPS**

Funding Scheme: **Support action**

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INDEX

Introduction

The ETPSGIII Grant Agreement defines the need to provide a final report at the end of the project.

The publishable summary has to include 5 distinct parts described below:

1. An executive summary (not exceeding 1 page).
2. A summary description of project context and objectives (not exceeding 4 pages).
3. A description of the main S&T results/foregrounds (not exceeding 25 pages),
4. The potential impact (including the socio-economic impact and the wider societal implications of the project so far) and the main dissemination activities and exploitation of results (not exceeding 10 pages).
5. The address of the project public website, if applicable as well as relevant contact details.

It has to be taken into account that this document is not a self-contained document, as it is a summary of the activities performed by the ETPSGIII consortium members during the project, but it does not give details and descriptions of the results and outputs obtained in this period. For a complete and detailed explanation of the results and outputs, please refer to the deliverables mentioned along this report, which have been delivered to the Commission during this period.

1 Final publishable summary report

1.1 Executive summary

The ETP SmartGrids has been offering strategic guidance for its stakeholders on the research, development and demonstration of technologies related to Smart Grids that address the future needs of electricity networks in the European electricity supply system. The stakeholders include: the European Commission and legislators; system operators; manufacturers of power equipment, solutions and services; the relevant parts of the ICT industry; research organisations; regulators and academia. The strategic guidance was developed through mobilisation of the expertise resident in the stakeholders and exerts its influence through efficient dissemination of the strategic agendas developed.

The ETP SG aims at fostering and supporting the research and development (R&D) of SmartGrids Technologies in Europe that can optimally facilitate the sustainable energy development and use with a perspective towards 2035, with focus on integrating SmartGrids technology in the whole energy system value chain that can maximize sustainable energy targets and objectives.

The objective of this project was to provide continuity to the activities of the Platform with the support of an efficient and active secretariat, with flexibility needed to quickly act on the challenges ahead, in terms of efficient, impartial and transparent management of platform activities, communication strategy and so contribute to achieving the statutory platform objectives and ensure their highest quality.

The four main activity lines of the secretariat were:

1. Support to the main bodies forming the internal structure of the Platform (i.e. the SC: Steering committee, WG: Work Groups): definition and planning of activities, organisation and management of meetings, and internal communication exchange.

2. Coordinate and follow-up actions carried out by ETP groups or members, ensuring the generation of high quality outcomes and playing an active role in the development of key ETP public documents.

3. Coordinate links with other related initiatives, providing the information and contacts to foster exchange of information and cooperation

4. Support in the definition and implementation of a communication strategy based around an information centre (the public Smart Grids ETP internet site www.smartgrids.eu), conferences, newsletters, workshops, disseminating activities in other events and initiatives and direct cooperation with the European Commission.

Along the project duration which started in September 2012 and ended in June 2016 a number of achievements were reached by the ETP Smartgrids, with the support of the secretariat and in particular:

- **Relaunch of the ETP Smartgrids** and support the nomination of a new Steering Committee
- Reactivation of 2 working groups and launch of a third one, gathering together over 100 experts in Europe
- Synthetise and **prioritise research priorities needed for Smartgrids in Europe** based on the SRA 2035
- Launch of 4 **reports and vision papers reflecting the future challenges of Smartgrids**
- Development and strengthen the relation with **19 national and regional smartgrids initiatives** to better understand and streamline research priorities at European and national level
- **Organisation of 2 high-level events**, **7 workshops** and **4 webinars** to disseminate and exchange about the ETP Smartgrids outcomes
- **Become a key reference adviser for research and technology priorities for smartgrids in Europe** by answering European Commission official consultations
- **Help launch the new European Technology and Innovation Platform Smart Network for Energy Transition**

1.2 Summary description of project context and objectives

Context

During the first International Conference on the Integration of Renewable Energy Sources and Distributed Energy Resources held in December 2004, industrial stakeholders and the research community suggested the creation of an European Technology Platform for the Electricity Networks of the Future (ETP SG).

The European Commission Directorate General for Research developed the initial concept and guiding principles of the ETP SG with the support of an existing FP5+6 research cluster, which represented over 100 stakeholders in the electricity networks sector.

The ETP SG began its work in 2005. Its aim was to formulate and promote a vision for the development of European electricity networks looking towards 2020 and beyond.

In April 2006 the ETP SG presented its Vision and Strategy for Europe´s Electricity Networks of the Future document for SmartGrids. The Vision, for both transmission and distribution networks, is driven by the combined effects of market liberalisation, the change in generation technologies to meet environmental targets and the future use of electricity.

The ETP SG published The Strategic Research Agenda (SRA) in 2007, describing the main areas to be investigated, technical and non-technical, in the short-medium term in Europe. Since then, these documents have inspired several Research and Development programs within the EU and National institutions.

At the end of 2008 the first draft Strategic Deployment Document was released, and in 2010 it was formally finalized. This document describes the priorities and timelines for the deployment of innovation in the electricity networks and the benefits that such innovation will deliver for all stakeholders.

In 2012, the SRA was updated with the horizon 2035. The new SRA 2035 serves as key input to the 7th framework Programme, the Horizon 2020 and other SmartGrids research, development and demonstration initiatives, both at national and European levels with the goal to advance the SmartGrids based European Energy System.

In addition the European Technology Platforms (ETPs) have helped, jointly with European Industry Initiatives (EIIs) and the European Energy Research Alliance (EERA), implementation of the European union Strategic Energy technology Plan (SET-Plan) since its launch in 2007. In 2015, a new Integrated SET Plan was released, the whole governance of the plan was also reviewed. In this context, ETPs are now evolving towards European Technology and Innovation Platforms (ETIPs) and will integrate in a single advisory environment the stakeholders which were involved in the EIIs and EERA.

In June 2016 the ETP Smartgrids evolved towards the ETIP smart Network for Energy Transition (ETIP SNET).This evolution reflects the increasing need to consider the smart electricity networks within the wider energy system, broadening the stakeholders to be involved beyond the traditional ones (Distribution and Transmission networks, technology vendors and ICT, research and academia) to storage, consumers and other connected energy carriers (gas, hydrogen, transport, etc.). The ETIP SNET is the new integrated advisory environment to reflect this evolution.

Objectives

The overall objective of this project was to provide continuity to the activities of the ETP SmartGrids with the support of an efficient and active secretariat, with flexibility needed to quickly react to the challenges ahead, in terms of efficient, impartial and transparent management of platform activities, communication strategy and so contribute to achieving the statutory platform objectives and ensure their highest quality.

The specific objectives of the secretariat were:

- To assist the main bodies of the platform in an effective and efficient manner in order to achieve their planned objectives. These are: the Steering Committee, its Chairman and Vice-chairman as wells as Work Groups 1, 2 and 3 and their chair persons.
- To provide mediation to define a shared vision for the future activities of the different platform groups, encouraging the engagement of the multiple stakeholders involved.
- To monitor related policy, research, development, and demonstration initiatives relevant to SmartGrids and provide information for platform members
- To draw draft documents, conclusions and recommendations that will be endorsed by the Steering Committee.
- To obtain high-quality results in terms of deliverables and activities executed by the platform main bodies of the platform.
- To disseminate activities of the ETP and disseminate other related SmartGrids developments to the European Stakeholders in general.

In addition the following objectives some more specific aroused in the course of the project such as:

- To ensure that the official status of the ETP SmartGrids as well as all ETPs is confirmed and ensured through a continued funding
- To reactivate and dynamise existing working groups and create a new one in 2014 in order to provide a consolidated view of the ETP SG on the H2020 2016-2017 Work-programme that was to be published by the European Commission in Summer 2015.
- To strengthen the cooperation with national technology platforms
- To provide support for the development of specific vision papers that are addressing future key challenges of the SmartGrids
- To become a key adviser for the European Commission in particular DG ENER which drives the development of H2020 work programmes, on smartgrids related matters.
- To set the basis towards the establishment of the new ETIP replacing the Smartgrids platform, and which will address the challenges of the integration of electricity within the wider energy system. The new body replacing the ETP SmartGrids is the European Technology and Innovation Platform Smart Networks for Energy Transition, “ETIP SNET” that was launched in June 2016.

Strategy to reach the objectives

In order to achieve these objectives the work of the secretariat has been carried in the following lines of activities:

- Support to the main active bodies that are part of the internal structure of the ETP SmartGrids: in particular the Steering Committee and Executive Group, with the definition and planning of its activities, organisation and management of meetings, and internal communication exchange.
- Coordinate links with other initiatives at European, national and international level, providing the information and contacts to foster exchange of information and promote further cooperation.
- Define and implement a coherent communication strategy based around an information centre (public internet site), social media, newsletters, workshops, disseminating activities in other events and initiatives with direct cooperation with the European Commission. With actions that ensure a strong visibility to the ETP and give it credit and recognition.
- Planning and organization of high-level events and specific-purpose workshops in support of the mission of the ETP SG.

1.3 Description of the main S&T results/foregrounds

The main result of the ETPSGIII project is to have supported successfully the ETP SG with an efficient and active secretariat, providing the necessary support to the various bodies of the platform.

Main result 1: Successfully relaunch of the ETP Smartgrids and support the nomination of a new Steering Committee

The secretariat team initiated the process to renew membership and Chairmanship in the Steering Committee (SC). This process started in September 2012 and concluded in January 2013 when the new Chair and Vice-Chair were elected by the new members. The process settled the basis for a renewed membership and leadership in the Platform. During the project a total of 15 Steering committee meetings were held, in average once every quarter.

In addition the secretariat coordinated an Executive Committee (ExCo) which was part of the SC and which was created in period 2. This ExCo held regular phone calls organized by the secretariat under the direct request of Chair or Vice-Chair, these were in average bi-monthly. They served to check the status of pending actions, discuss and react to urgent issues, and plan physical meetings.

Finally in between these calls and meetings, the secretariat maintained a constant contact with the chairman of the Steering Committee, since it changed to Nikos Hatziargyriou att he beginning of 2015, by holding weekly conference calls allowing to quickly and constantly move forward, getting a quick approval process on less strategic issues which required the decision to be taken at a higher level than the secretariat.

Main result 2: Reactivation of 2 working groups and launch of a third one, gathering together over 100 experts in Europe

Once the news Steering committee was set up in 2013, the process of reactivating and redefining working groups was initiated as well. The definition, role and activities of the working groups were discussed helped continue to stimulate and enrich the debate on the priorities. Once the groups were decided a call members was opened and coordinated by the secretariat.

