

# **ISGAN Newsletter No.10**

Update – December 2015

ISGAN Award of Excellence 2015 – Excellence in Smart Grids for Renewable Energy Integration

In 2015, ISGAN and the Global Smart Grid Federation (GSGF) launched the second annual ISGAN Award of Excellence. The 2015 ISGAN Award of Excellence focused on excellence in *Smart Grids for Renewable Energy Integration*.



ISGAN honored the "GRID4EU Large-scale Demonstration of European Smart Distribution" project as the winner. "DS3 – Delivering a Secure, Sustainable Electricity System," submitted by Eirgrid (Ireland), and the "Smart Grid Station of Korea Electric Power Corporation" (KEPCO) were recognized for the quality of their project submissions by receiving an honorable mention. *Find more information.* 

Award of Excellence 2016 nominations are now open. ISGAN and GSGF seek projects that exemplify excellence in smart grids for reliable electricity service. *Find more information.* 

## ISGAN-GSGF Workshop – Communications as Critical Enabler for the Development of Smart Energy Systems

On 14-15 September 2015, a two-day international workshop on *Communications as Critical Enabler for the Development of Smart Energy Systems* was held at the Chamber of Commerce in Lecco, Italy.



The event drew the attention of governments, including the Italian Parliament, Ministries and European Institutions, technology providers, manufacturers, network operators and research centres. More than 120 participants from 26 countries gathered to debate achievements and challenges related to the application of and communication technology information solutions in the design and deployment of smart grids. Experts shared practical experiences by

outlining the technical and non-technical barriers and solutions in various participant countries. *Find more information.* 

ISGAN experts have actively participated in a number of international events this year to deepen engagement with external stakeholders. Highlights from two key events are elaborated on below.

#### • The sixth Clean Energy Ministerial (CEM6)



At the sixth Clean Energy Ministerial (CEM6), held in Mérida, Mexico, on 27-28 May 2015, Energy ministers laid out a vision for a more effective, ambitious CEM. This vision has been labelled as "CEM 2.0," focused on playing a fundamental and sustained role in accelerating the transition to a global clean energy economy.

ISGAN, as a CEM initiative, released a series of deliverables, including several publications, and used this event to host the ISGAN Award of Excellence competition awards ceremony. *Find more information.* 

#### • Austria Smart Grid Week

Austria Smart Grid Week celebrated its 10<sup>th</sup> anniversary by successfully hosting the international conference and associated events. More than 300 national and international experts attended the Austria Smart Grid Week 2015 to share the latest insights, look to future innovation and initiate joint projects. During the Week, ISGAN's Annex 6 and Annex 7 held joint workshops with the Photovoltaic Power Systems Programme (IEA PVPS) and ERA-Net Smart Grids Plus Knowledge Community, respectively.

#### **ISGAN Annex Activities**

ISGAN working groups, known as "Annexes," cover a wide range of smart grid related topics, ranging from technical research to social aspect analysis. Currently, seven Annexes are conducting research and delivering outcomes based on key smart grid themes and specified common areas of interest amongst participants from each Annex. Recent progress within the Annexes is reflected in the updates below.

#### • Webinars

In collaboration with the CEM's Clean Energy Solution Center (CESC), ISGAN continues the organisation and hosting of the ISGAN Smart Grid Project Webinar Series to promote information exchange related to experiences and lessons learned in selected smart grid projects drawn from ISGAN's global project inventory.

From May 2015 to date, four webinars have been held: "Deploying Smart and Strong Power Grids: Best Practices from Austria, Ireland and Around the World" and "Meltemi Community Smart Grid Pilot Site" in May; and two ISGAN Award of Excellence winning projects, "Operating High Variable, Renewable Energy Generation Power Systems: Lessons Learned from Ireland and Northern Ireland", and "How Distribution Grids Can Integrate More Renewable Energy: Lessons Learned from GRID4EU Project" in September. Upcoming ISGAN webinars will be scheduled soon. Refer to the <u>ISGAN website and CESC website</u> for further updates.

## • Publications

**Annex 2 (Smart Grid Case Studies)** has been converted its flagship publications - AMI and DSM case books – into an online case study platform. An online version of the AMI case book and DSM case book was released in May and is now available at **www.amicasebook.org**.