The three permanent working groups that were reactivated and launched until September 2014 (WG2 took longer to be launched) were:

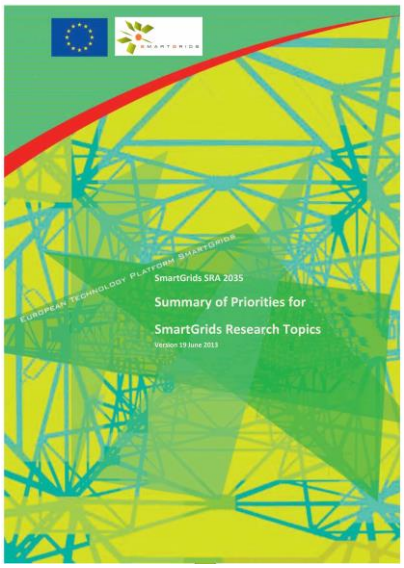
WG1: Network operation and assets

WG2: Energy storage and grid integration

WG3: Demand side, metering and retail

In addition to these working groups, several ad-hoc task forces composed by volunteer members from existing working groups were set in 2015 to prepare some vision papers that were presented at the last high-level event of the platform in May 2016.

Main result 3: Synthetize research priorities needed for Smartgrids in Europe based on the SRA 2035



Based on the SRA 2035 released at the beginning of 2012, a work aiming at synthetizing and prioritising the SRA document was started, it ended-up in a shorter (10 pages) and more straightforward version of the SRA that was published in June 2013 and disseminated through various events afterwards.

Research priorities are classified by areas:

- Integrated Systems (IS)
- Distribution Systems (D)
- Retail and Consumers (RC)
- Socio Economic (SE)
- Transmission Systems (T)
- Transmission and Distribution Systems (T&D)

The top priorities are shown below:

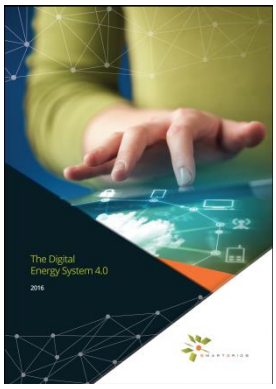
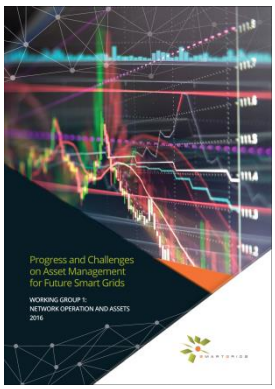
Re-search Area	Priority (1: highest)	High Priority Research Topic
IS	1	Observability and Control (including ICT for Control)
	2	Widespread Storage within the Grid
		Self-healing
	3	Advanced components
		VPP (Virtual power plants) and market
	4	Operator Issues, Training and Education
D	1	Modelling Power Systems and ICT together
		Observability at Distribution Level
	2	Power Electronics Technologies
	3	EVI (Electric Vehicle Integration)
	4	Risk based operation
	5	Cyber Security
		Microgrids
		DC distribution grids & DC distribution integrated into to AC grids
RC	1	Distributed self-organisation vs. central control
	2	Energy Cloud
	3	The NEW Infrastructure integrating both Energy/Electricity and ICT
SE	1	Consumer Maturity
	2	Legislation/Regulation: New energy-markets designs
T	1	Power technology to increase network flexibility
		Monitoring and control technologies to observe and control the 2035 pan-European network
	2	Pan-European market tools for 2035 ancillary services and balancing needs
		Market mechanisms for ensuring system adequacy and efficiency in electric systems by 2035
	3	Long-term assets management
TD	1	The integration of demand side management 2035 at DSO level into TSO operations
	2	Ancillary services provided through DSOs

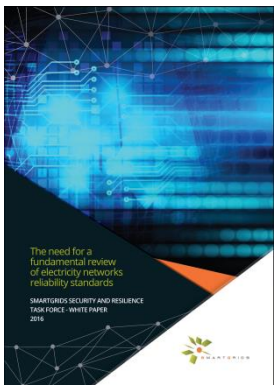
Main result 4: Launch of 4 reports and vision papers reflecting the future challenges of Smartgrids

In 2014 a work to provide a view from the ETP SG on what the priorities for smartgrids within the following H2020 Work Programme 2016-2017 was started. This action was carried out mainly by working group members under the supervision of the steering committee and the coordination of the secretariat. The conclusions were sent at the end of 2014 to the European Commission to make sure they fed in time the process of drafting of the work programme. Finally, the views of the ETP were officially presented at the ETP SG 5th General Assembly in April 2015.

The same way, task forces inside working groups or gathering members rom various working groups worked in 2015-2016 on the preparation of several visions papers on future challenges of Smartgrids in Europe. 3 papers were published in 2016.

The four reports published are shown in the table below:

"**The Digital Energy System 4.0**" – ETP SG Digitalisation Task Force report (2016) 	The European Digital Single Market initiative will ensure that Europe's economy, industry and employment take advantage of digital technologies as a key driver for growth. All industrial sectors need to integrate these new technologies and manage the transition to a smart industrial society. This report discusses use cases and opportunities of digitalization of the energy system. It can be downloaded at: http://www.smartgrids.eu/documents/ETP SG Digital Energy System 4.0 2016.pdf
"**Progress and Challenges on Asset Management for Future Smart Grids**" - **ETP SG Working Group 1 report** (2016) 	The expected benefits associated to the innovation on asset management are huge and have the potential to take this important area to the next level, increasing the overall efficiency of the power system management and operation and helping network operators to take full advantage of the network assets in this digital era. This report outlines the challenges that grid assets are facing. It can be downloaded at: http://www.smartgrids.eu/documents/ETP SG_Asset Management_White Paper_2016.pdf

"The need for a fundamental review of electricity networks reliability standards"- **ETP SG Security And Resilience Task Force's white paper** (2016)  	The historical network reliability standards and practices require that network security is provided through network asset redundancy. In this context, this paper sets out the case for a fundamental review of the philosophy of transmission and distribution network operation and design may be needed to inform the industry, consumers, regulators, policy makers, in order to facilitate a cost effective delivery of the EU energy policy objectives. It can be downloaded at: http://www.smartgrids.eu/documents/ETP_SG_Future_Network_Reliability_Standards_2016.pdf
"Consolidated view of the ETP Smartgrids on Research, Development and Demonstration needs in the Horizon 2020 Work Programme 2016-2017." (April 2015)  	With this document, the ETP SG intends to identify for the European Commission and other stakeholders those areas and topics considered of utmost importance to be researched and demonstrated during the years to come. It can be downloaded at: http://www.smartgrids.eu/ETP%20Smartgrids%20View%20on%20H2020%20WP16-17.pdf

Main result 5: Development and strengthening of the relation with initiatives at regional, European and international level allowing a better streamlining of research priorities

National and regional level

From mid 2014 it was decided to further strengthen the link with national and regional platforms in order to foster cooperation and better streamline research priorities between the European and national level. A work of identification of these platforms and interaction was launched. This allowed to produce a catalogue of existing initatives firstly in April 2015 where 13 organisations were listed. The catalogue was then extended and updated in 2016 where in the end the ETP SG managed to identify 19 national and regional active Smartgrids platforms or similar initiative within Europe. In addition 2 workshops and 3 webinars were organised with these platforms allowing to exchange information and disseminate good practices from some countries or region.

The catalogues of national and regional smartgrids platforms are the followings:

"Overview of National and Regional Smartgrids Initiatives around Europe" (April 2015, 1st Ed.) 	This booklet presents the national and regional SmartGrids initiatives in Europe. It has three main objectives: It provides an overview of the different profiles of SmartGrids initiatives in Europe, reflecting different challenges, approaches and solutions. It presents an overview of ongoing activities and projects in the European SmartGrids area. It serves as a guide for SmartGrids initiatives, allowing to compare the activities of the various EU platforms and to find links or common interests in order to facilitate transnational collaboration. The document can be downloaded here: http://www.smartgrids.eu/Overview of National and Regional Technology Platforms in Europe.pdf
"**National and Regional Smart Grids initiatives in Europe**" - **Cooperation opportunities among Europe's active platforms** (May 2016, 2nd Ed.) 	National and Regional Smart Grids initiatives (N/RTPs) with the focus on local conditions and the ETP as the key European forum in the SG sector, have supported each other in the past and will continue this fruitful cooperation. In the future, the voice of N/RTPs will be even stronger within the new European Technology and Innovation Platform (ETIP) for Smart Grids and Storage that will succeed the ETP. The active SG initiatives of these Member States present themselves in the second edition of this booklet The document can be downloaded here: http://www.smartgrids.eu/documents/ETP_SG_National Platforms Catalogue 2016 edition.pdf

At European level

From the end of 2014 , some exchanges started to take place with the European Construction Platform (ECTP) and the European Photovoltaic Technology Platform (EU PV TP). Common areas of interest and activities were discussed. The dialogue concluded with the signature of a memorandum of understanding between the three platforms in 2016 aiming to promote further cooperation. In fact the SmartGrids ETP co-organised its 6th General Assembly in May 2016 jointly with the European Photovoltaic Platform, showing the importance of smartgrids to allow for the long term development of renewables and photovoltaics in particular in Europe.
Additional cooperation has taken place, with the smartgrids research community for instance with the joint organisation of several workshops with the ELECTRA project, lead by the EERA (European Energy research Alliance) in December 2014 and December 2015.
Finally punctually the ETP has been cooperating with other European initiatives such as EASE (European Association for Storage of Energy) in the area of storage via WG2 activities, SEDC (Smart Energy Demand Coalition) or ESMIG (European voice of smart energy solution providers) in the area of demand side management via WG3 activities mainly, they were also invited to meetings organised by the European Commission together with the ETP Smartgrids.
In addition the ETP SG cooperated with the Grid+ and the Grid+Storage projects by participating to consultations.

At International level

Cooperation happened punctually with the International Smart Grid Action Network of the IEA (ISGAN), the Global Smart Grids Federation (GSGF) and the Institute of Electrical and Electronics Engineers Smartgrids (IEEE).
Interaction happened through the invitation of ETP Steering Committee members to some of their meetings such as the ISGAN-GSGF workshop on 14-15 September 2015 in Lecco where Maher Chebbo, ETP SG Steering committee was speaker. In addition GSGF vice-chair, Paddy Turnbull, was speaker of the ETP SmartGrids 5th General Assembly on 29 April 2015. In addition some Steering Committee members of the ETP SG, Marko Delimar and Nikos Hatziargyriou, participated to several IEEE events from October 2015 to April 2016.

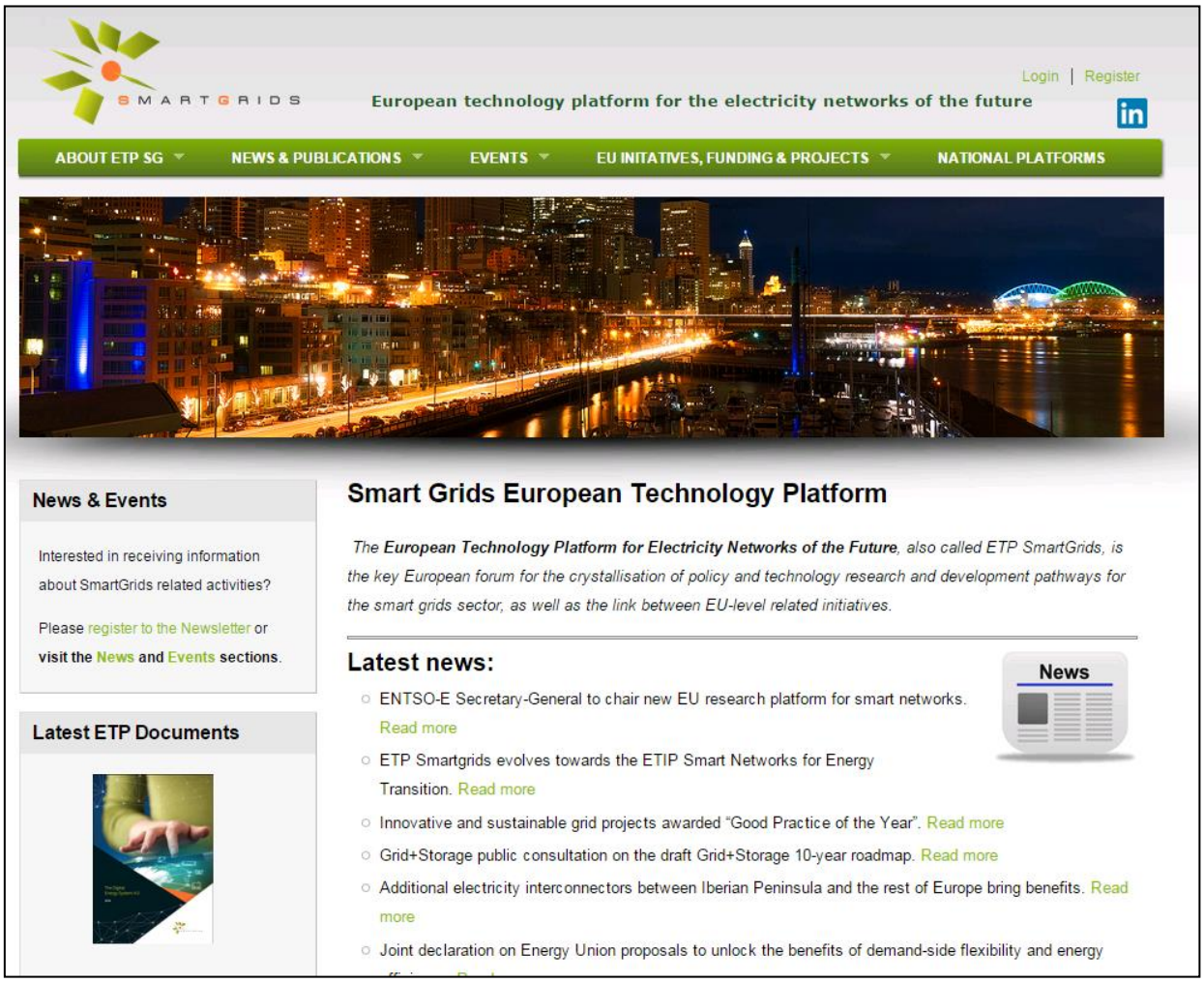
Main result 6: successfully disseminate ETP activities

The ETP SG successfully disseminated its results via a series of communication and dissemination actions.

The main tools for dissemination has been the website and the newsletter due to their largest outreach. However a number of other actions (organisation of conferences, webinars, workshops or oral presentations) as shown also in table A2 have been undertaken, allowing for a wide dissemination of the platform activities and results.

Website

The ETP Smartgrids website is www.smargrids.eu



The website, was entirely rebuilt at the beginning of 2013 and served as the main information centre to post news from the ETP and relay news from other relevant stakeholders, EC consultations and events of interest to the community.

At the end of 2014 – beginning of 2015 an important work to reduce the number of subpages was undertaken, in order in particular to reduce the amount of pages that were remaining quickly obsolete, in stead, some links to the right websites of reference were added.

The main sections and corresponding targeted audiences that can be found on the current website are:

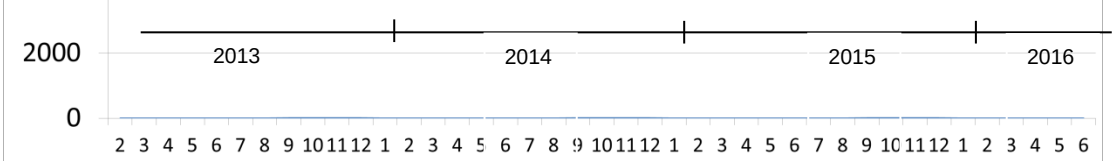
Section	Description	Targeted Audience
Main Portal	Provides a general snapshot of the current events, smartgrids news and developments or activities of the ETP SG	General Public
ABOUT ETP SMART GRIDS	General overview of the ETP SG. Its mission and objectives, the structure of its executive board, the main activities, the produced documents, and similar issues are detailed here.	General Public & Stakeholders
NEWS AND PUBLICATIONS	All relevant news about the ETP, the smart grids sector as well as all the publications released by the ETP SG	General Public & Stakeholders
EU INITIATIVES, FUNDING AND PROJECTS	Where to find information about European initiatives such as EEGI, SETIS, regulation, standards…; current projects related to SmartGrids research; funding and financing programmes to support Research, Development and Demonstration activities in the field of Smart grids; as well as links of interest	General Public & Stakeholders
National Platforms	Information of existing National Platforms in Europe: activities, priorities and main national and regional projects	Stakeholders
Private	Access controlled section intended for internal use only. Secretariat partners and SC members can to find here ETP SG document templates and meeting minutes and presentations.	Internal

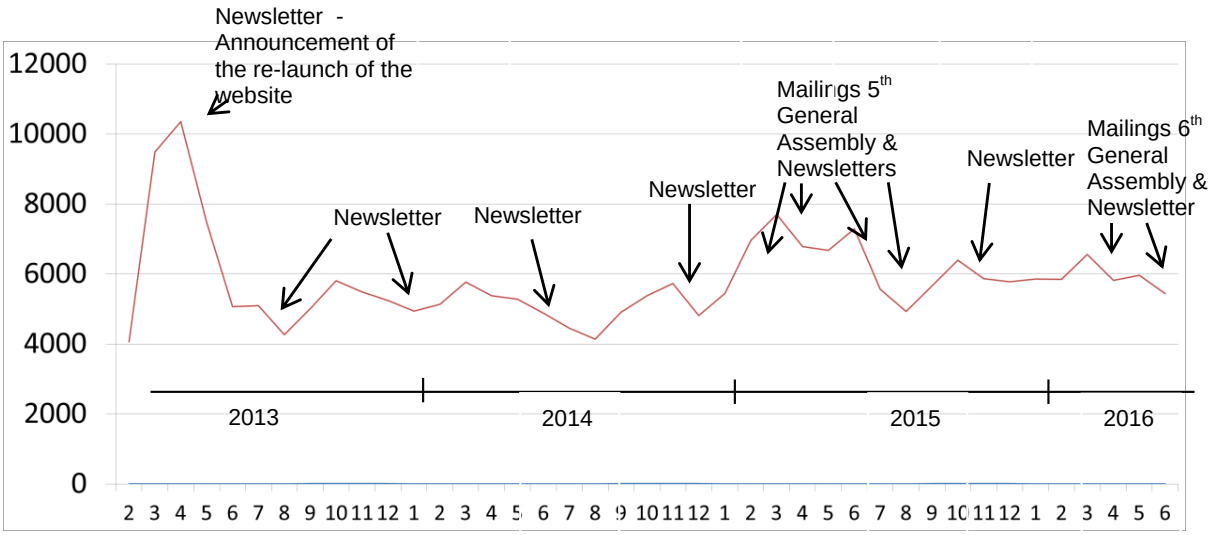
The frequentation of the website (visits) was monitored through an automatic system called Dinastats. Since **February 2013 until June 2016** (41 months), the visits of the website have been as follows:

Month	Unique visitors	Number of visits	Number of Pages visited	Number of Hits
Total 2013-2016	238.713	495.515	3.422.421	8.354.049
Average/month	5.822	12.085	83.474	203.757

Comparing unique visitors and number of visits is interesting since it shows how many time visitors are coming back to the website, this is in average 2,05 per unique visitors, meaning that each visitors has come at least 2 times to the website in the last 41 months. We can conclude that the smartgrids.eu website with a frequentation of 5.800 unique visitors per months, 12.085 visits per months and over 2 visits per unique visitor is a website of reference in the sector, given the technicity of the content, 5.800 unique visits a month is a very good score. Concerning hits and pages visited. One can estimate that each unique visitor has been giving a hit on the website 17 times in average per visit, browsing about 6,9 pages each time. This number is very high and shows the interest from visitors for the website.

The graph bellow shows the number of average unique visits per month and the effect of newsletter and other mailings on the number of visits over the whole period of measurement (from February 2013 to June 2016):





Newsletter

Along the project duration **14 newsletters** were issued reaching **between 2800 and 3000 active recipients** in each edition. The newsletter was issued quarterly from the end of 2014, this rhythm was followed closely to ensure constant update to the smartgrids community. The process to prepare the newsletter and monitor news was reviewed at the end of 2014 and a more regular issuing of the newsletter was followed, coupled to a more regular update of the website and the LinkedIn page.

The newsletter informed about news, events and activities related with the Research and Development in the SmartGrids field in general and with the ETP SG in particular.

The newsletter was prepared by the Secretariat with the feed-back from the SC, the chairman in particular, inputs were coming from the EC and stakeholders by identifying contents that could be relevant to the SmartGrids R&D community.

There have been two models of the newsletter during the project duration, a pdf version attached to a mail existed until end 2014 and an HTML version embedded in the mails received by recipients was launched at the beginning of 2015, reflecting more modern way of preparing and issuing newsletters, referring to articles already posted on the website.