Meanwhile, Annex 2 is working on the development of a **"Consumer Engagement & Empowerment"** case book. This case book will include project information and lessons learned from the top 10 projects of the inaugural ISGAN Award of Excellence competition (2014). The casebook is scheduled for release in early 2016.



Annex 4 (Synthesis of Insights for Decision Makers) released a synthesis report, "The Role of Smart Grids in Integrating Renewable Energy" in May 2015. The report explores the intersection of smart grid technology, policy and regulation from a non-technical point of view and includes several cases from Sweden, Korea, Austria, the Unite States and Canada.



Annex 6 (Power Transmission and Distribution (T&D) Systems) published a casebook entitled "Spotlight on Smart and Strong Power T&D Infrastructure" in May 2015. This casebook shares experiences from seven countries and covers various voltage levels in the electrical system. In addition, Annex 6 contributed an article, "Why the TSO-DSO Relationship Needs to Evolve" to the July 2015 issue of the IEEE Smart Grid Newsletter.

All publications are available for download at the ISGAN website.

#### • Events and ongoing activities

Annex 5 (Smart Grid International Research Facility Network (SIRFN)) pursues international cooperation for smart grids testing. Initial PV protocols have been published under Sandia logo, one of the SIRFN participants, and ESS protocols will be published soon under ISGAN-SIRFN logo. On 8-11 September, 2015, SIRFN held its technical meeting in conjunction with the 2015 International Symposium on Smart Electric Distribution Systems and Technologies (EDST) in Vienna (AT). To ensure better knowledge sharing, SIRFN organizes a list of scheduled meetings and has launched its website. *Find more information.* 

**Annex 5** participants also presented a conference paper on "International Development of Energy Storage Interoperability Test Protocols for Photovoltaic Integration" at the 31<sup>st</sup> European PV Solar Energy Conference and Exhibition" (EU PVSEC 2015) in Hamburg, Germany.

In May, *Annex 6* and IEA PVPS task 14 organized a joint workshop which focused on "The use of variable renewables as flexible resources to support grid operation and Power Transmission and Distribution Interaction" in Vienna. <u>Find more information.</u> **Annex 6** is currently working on several discussion papers and an updated version of its case book, **"Spotlight on Smart and Strong Power T&D Infrastructure"**. **Annex 6** further plans to co-host the International Synchrophasor Symposium in early 2016. **Find more information**.

Annex 7 and ERA-Net Smart Girds Plus hosted a joint-international workshop on "The Role of Storage in Cross Energy Carrier Systems, Regulatory and Market Frameworks for Intelligent Storage Solutions, and Citizen Expectations to the Use of Storage" in May. <u>Find more information.</u>

Annex 7 participants also presented a conference paper on "Active social acceptance, technology diffusion and policy strategies: An agent-based model of investment in distributed electricity production" at the 6th International Sustainability Transitions (IST) Conference in Brighton, UK.

## ISGAN's 10<sup>th</sup> Executive Meeting in Lecco, Italy

The 10th ISGAN Executive Committee Meeting (ExCo10) took place on 16-18 September 2015, in Lecco, Italy. The meeting served as an opportunity for delegates to assess progress since ExCo9 and discussed the future strategic direction of ISGAN.



Currently 25 Contracting Parties have joined the ISGAN community and the Exco continually strives to increase its diverse and influential network of members. The eleventh ExCo meeting (ExCo11) is scheduled for Yokohama, Japan during the week of 7 March 2016.

## About ISGAN

ISGAN newsletters are published on a regular basis as a mechanism to inform the broader international smart grid community of ISGAN initiatives, events and publications.

For further information regarding ISGAN, please visit the ISGAN website, <u>www.iea-isgan.org</u>, or contact the ISGAN Secretariat at the Korea Smart Grid Institute at <u>isgan@smartgrid.or.kr</u>.

ISGAN Secretariat, Korea Smart Grid Institute 18F Korea Technology Center, 305 Teheran-ro Gangnam-gu, Seoul, 135-780, Korea Tel: 82-2-6009-4932, Fax: 82-2-6009-4949





An initiative of the Clean Energy Ministerial, ISGAN's vision is to accelerate global progress on smart grid policy, technology, and related standards through cooperative projects and programs supported by the voluntary action of governments and grid stakeholders.