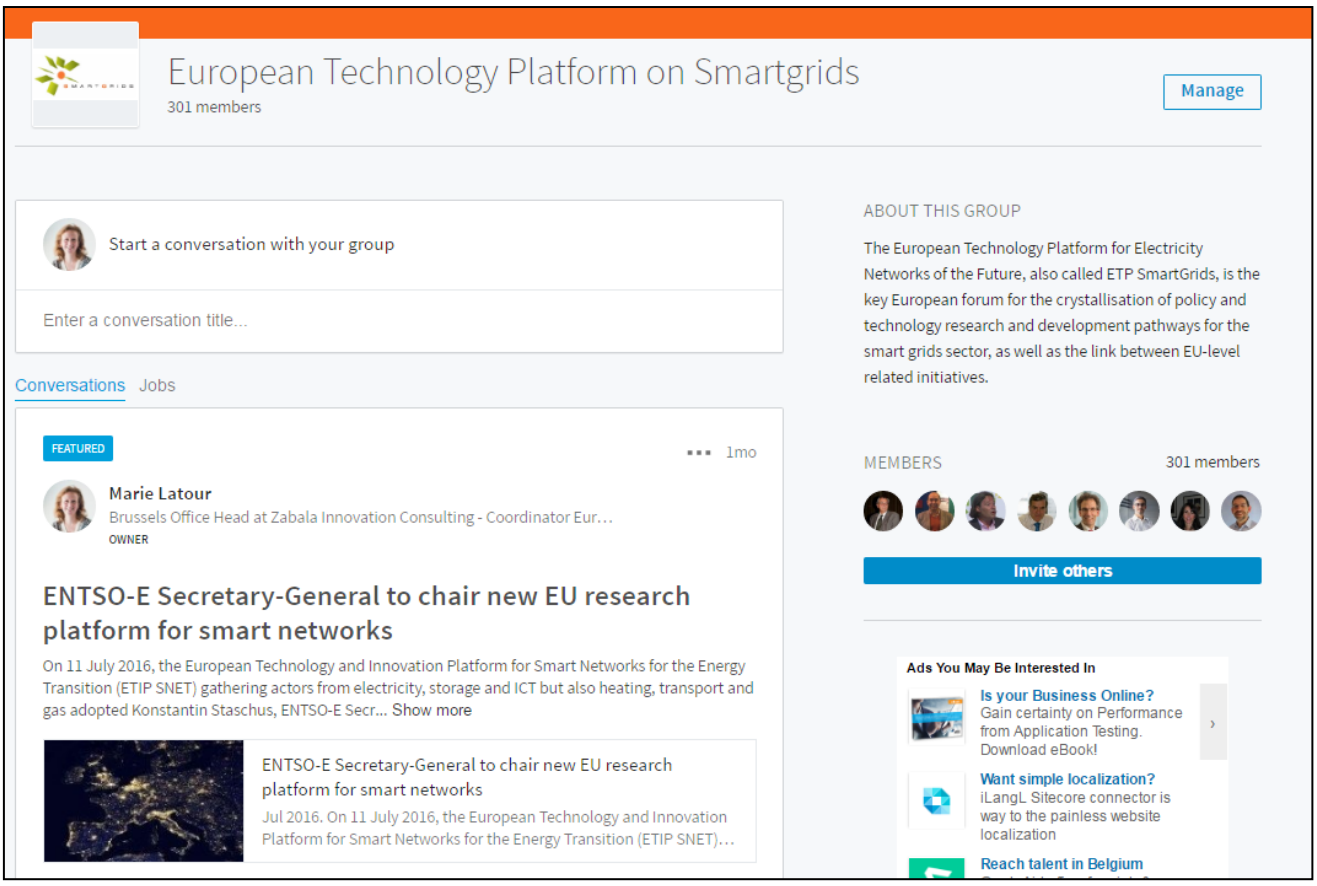
Newsletter format until November 2014	Newsletter format from 2015
	

Social Media

The main activity on social media was the creation of a LinkedIn group in November 2014. Activity in other social media was firstly disregarded due to the limited resources of the Secretariat. However some Twitter activity developed in 2016 in the occasion of the ETP's general Assembly.

SmartGrids experts were encouraged to join the LinkedIn group by invitation of the SC, the WG members, the EC or the Secretariat. Experts could also join by sending an application. The group participation is on request but is not private, therefore allowing to provide visibility to the platform in social media. Selected articles posted on the website were published on the LinkedIn page , allowing to give more visibility to the platform activities.

The LinkedIn group has been a very good tool to get direct access to experts and their updated profiles, especially when organizing workshops.



The LinkedIn group address is: https://www.linkedin.com/groups/8208338

High-level Events

The secretariat coordinated the organization of two high-level events, general assemblies which allowed triggering over 400 participants all together.

The General Assembly (GA) is open to the whole SmartGrids community. The last two GAs took place in Brussels:

- **On 29 April 2015** in conjunction to a workshop with national Smartgrids Initiatives that the ETP organised on 28 April. The European Technology Platform on SmartGrids (ETP SG) celebrated in Brussels its 5th General Assembly on 29 April 2015 which was attended by over 200 participants.

  The assembly was the occasion to present and debate the ETP SG view on future Research priorities for the ongoing H2020 programme. The ETP SG launched detailed challenges and objectives of the future grid, funding needs for the next years, as well as regulatory barriers for the implementation of technologies. It is expected that it will serve as major input for the future H2020 Work Programme 2016-2017 to be released in September this year. The report is available for download here.

  An essential part of the day was dedicated to the interaction between the ETP SG, National Technology Platforms, the Global Smart Grid Federation and other European initiatives in the area of renewable generation and smart demand. The ETP SG provides the link with National Technology Platforms, in order to ensure that European and National Research and Innovation programmes in the field are aligned, and that enhanced cooperation among national platforms is achieved.

  During the Assembly, the 1st European Innovative SmartGrids Solutions Competition was held."Meltemi Community Pilot Site" promoted by the National Technical University of Athens was selected by the participants as the most innovative project. It consists on 170 cottages providing a perfect living test field that has been employed in several European and national R&D projects. It has been used to validate methods of intelligent load management and increasing use of RES.

  More information on the General Assembly can be found here:

  http://www.smartgrids.eu/5_General_Assembly

- **On 19 May 2016** in conjunction with the Photovoltaics (PV) ETIP Annual Event that took place on 18 May, which could ensure a good participation from representatives of a key renewable technology: photovoltaics.

The event was organised in conjunction with the annual event of the European Photovoltaic Technology and Innovation Platform (ETIP Photovoltaics) under the common banner "Repowering EU". This cooperation started back in 2015 when it was proposed to sign a common memorandum of understanding between the ETP Smartgrids, the ETIP Photovoltaics (and the European Construction Technology Platform). From the discussions aroused the interest to organise back to back the general assemblies/annual conferences of the two platforms.

Gathering the two events allowed to get together about 200 participants over two days. The Photovoltaic event took place on 18 May focusing its event on the challenges for integrating solar power to the grid. A joint reception of the participants of both events took place on18 May in the evening.

The 6th ETP SG assembly being the last one of the ETP, before the launch of the ETIP, it focused on the successes that the smartgrids had been facing since the creation of the ETP over 10 years ago and on the future challenges to be faced.

On the occasion of the General Assembly **4 new reports** were presented and disseminated:

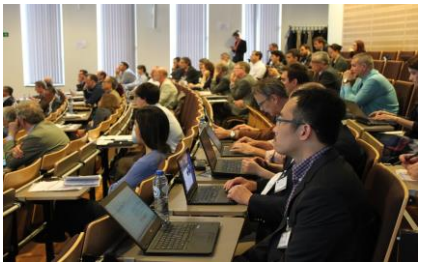
- "The Digital Energy System 4.0"
- "Progress and Challenges on Asset Management for Future Smart Grids"
- "The need for a fundamental review of electricity networks reliability standards"
- "National and Regional Smart Grids initiatives in Europe"

These are the result of the work of the working groups, task forces or the secretariat during past year.

In conclusion of the General Assembly the new ETIP (European Technology and Innovation Platform) Smart Network for the Energy Transition was announced and presented, marking the end of the ETP and the beginning of the new ETIP era.

More information on the General Assembly can be found here:

http://www.smartgrids.eu/6th_General_Assembly



Workshops

Over **7 workshops and 4 webinars** were organised along the project duration, r**eaching over 600 persons throughout Europe and beyond.** They allowed discussing ongoing activities of the ETP Smartgrids, sharing project results from other stakeholders or simply disseminating outcomes from the ETP Smartgrids or related projects.

Further information on workshops are available here: http://www.smartgrids.eu/ETP_Workshops

Workshop on Priorization of the Strategic Research Agenda 2035 topics

Date: 5 December 2012

Venue: IRED conference, Berlin, Germany

Description: In connection with the IRED conference in Berlin, the ETP SmartGrids organized a half-day workshop to work out the priorities of the long-term research topics identified in the Strategic Research Agenda 2035 (SRA 2035). The event successfully brought together 15 stakeholders of the field to develop priority list of topics. The resulting priority list served as a basis for the document "Summary of Priorities for SmartGrids Research Topics", produced by the ETP SmartGrids Secretariat. The document is available here.

Amount of participants: 15

Joint Workshop ETP Smartgrids-STARGRID project: "Industry statement for a conformed standardization framework enabling the large scale smart grid deployment"

Date: 16 May 2013

Venue: Brussels, Belgium

Description: with the support of the ETP SmartGrids, the STARGRID FP7 project organized a workshop on standardization in the field of SmartGrids. The objective of the event was to bring together promoters and stakeholders of various European smart grid industry initiatives in an ad-hoc round table aimed at assessing the impact of current standardization activities, raising awareness on standardization gaps and identifying the key standardization requirements.

Joint ETP and national platforms at the EU Sustainable Energy Week

Date: 27 June 2013

Venue: European Sustainable Energy Week, Brussels, Belgium

Description: The conference was co-organised by the ETP SmartGrids and GRID+ Project with the special contribution of Futured (Spanish Smargrids Platform). The main theme of the conference was the contribution of the smart grids to the sustainability on the energy field. Firstly, Member State cases were introduced by National Technology Platforms in order to provide different points of view about the benefits of the deployment of the SmartGrids. In addition, an overview of projects and initiatives in Europe was provided by the Joint Research Centre of the European Commission. In the last panel discussion, the future of smart grids RD&D was discussed after presenting the priorities identified for 2020 and 2035, as well as the support mechanisms foreseen within Horizon 2020.

Joint ETP SG WG1 & ELECTRA Workshop

Date: 17 December 2014

Venue: Committee of the Regions, Brussels, Belgium

Objectives: Joint Technical Workshop on Network Operation for 2030+. 3 main topics to be addressed:

1. Inertia and grid stability with high penetration of DG and storage
2. Operational flexibility and ancillary services
3. Observability and system integration

Amount of participants: 40

Workshop with National Smartgrids Initiatives

Date: 28 April 2015

Venue: thon Hotel Stephanie, Brussels, Belgium

Objectives: Strengthen the link between the ETP SG and National Initiatives and facilitate exchange among them, initiate new joint activities, establish cooperation framework for the future.

Amount of participants: 20 SC members and National Smartgrids Initiatives representatives

Workshop on Future Technology and Research Priorities for SmartGrids in Europe - Focus: Smart Meters for Distribution Networks – Data and Control

Date: 19 May 2015

Venue: Smart Grids Week, Vienna

Objectives: share with the participants the knowledge and experience of a successful DSO addressing a hot theme that is of interest to all the grid operators of Europe but also policy makers and regulators: "Data from Smart Meters for improved operation of the distribution system".

Amount of participants: 30 Smartgrids knowledgeable participants

1st National Smart Grid Webinar: Smart Grids Flanders

Date: 25 June 2015

Venue: Online Webinar organised with the Flemish Regional Smartgrids Platform

Objectives: Present the activities of the Flemish Platform , its priorities and disseminate about important smartgrids National/European projects where Flanders is involved

Amount of participants: 24 participants from NTPs and other stakeholders

Co-organisation of the Aalborg Symposium on Microgrids

Date: 27-28 August 2015

Venue: Aalborg, Denmark

Objectives: exchange information internationally, yet informally, on the current state of research, development and demonstration on microgrids, and to identify key technical, economic, and policy issues that should be addressed for their wide deployment. In the Aalborg 2015 Symposium on Microgrids research and demonstrations in progress in Europe, USA, China, Japan, Canada, Korea, Chile and developing countries were presented with an emphasis on recent results, and on identifying areas of potential international cooperation..

Amount of participants: 80+ experts worldwide experts on Microgrids

2nd National Smart Grid Webinar: The Norwegian Smartgrid Centre

Date: 30 September 2015

Venue: Online Webinar organised with the Norwegian National Smartgrids Platform

Objectives: Present the activities of the Norwegian Platform , its priorities and disseminate about important smartgrids National/European projects where Norway is involved

Amount of participants: 41 participants from NTPs and other stakeholders

Co-organisation of The Innovation Programme of the European Utility Week 2015, Vienna

Date: 4 November 2015

Venue: European Utility Week, Vienna, Austria

Objectives: Organise a track of the innovation programme of the EUW entitled "Utilities Outlook: The future we can only imagine", addressing how utilities can take strategic decision under increased uncertainty. It provided the latest data on developments in the sector, highlighted key uncertainties and discuss their potential impact with a panel of experts

Amount of participants: + 100

Energy Digitalisation Workshop

Date: 24 November 2015

Venue: Online WEBINAR organised instead of physical due to Paris attack and lock down in Brussels

Objectives: Exchange about use cases on digitalisation among utilities.

Amount of participants: 40 participants from Digitalisation task force and other experts involved in the preparation of the Digitalisaton Paper.

2nd ELECTRA / WG1 ETP SmartGrids Joint Technical Workshop: The Web of Cells and alternative Concepts - New Architectures for the Grid of the Future

Date: 10 December 2015

Venue: EC DG RTD, Brussels

Objectives: The technical workshop jointly organized by the ELECTRA IRP and the ETP SmartGrids WG1 led to a general consensus on most of the principles constituting the Web-of-Cells concept. The Web-of-Cells are capable of developing a robust and resilient grid well suited to handle the expected high penetration of variable renewable energy sources and the integration of the needed supportive technologies.

Amount of participants: 30 Smartgrids experts

3rd National Smart Grid Webinar: The Spanish Smartgrid Centre – FUTURED

Date: 17 December 2015

Venue: Online Webinar organised with FUTURED,the Spanish National Smartgrids Platform

Objectives: Present the activities of the Spanish Platform , its priorities and disseminate about important smartgrids National/European projects where Spain is involved.

Amount of participants: 44 participants from NTP and other stakeholders
Utilities' future, breaking the thinking of today - WEBINAR **Date:** 26 April 2016 **Venue:** Online Webinar – co-organised with ENGERATI **Objectives:** address how utilities can take strategic decision under increased uncertainty. It provided the latest data on developments in the sector, highlighted key uncertainties and discuss their potential impact with a panel of experts. **Amount of participants:** +90 participants

Oral Presentations

On 16 occasions, at least, during the project the ETP Smartgrids has been disseminating the results of its work or ongoing activities. This was done either by encouraging the active participation of its members in European events that relate to its field of action or by the Secretariat members themselves.

To do so a regular monitoring of relevant events has been carried out by the secretariat and members of the platform in particular Steering Committee members have been informed about these. In each occasion the secretariat identified the right expert to attend to these events on behalf of the ETP Smart Grids, and proposed its choice to the Steering Committee to appoint this expert as ETP representative. In some specific cases the expert has been appointed directly by the Chairman and Vice-Chair of the Steering Committee.

The 16 oral presentations performed during the project are the followings (The presentations listed below do not take into considerations all the presentations made on the occasion of the ETP's own organised events and workshops):

- 8 May 2013 Dublin, Ireland, SET PLAN Conference, Richard Charnah, ETP SG Chairman
- 16 May 2013 Brussels, Belgium, STARGRID Workshop, Jean-Luc Bessede, ETP SG SC member
- 27 June 2013 Brussels, Belgium, Sustainable Energy Week – Workshop: SmartGrids at European and National level: converging activities on energy efficiency, Richard Charnah, ETP SG Chairman
- 1 July 2013 Zagreb, Croatia , Workshop for Preparation of Croatian NTP, Prof. Nikos Hatziargyriou, ETP Vice-Chairman
- 10 October 2013, Milan, Italy, DeRri (Experimental research and DER integration in the EU Energy System) Conference, Dr. Venizelos Efthymiou, ETP SG Ex-Co member
- 25 March 2014, Brussels, Belgium, Innogrid 2020 Conference, Richard Charnah, ETP SG Chairman
- 8 April 2014, Hannover, Germany, Smart Grids FORUM, Hannover Messe, Jochen Kreusel, ETP SG SC member
- 16 September 2014, Brussels, Belgium, Grid4EU Workshop, Pieter Vingerhoets, ETP SG Secretariat
- 26 March 2015, Nicosia, Cyprus Mediterranean Technology forum, Nikos Hatziargyriou
- 29 March 2015, Paris, France, Smartgrids Paris 2015, Jean-François Faugeras
- 18 June 2015, Lyon, France, CIRED 2015, Pieter Vingerhoets
- 18 June 2015, Brussels, Belgium, Coordinated R&D for electricity grids: Overcoming barriers to a sustainable and integrated energy future, EUSEW 2015 Venizelos Efthymiou
- 8 July 2015, London, UK, ETP Photovoltaic General Assembly 2015, Venizelos Efthymiou

- 27-28 August 2015, Aalborg, Denmark, Microgrid Symposium, Nikos Hatziargyriou
- 14-15 September 2015, Lecco, Italy, ISGAN event, Maher Chebbo
- November 2015, Ispra, Italy, "Towards a Transatlantic E-Mobility Market" - JRC International Symposium, Jesus Garcia Martin

Press communication

Communication with the press was done in specific punctual occasions: the 2 high-level events organised by the ETP Smartgrids, the 5th and 6th General Assembly.

4 press releases were sent in total to a database of more than 500 specialised journalists, one before and one after each of these 2 events:

- 30/03/2015 : a press release to announce the event was sent out to the journalists database. Title: *"The European SmartGrids Technology Platform will debate on the future contribution of Smartgrids for a competitive Europe"*
- 29/04/2015: a press release on the day of the event was sent to the same list of contacts, slightly updated. Title: *"5th European Technology Platform (ETP) on SmartGrids General Assembly: SmartGrids ready for large-scale implementation, the ETP a player that counts."*
- 3/05/2016: a press release to announce the event was sent out to the journalists database. Title: *"Europe, World n°1 in Renewables: European SmartGrids and Photovoltaic Platforms to address challenges of Repowering Europe"*
- 20/05/2016: a press release the day after the Smartgrid event was sent to the same list of contacts, slightly updated. It highlighted key outcomes of the General Assembly. Title: *"Smartgrids essential towards making Europe World n°1 in renewables"*

As a result several articles or references to the ETP Smartgrids and the events were published in some online media. In addition several articles were specifically published about the ETP. The table below gathers a number of these articles:

Article Title	*Publication*	*Date*	*Link to article*
La ETP Smart Grids celebra la quinta edición de su Asamblea General	*SmartGRidlnfo.es*	*9 Apr 2015*	*https://www.smartgridsinfo.es/noticias/la-etp-smart-grids-celebra-la-quinta-edicion-de-su-asamblea-general*
Celebrada la V Asamblea General de la ETP Smart Grids	*SmartGRidlnfo.es*	*4 May 2015*	*https://www.smartgridsinfo.es/noticias/celebrada-la-v-asamblea-general-de-la-etp-smart-grids*
Estrategias para convertir a Europa en líder mundial en Smart Grids	*SmartGRidlnfo.es*	*17 May 2015*	*https://www.smartgridsinfo.es/noticias/estrategias-para-convertir-a-europa-en-lider-mundial-en-smart-grids?utm_medium=Newsletter&utm_source=1426*
Meltemi Community Pilot Site wins the 1st prize in the European Smart Grids Solutions Competition	*DERLab*	*May 2015*	*http://www.der-lab.net/news/index.html*
ETP SmartGrids to play important role in implementing Integrated Roadmap vision	*SETIS website*	*20 July 2015*	*https://setis.ec.europa.eu/newsroom/news/etp-smartgrids-play-important-role-implementing-integrated-roadmap-vision*
Estrategias para convertir a Europa en líder mundial en Smart Grids	*F2e.es*	*18 May 2016*	*http://www.f2e.es/es/estrategias-para-convertir-a-europa-en-lider-mundial-en-smart-grids*
El aumento de la generación renovable está condicionado al desarrollo de Smart Grids	*Energetica21.com*	*23 May 2016*	*http://www.energetica21.com/noticia/el-aumento-de-la-generacin-renovable-est-condicionado-al-desarrollo-de-smart-grids*
Sustainable Smart Grids Could Revolutionise Europe	*Blueandgreentomorrow.com*	*29 May 2016*	*http://blueandgreentomorrow.com/2016/05/29/sustainable-smart-grids-revolutionise-europe/*
Europe, world no 1 in renewables: European SmartGrids and PV platforms to address challenges of repowering Europe	*SolarServer*	*May 2016*	*http://www.solarserver.com/*
Repowering Europe, o cómo convertir al Viejo Continente en líder mundial de las energías renovables	*Energías-renovables.com*	*29 August 2016*	*http://www.energias-renovables.com/articulo/repowering-europe-o-como-convertir-al-viejo-20160509*
Towards a Holistic Approach to European Research and Innovation	*IEE Power & Energy magazine*	*January/February 2015 edition P. 30 to 37*	http://magazine.ieee-pes.org/
Digitalisation of Energy: a vision becoming today a reality	*European Energy Innovation Magazine*	*Spring edition P.40-41*	http://www.europeanenergyinnovation.eu/Portals/0/publications/EuropeanEnergyInnovation-Spring2016.pdf

Main result 7: Become a key reference adviser for research and technology priorities for smartgrids in Europe by answering European Commission consultations

During the project duration the ETP Smartgrids answered several consultations launched by the European Commission. The consultations to which the ETP Smartgrids replied are:

- **Barriers to innovation** which was conducted at the end of 2014, by DG RTD
- **Security of Supply** which was conducted until October 2015, by DG ENER
- **Future Market Design** which was conducted until October 2015, by DG ENER
- **SET Plan Issue Paper 4** on the Energy System which was conducted from December 2015 - January 2016, by DG ENER
- **SET Plan Issue Paper 7** on battery for e-mobility in May 2016, by DG ENER.

By replying regularly to the EC consultation the ETP Smartgrids could position as a privileged interlocutor on technical aspects related to Smartgrids.

Outside from formal consultations the ETP Smartgrids was involved in some discussions held with several stakeholder associations such as ENTSO-E (Transmission System operators), EDSO (Distribution system Operators) and EASE (Storage of Energy), about the Energy Panorama towards 2020, this informal consultation was conducted from November 2015 until February 2016, by DG ENER. The ETP together with the other stakeholder associations presented their vision about the EU Energy System in 2020 from each stakeholder point of view including the one of the consumer. This consultation was raised by the EC in the view of reviewing several pieces of legislation in the year 2016 but also to finalise the SET Plan Issue Paper 4 on the Energy system for which an official consultation had been held at the end of 2015.

Main result 8: Help launch the new European Technology and Innovation Platform Smart Network for the Energy Transition

From the end of 2015 the ETP worked on defining together with EC DG ENER the terms of reference of the new *European Technology and Innovation Platform Smart Networks for Energy Transition* (ETIP SNET) which was announced at the ETP Smartgrids General Assembly on 19 May 2016 and launched in parallel to the Innogrid 2020+ Conference in June.

With the new SET Plan presented by the EC in 2015, the ETPs are now evolving towards ETIPs and will integrate in a single advisory environment the stakeholders which were involved in the EIIs (European Industry Initiatives) and EERA.

In the case of the ETP Smartgrids evolving towards the ETIP SNET, it reflects the increasing need to consider the smart electricity networks within the wider energy system, broadening the stakeholders to be involved beyond the traditional ones (Distribution and Transmission networks, technology vendors and ICT, research and academia) to storage, consumers and other connected energy carriers (gas, hydrogen, transport, etc.). The ETIP SNET will therefore become the new integrated advisory environment to reflect this evolution.

After a period of consultation with the stakeholders of the SET Plan a proposal of new governing structure has been developed jointly with the EC and a call for nominations was launched by the EC in the end of May after the new structure was presented at the ETP Smartgrids 6th General Assembly. Stakeholders identified had until 15 June 2016 to nominate representatives to the new Governing Board of the ETIP SNET to the EC, including representatives from Member States. On Monday 27 June the nominated stakeholders gathered

together for the first meeting of the Governing Board of the ETIP SNET. The Terms of Reference, the next steps for the election of a chair and vice chairs and the determination of working groups were discussed in this first meeting.

The terms of reference of the new ETIP SNET are available here after:

EUROPEAN TECHNOLOGY AND INNOVATION PLATFORM SMART NETWORKS FOR THE ENERGY TRANSITION

ETIP SNET

TERMS OF REFERENCE

(23/06/2016)

Background

With the publication of the new Integrated Roadmap of the Strategic Energy Technology Plan (SET Plan) in September 2015, a new advisory environment for Research and Innovation is needed.

In the first implementation of the SET-Plan, initiated in 2007, six European Industrial Initiatives (EIIs) were established, including the EEGI (European Electricity Grid Initiative), which brought together industry, the research community, Member States and the European Commission. These initiatives aimed at the rapid development of key energy technologies at European level, for which the barriers, scale of investment and risk can be better tackled collectively. In parallel, the European Energy Research Alliance (EERA) has been working since 2008 to align the R&D activities of individual research organisation with SET-Plan priorities and to determine a joint programming framework at EU level. Implementation of the SET-Plan was also supported by a series of industry-led European Technology Platforms (ETPs). These help define research and technological development objectives and lay down concrete goals for achieving them.

Today, the European Commission is calling for the creation of a European Technology and Innovation Platform (ETIP) which can address issues in the fields of smart grids, storage and energy systems integration.

Vision: Smart Energy Networks for Energy Transition

The ETIP SNET positions itself together with the smart grid at the centre of an energy system which is under transition towards a low carbon energy, in line with the EU 2020, 2030 and 2050 decarbonisation objectives, in which the share of electricity in the overall energy mix is expected to grow. The electricity grid is challenged on the production side by an increasing share of renewables, in particular variables and on the consumption side by evolving consumption profiles. The expected growing electrification of transport and of heating and cooling are additional elements which should be integrated. In order to cast flexibility in the system, many options can be envisaged such as demand response, storage with or without re-electrification and variable generation. Technologies such as power to heat, power to gas, power to fuel offer solutions to inject renewable energy in sectors which rely mostly on hydrocarbon fuels. The

management of such a complex system will obviously rely extensively on ICT technologies. This leads naturally to the proposed ETIP title: Smart Networks for Energy Transition.

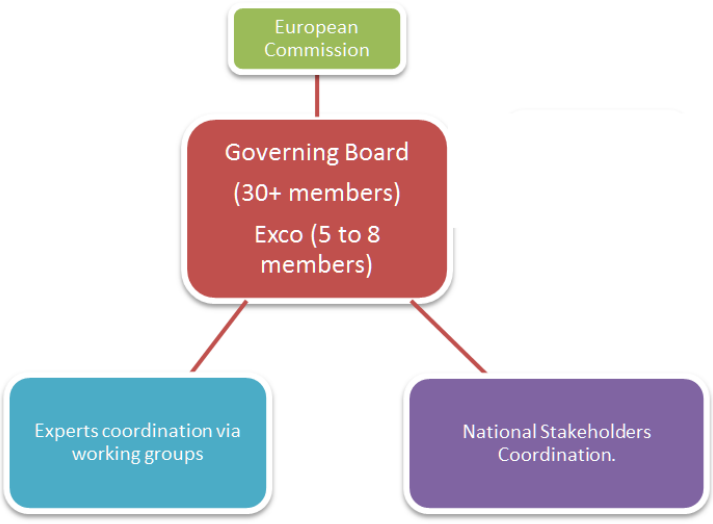
Mission and goals

- Set-out a vision for research and innovation for Smart Energy Networks for Energy Transition and engage stakeholders in this vision
- Prepare and update the Strategic Research and Innovation Agendas, report on the implementation of RD&I activities at European, national/regional and industrial levels
- Provide input to the Strategic Energy Technology Plan
- Identify innovation barriers, notably related to regulation and financing
- Develop further enhanced knowledge-sharing mechanisms that help bringing RD&I results to deployment
- Preparing consolidated stakeholder views on Research and Innovation to European Energy Policy initiatives
- Ensure the stakeholder community receives proper feedback
- The ETIP SNET is open to new stakeholders and its structure will allow to give answers to emerging issues with ad-hoc experts / working groups for a wide set of topics.

Stakeholders and Governance

In order to have a wide representation of stakeholders and offer agile and efficient operation of ETIP SNET, the platform is organised as follows:

- - a **Governing Board** to steer the platform with a limited number of seats where associations send representatives
- - **Working Groups** which are open for experts to participate and provide input to the Governing Board; working groups can be permanent or ad-hoc.
- - A **National Stakeholder Coordination** group to make the links with various national stakeholders.



Governing Board

The Governing Board is the main decision-making body. It steers the ETIP, launches initiatives, elaborates and approves a yearly work plan. The members of the Governing Board are expected to bring their unbiased expertise to the ETIP SNET and to represent the collective view of their stakeholder organisation, not that of their own company.

Members should be able to make active contribution, demonstrate a high degree of commitment, and devote sufficient time to the Governing Board. They should also be in a position to influence stakeholders planning research & innovation programmes.

The members of the Governing Board meet at least twice a year in plenary meetings and when it is considered necessary by its Executive Committee.

Governing Board membership is not subject to remuneration or reimbursement of travel expenses.

The initial composition is as follows:

Stakeholder group	Number of seats	Associations
TSOs	4	ENTSO-E
DSOs	4	CEDEC, EDSO, Eurelectric, GEODE
National representatives	3	SET-Plan Steering Committee
Research & Academia	3	EERA - EUREC - EUA - EPUE
Storage (technology and services providers)	3	EASE - Eurobat - HEA
Consumers (aggregated and not aggregated)	3	ANEC - BEUC - SEDC
Thermal Generation (flexible)	3	COGEN Europe - EPPSA - ETN - EUGINE - EUTURBINE
ICT technology & network providers	3	Digital Europe - ESMIG - ETNO - EUTC
Non ICT - Manufacturers equipment suppliers	3	Europacable, Orgalime, T&D Europe
Renewable Energy Sources ETIPs	3	EGEC - Ocean - PV - RES H&C - Wind
Interface to Other Energy Carriers (Heat, Transport, Gas, …)	3	EGVIA - EHA - ENTSO-G - ERTRAC - Euro Heat and Power - EUROGAS
Regulators*	1	ACER - CEER

TOTAL	36

*Participation on ad-hoc basis

Governing Board decisions are taken by consensus, whenever possible. If not possible, a vote can be organised on the basis of the seats indicated in the table above. Additional stakeholders may be invited to attend Governing Board meetings on an ad-hoc basis.

For the initial formation of the Governing Board, the European Commission asks stakeholder representative organisations to nominate their representative among its membership (the defined number of seats per stakeholder is provided above) and up to one alternate per representative. The National Representatives are appointed in consultation with the SET-Plan Steering Committee. The Governing Board may decide to amend this composition.

Executive Committee (ExCo)

The ExCo members are the Chair and Vice-Chairs of the Governing Board together with the leaders of the Permanent Working Groups. The ExCo provides executive support to the Governing Board and acts as facilitator to drive the processes, and the decisions taken by the Governing Board.

Chair and vice-chairs are serving for a period up to three years and are endorsed by the Governing Board. In order to ensure renewal and continuity, a new Chair or vice-Chair is appointed every year, replacing one of the ExCo members. Candidates must represent parties having the system view of the electricity/energy system.

Permanent Working Groups and Ad-Hoc Task Forces

Permanent Working Groups and Ad-Hoc Task Forces are created by the Governing Board. Working Groups terms of references and Chair-person are proposed by the Working Group and approved by the Governing Board.

A Working Group and/or Ad-Hoc Task Force is composed of a limited number of high-level experts willing to voluntarily participate to the work of the ETIP and act in their personal capacity.

1.4 Potential impact

Since its creation the ETP SmartGrids has been a key actor in providing recommendations for research priorities in Europe, defining for the first time in Europe the concept of the SmartGrids. The ETP work started at the same time as the one of other ETPs created by the EC. These were meant to be industry-led informal structures aimed at providing an unbiased view on long term research priorities in their field of competence. Since then, several other advisory frameworks have been developed such as the European Industry Initiatives (EIIs) and the European Energy Research Area (EERA), aiming to complement the vision in the longer term though the EERA but also implement the vision on a shorter term through the EIIs. In the area of electricity, the European Electricity Grid was created in 201X and helped develop a roadmap and yearly implementation plans at Transmission and Distribution level, including the storage dimensions in more recent update of the roadmap. Within this new setting, the ETP SmartGrids has been searching its marks among the various advisory groups (EERA and EEGI).

The ETP Smartgrids, apart from providing its views on future Horizon 2020 work programmes have worked in developing several vision papers with the voluntary contribution of its members either in the Steering Committee or within Working Groups, ensuring that a non-biased point of view was always conveyed, balancing between the various actors of the electricity system: distribution, transmission, equipment manufacturers, research and academia…

In addition the ETP Smartgrids in the last years (since 2014) has started a strong work of cooperation with the national level. This will allow for the future to better structure the dialogue between the European and national level. As a matter of fact streamlining and coordinating research, development and innovation between the European and national levels is essential in order to make a more effective use of public funding, and ensuring Europe maintains a leadership position in the field in the future.

With the publication of the SET Plan Integrated Roadmap in 2015 and the review of its governance, it has been decided to merge the EEIs and the ETPs into single platforms: the European Technology and Innovation Platforms (ETIPs). Positioning the ETP SmartGrids within this new environment has been a constant work of the platform along the last years. Today the ETIP Smart Network for Energy Transition (ETIP SNET) is becoming the new integrated advisory environment that will look how the electricity system will integrate within the wider energy system with the increasing development of renewable energy sources requiring an ever more flexible environment.

The current project through the various activities undertaken has helped structure the input of stakeholders, prepare reports, organise workshops and high-level events. Further dissemination of the activities will continue to happen in the next months and years, as the new ETIP SNET starts its activities and will rely on the foundations left by the ETP SmartGrids and the EEGI.

1.5 Address of the project public website

The website of the project is available at: www.smartgrids.eu

2 Use and dissemination of foreground

- Section A

TEMPLATE A2: LIST OF DISSEMINATION ACTIVITIES								
NO.	Type of activities[1]	Main leader	Title	Date/Period	Place	Type of audience[2]	Size of audience	Countries addressed
1	*Publication*	ZABALA	*ETP Smartgrids Flyer*	*28 April 2015*	Brussels	Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias		
2	*Publication*	DerLab	*Overview of National and Regional Smartgrids Initiatives around Europe*	*28 April 2015*	http://www.smartgrids.eu/Overview%20of%20National%20and%20Regional%20Technology%20Platforms%20in%20Europe.pdf	Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*
3	*Publication*	Zabala Innovation Consulting	*Consolidated view of the ETP Smartgrids on Research, Development and Demonstration needs in the Horizon 2020 Work Programme 2016-2017.*	*April 2015*	http://www.smartgrids.eu/Overview%20of%20National%20and%20Regional%20Technology%20Platforms%20in%20Europe.pdf	Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*

[1] A drop down list allows choosing the dissemination activity: publications, conferences, workshops, web, press releases, flyers, articles published in the popular press, videos, media briefings, presentations, exhibitions, thesis, interviews, films, TV clips, posters, Other.

[2] A drop down list allows choosing the type of public: Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias, Other ('multiple choices' is possible).

4	*Publication*	Zabala Innovation Consulting	*Thinking ahead Electricity network and electric vehicles*	*28 September 2015*	http://www.smartgrids.eu/documents/ETP_SG_Transatlantic_e-Mobility_Market_Oct2015.pdf	Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*
5	*Publication*	Zabala Innovation Consulting	*Digitalisation of Energy: a vision becoming today a reality*	*March 2016*	*http://www.europeanenergyinnovation.eu/*	Industry, Scientific Community		*All the member states and associated countries*
6	*Publication*	DerLab	*Overview of National and Regional Smart Grids initiatives in Europe, 2nd Edition*	*May 2016*	http://www.smartgrids.eu/ETP_Documents	Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*
7	*Publication*	Zabala Innovation Consulting	*The need for a fundamental review of electricity networks reliability standards*	*2016*	http://www.smartgrids.eu/documents/ETP_SG_Future_Network_Reliability_Standards_2016.pdf	Scientific Community (higher education, Research), Industry		*All the member states and associated countries*
8	*Publication*	KU Leuven	*Progress and Challenges on Asset Management for Future Smart Grids*	*2016*	http://www.smartgrids.eu/documents/ETP%20SG_Asset%20Management_White%20Paper_2016.pdf	Scientific Community (higher education, Research), Industry		*All the member states and associated countries*
9	*Publication*	KU Leuven	*The Digital Energy System 4.0*	*2016*	http://www.smartgrids.eu/documents/ETP%20SG%20Digital%20Energy%20System%204.0%202016.pdf	Scientific Community (higher education, Research), Industry, Policy makers, Medias		*All the member states and associated countries*
10	*Publication*	Zabala Innovation Consulting	*Newsletter Sept 2012*	*15 September 2012*	http://www.smartgrids.eu/documents/newsletter/Newsletter_Sep_2012_sent.pdf	Industry, Scientific Community, Medias	2700	*All the member states and associated countries*
11	*Publication*	Zabala Innovation Consulting	*Newsletter Dec 2012*	*15 December 2012*	http://www.smartgrids.eu/documents/newsletter/Newsletter_Sep_2012_sent.pdf	Industry, Scientific Community, Medias	2.774	*All the member states and associated countries*
13	*Publication*	Zabala Innovation	*Newsletter March 2013*	*15 March 2013*	http://www.smartgrids.eu/documents/newsletter/2013/ETPSG_Newsletter_March_2013.pdf	Industry, Scientific Community, Medias	2.827	*All the member*

		Consulting						*states and associated countries*
14	*Publication*	Zabala Innovation Consulting	*Newsletter May 2013*	*15 May 2013*	http://www.smartgrids.eu/documents/newsletter/2013/ETPSG_Newsletter_May_2013.pdf	Industry, Scientific Community, Medias	2.895	*All the member states and associated countries*
15	*Publication*	Zabala Innovation Consulting	*Newsletter July 2013*	*15 July 2013*	http://www.smartgrids.eu/documents/newsletter/2013/SmartGrids-ETPS-III_Newsletter_July_2013.pdf	Industry, Scientific Community, Medias	3.017	*All the member states and associated countries*
16	*Publication*	Zabala Innovation Consulting	*Newsletter Dec 2013*	*15 December 2013*	http://www.smartgrids.eu/documents/newsletter/2013/SmartGrids-ETPS-III_Newsletter_Dec_2013.pdf	Industry, Scientific Community, Medias	3.138	*All the member states and associated countries*
17	*Publication*	Zabala Innovation Consulting	*Newsletter June 2014*	*15 June 2014*	http://www.smartgrids.eu/documents/newsletter/2014/SmartGrids-ETPS-III_Newsletter_Jun_2014_v2.pdf	Industry, Scientific Community, Medias	3.241	*All the member states and associated countries*
19	*Publication*	Zabala Innovation Consulting	*Newsletter Nov 2014*	*15 November 2014*	http://www.smartgrids.eu/documents/newsletter/2014/SmartGrids-ETPS-III_Newsletter_Jun_2014_v2.pdf	Industry, Scientific Community, Medias	3.244	*All the member states and associated countries*
20	*Publication*	Zabala Innovation Consulting	*Newsletter Feb 2015*	*15 February 2015*	http://www.smartgrids.eu/newsletter/SG_newsletter_Feb2015.html	Industry, Scientific Community, Medias	3.250	*All the member states and associated countries*
21	*Publication*	Zabala Innovation Consulting	*Newsletter May 2015*	*15 May 2015*	http://www.smartgrids.eu/newsletter/SG_newsletter_May.html	Industry, Scientific Community, Medias	2.808	*All the member states and associated countries*
22	*Publication*	Zabala Innovation Consulting	*Newsletter July 2015*	*15 July 2015*	http://www.smartgrids.eu/documents/newsletter/2015/SG_newsletter_July_2015.html	Industry, Scientific Community, Medias	2.830	*All the member states and associated*

								countries
23	*Publication*	Zabala Innovation Consulting	*Newsletter Oct 2015*	*15 October 2015*	http://www.smartgrids.eu/documents/newsletter/2015/SG_newsletter_Oct_2015.html	Industry, Scientific Community, Medias	2.808	*All the member states and associated countries*
24	*Publication*	Zabala Innovation Consulting	*Newsletter Feb 2016*	*15 February 2016*	http://www.smartgrids.eu/documents/newsletter/SG_newsletter_Feb_2016.html	Industry, Scientific Community, Medias	2.830	*All the member states and associated countries*
25	*Publication*	Zabala Innovation Consulting	*Newsletter Feb 2016*	*15 June 2016*	http://www.smartgrids.eu/documents/newsletter/2016/SG_newsletter_June_2016.html	Industry, Scientific Community, Medias	2.815	*All the member states and associated countries*
26	*Publication*	Zabala Innovation Consulting	*IEE Power & Energy magazine*	*January/February 2015*	http://magazine.ieee-pes.org/	Industry, Scientific Community		*All the member states and associated countries*
27	*Publication*	DerLab	*ETP SmartGrids: European Collaboration Specifics and Final Challenges*	*April 2015*	*Germany*	Industry, Scientific Community		*All the member states and associated countries*
28	*Publication*	DerLab	*European Distributed Energy Resources Laboratories*	*April 2013*	*Germany*	Industry, Scientific Community		*All the member states and associated countries*
29	*Oral presentation to a wider public*	Zabala Innovation Consulting	*SET PLAN Conference*	*8 May 2013*	Dublin, Ireland	Industry, Scientific Community		*All the member states and associated countries*
30	*Oral presentation to a wider public*	Zabala Innovation Consulting	*STARGRID Workshop*	*16 May 2013*	Brussels, Belgium	Industry, Scientific Community		*All the member states and associated countries*

31	*Oral presentation to a wider public*	Zabala Innovation Consulting	*Sustainable Energy Week – Workshop: SmartGrids at European and National level: converging activities on energy efficiency,*	*27 June 2013*	Brussels, Belgium	Industry, Scientific Community		*All the member states and associated countries*
32	*Oral presentation to a wider public*	Zabala Innovation Consulting	*Workshop for Preparation of Croatian NTP*	*1 July 2013*	Zagreb, Croatia	Industry, Scientific Community		*All the member states and associated countries*
33	*Oral presentation to a wider public*	Zabala Innovation Consulting	*DeRri (Experimental research and DER integration in the EU Energy System) Conference*	*10 October 2013*	Milan, Italy	Industry, Scientific Community		*All the member states and associated*
34	*Oral presentation to a wider public*	Zabala Innovation Consulting	*Innogrid 2020 Conference*	*25 March 2014*	Brussels, Belgium	Industry, Scientific Community	300	*All the member states and associated*
35	*Oral presentation to a wider public*	Zabala Innovation Consulting	*Smart Grids FORUM, Hannover Messe*	*8 April 2014*	Hannover, Germany	Industry, Scientific Community		*All the member states and associated*
36	*Oral presentation to a wider public*	KU Leuven	*Grid4EU Workshop*	*16 September 2014*	Brussels, Belgium	Industry, Scientific Community	15	*All the member states and associated*
37	*Oral presentation to a wider public*	Zabala Innovation Consulting	*Mediterranean Technology forum*	*26 March 2015*	Nicosia, Cyprus	Industry, Scientific Community	40	*All the member states and associated countries*
38	*Oral presentation to a wider public*	Zabala Innovation Consulting	*Smartgrids Paris 2015*	*29 March 2015*	Paris, France	Industry, Scientific Community	2.700	*All the member states and associated*
39	*Organisation of conferences*	Zabala Innovation	*5th General*	*29 April 2015*	Brussels	Scientific Community (higher education,	200	*All the member*

		Consulting	*Assembly, "Smartgrids for Competitive Europe"*			Research), Industry, Civil Society, Policy makers, Medias		*states and associated countries*
40	*Oral presentation to a wider public*	KU Leuven	*CIRED 2015*	*18 June 2015*	Lyon, France	Industry, Scientific Community		*All the member states and associated*
41	*Oral presentation to a wider public*	DerLab	*Coordinated R&D for electricity grids: Overcoming barriers to a sustainable and integrated energy future, EUSEW 2015*	*18 June 2015*	Brussels, Belgium	Industry, Scientific Community	50	*All the member states and associated*
42	*Oral presentation to a wider public*	Zabala Innovation Consulting	*ETP Photovoltaic General Assembly 2015*	*8 July 2015*	London, UK	Industry, Scientific Community		*All the member states and associated*
43	*Oral presentation to a wider public*	Zabala Innovation Consulting	*Microgrid Symposium*	*27-28 August 2015*	Aalborg, Denmark	Industry, Scientific Community		*All the member states and associated*
44	*Oral presentation to a wider public*	Zabala Innovation Consulting	*ISGAN event*	*14-15 September 2015*	Lecco, Italy	Industry, Scientific Community		*All the member states and associated*
45	*Oral presentation to a wider public*	Zabala Innovation Consulting	*"Towards a Transatlantic E-Mobility Market" - JRC International Symposium*	*November 2015*	Ispra, Italy	Industry, Scientific Community		*All the member states and associated*
46	*Organisation of conferences*	Zabala Innovation Consulting	*Repowering Europe - 6th ETP SmartGrids General Assembly*	*18-19 May 2016*	Brussels	Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias	200	*All the member states and associated countries*
47	*Workshop*	DerLab	*Workshop on Priorization of the Strategic Research*	*December 2012*	Berlin	Industry, Scientific Community	15	*All the member states and associated*

			Agenda 2035 topics					*countries*
48	*Workshop*	DerLab	*Joint Workshop "Industry statement for a conformed standardization framework enabling the large scale smart grid deployment"*	*May 2013*	Brussels	Scientific Community (higher education, Research), Industry,	*25*	*All the member states and associated countries*
49	*Workshop*	DerLab	*ELECTRA / Working Group 1 ETP SmartGrids Joint Technical Workshop on Network Operation for 2030+*	*17 December 2014*	Brussels	Industry, Scientific Community	40	*All the member states and associated countries*
50	*Workshop (Webinar)*	ZABALA	*Utilities' future, breaking the thinking of today*	*25 April 2016*	*On-line*	Industry, Scientific Community	*90*	*All the member states and associated countries*
51	*Workshop*	DerLab	*Workshop with National Smartgrids Initiatives*	*28 April 2015*	Brussels, Belgium	Scientific Community (higher education, Research), Industry,	20	*All the member states and associated countries*
52	*Workshop*	DerLab	*ETP SmartGrids Workshop on Future Technology and Research Priorities for SmartGrids in Europe Focus: Smart Meters for Distribution Networks – Data and Control*	*19 May 2015*	*Vienna*	Scientific Community (higher education, Research), Industry, Policy makers,	30	*All the member states and associated countries*

53	*Workshop (Webinar)*	DerLab	*1st National Smart Grid Webinar: Smart Grids Flanders*	*25 June 2015*	On-line	Industry, Scientific Community	24	*All the member states and associated countries*
54	*Workshop (Webinar)*	DerLab	*2nd National Smart Grid Webinar: The Norwegian Smartgrid Centre*	*30 September 2015*	*On-line*	Scientific Community (higher education, Research), Industry, Civil Society,	*35*	*All the member states and associated countries*
55	*Workshop*	DerLab	*ETP Smart Grids co-organised The Innovation Progamme as part of the European Utility Week 2015 "Utilities Outlook: The future we can only imagine"*	*4 November 2015*	*Vienna*	Scientific Community (higher education, Research), Industry, Civil Society, Policy makers, Medias	*100*	*All the member states and associated countries*
56	*Workshop*	DerLab	*Energy Digitalisation Workshop*	*24 November 2015*	*Brussels*	Scientific Community (higher education, Research), Industry	*40*	*All the member states and associated countries*
57	*Workshop*	DerLab	*2nd ELECTRA / WG1 ETP SmartGrids Joint Technical Workshop: The Web of Cells and alternative Concepts - New Architectures for the Grid of the Future*	*10 December 2015*	*Brussels*	Scientific Community (higher education, Research), Industry, Civil Society, Policy makers,	*34*	*All the member states and associated countries*
58	*Workshop (Webinar)*	DerLab	*3rd National Smart Grid Webinar: The Spanish Smartgrid Centre - FUTURED*	*17 December 2015*	*On-line*	Industry, Scientific Community	*44*	*All the member states and associated countries*
59	*Articles published in*	Zabala	5th General Assembly	*26 march 2015*	*http://smartgridireland.org/en/weblog/2015/03/2*	Scientific		*All the*

	the popular press	Innovation Consulting	ETP SmartGrids 29 April 2015		*6/5th-general-assembly-etp-smartgrids-29-april-2015/*	Community, Industry, Civil Society, Policy makers, Medias		*member states and associated countries*
60	*Articles published in the popular press*	Zabala Innovation Consulting	*La ETP Smart Grids celebra la quinta edición de su Asamblea General*	*9 Apr 2015*	*https://www.smartgridsinfo.es/noticias/la-etp-smart-grids-celebra-la-quinta-edicion-de-su-asamblea-general*	Scientific Community, Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*
61	*Articles published in the popular press*	Zabala Innovation Consulting	*5th European Technology Platform (ETP) on SmartGrids General Assembly: SmartGrids ready for large-scale implementation, the ETP a player that counts*	*1 May 2015*	*http://www.globalsmartgridfederation.org/2015/05/01/5th-european-technology-platform-etp-on-smartgrids-general-assembly-smartgrids-ready-for-large-scale-implementation-the-etp-a-player-that-counts/*	Scientific Community, Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*
62	*Articles published in the popular press*	Zabala Innovation Consulting	*Celebrada la V Asamblea General de la ETP Smart Grids*	*4 May 2015*	*https://www.smartgridsinfo.es/noticias/celebrada-la-v-asamblea-general-de-la-etp-smart-grids*	Scientific Community, Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*
63	*Articles published in the popular press*	Zabala Innovation Consulting	*5th General Assembly of the European Technology Platform on SmartGrids*	*8 May 2015*	*http://www.project-increase.eu/index.php?cmd=s&id=123*	Scientific Community, Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*
64	*Articles published in the popular press*	Zabala Innovation Consulting	*Estrategias para convertir a Europa en líder mundial en Smart Grids*	*17 May 2015*	*https://www.smartgridsinfo.es/noticias/estrategias-para-convertir-a-europa-en-lider-mundial-en-smart-grids?utm_medium=Newsletter&utm_source=1426*	Industry, Scientific Community		*All the member states and associated countries*
65	*Articles published in the popular press*	DerLab	*Meltemi Community Pilot Site wins the 1st prize in the European Smart Grids Solutions*	*May 2015*	*http://www.der-lab.net/news/index.html*	Scientific Community, Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*

			Competition					
66	*Articles published in the popular press*	Zabala Innovation Consulting	*ETP SmartGrids to play important role in implementing Integrated Roadmap vision*	*20 July 2015*	*https://setis.ec.europa.eu/newsroom/news/etp-smartgrids-play-important-role-implementing-integrated-roadmap-vision*	Scientific Community, Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*
67	*Articles published in the popular press*	Zabala Innovation Consulting	*Estrategias para convertir a Europa en líder mundial en Smart Grids*	*18 May 2016*	*http://www.f2e.es/es/estrategias-para-convertir-a-europa-en-lider-mundial-en-smart-grids*	Industry, Scientific Community		*All the member states and associated countries*
68	*Articles published in the popular press*	Zabala Innovation Consulting	*El aumento de la generación renovable está condicionado al desarrollo de Smart Grids*	*23 May 2016*	*http://www.energetica21.com/noticia/el-aumento-de-la-generacin-renovable-est-condicionado-al-desarrollo-de-smart-grids*	Industry, Scientific Community		*All the member states and associated countries*
69	*Articles published in the popular press*	Zabala Innovation Consulting	*Sustainable Smart Grids Could Revolutionise Europe*	*29 May 2016*	*http://blueandgreentomorrow.com/2016/05/29/sustainable-smart-grids-revolutionise-europe/*	Industry, Scientific Community		*All the member states and associated countries*
70	*Articles published in the popular press*	Zabala Innovation Consulting	*Europe, world no 1 in renewables: European SmartGrids and PV platforms to address challenges of repowering Europe*	*May 2016*	*http://www.solarserver.com/*	Industry, Scientific Community		*All the member states and associated countries*
71	*Articles published in the popular press*	Zabala Innovation Consulting	*Repowering Europe, o cómo convertir al Viejo Continente en líder mundial de las energías renovables*	*29 August 2016*	*http://www.energias-renovables.com/articulo/repowering-europe-o-como-convertir-al-viejo-20160509*	Industry, Scientific Community		*All the member states and associated countries*
72	*Press release*	Zabala Innovation Consulting	*5th European Technology Platform (ETP) on SmartGrids General Assembly: SmartGrids ready for*	*29 March 2015*	*On-line*	Scientific Community, Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*

			large-scale implementation, the ETP a player that counts					
73	*Press release*	Zabala Innovation Consulting	*The European SmartGrids Technology Platform will debate on the future contribution of Smartgrids for a competitive Europe*	*30 March 2015*	*On-line*	Scientific Community, Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*
74	*Press release*	Zabala Innovation Consulting	*Europe, World n°1 in Renewables: European SmartGrids and Photovoltaic Platforms to address challenges of Repowering Europe*	*3 May 2016*	*On-line*	Scientific Community, Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*
75	*Press release*	Zabala Innovation Consulting	*Smartgrids essential towards making Europe World n°1 in renewables*	*20 May 2016*	*On-line*	Scientific Community, Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*
76	*Interviews*	Zabala Innovation Consulting	*Marie Latour, coordinadora de la ETP Smart Grids*	*12 May 2015*	*https://www.smartgridsinfo.es/entrevistas/marie-latour-coordinadora-de-la-etp-smart-grids*	Scientific Community, Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*
77	*Website*	Zabala Innovation Consulting	*ETP Smartgrids website*	*January 2013*	*www.smartgrids.eu*	Scientific Community, Industry, Civil Society, Policy makers, Medias		*All the member states and associated countries*
78	*Website*	Zabala Innovation Consulting	*ETP Smartgrids LinkedIn Group*	*November 2014*	*https://www.linkedin.com/groups/8208338*	Scientific Community, Industry, Civil Society, Policy makers, Medias	*301*	*All the member states and associated countries*