



# ENARD:- IEA Implementing Agreement on Electricity Networks Analysis, Research and Development

## Newsletter No 4 - July 2008

### Work Starts on Annexes II and III

Work has recently started on two new Annexes within ENARD's highly topical programme-of-work, namely Annex II "DG System Integration" and Annex III "Infrastructure Asset Management". Each of these two new Annexes was previously approved by the ENARD Executive Committee (ExCo) at its September 2007 meeting, hosted by SINTEF Energy Research in Trondheim, Norway.

**Annex II "DG System Integration"** is led by Arsenal Research, Austria and aims to :

- build up and exchange knowledge on DG system integration and existing approaches to active network management;
- promote the possibilities for the implementation of active distribution networks; and
- develop an authoritative set of guidelines to help facilitate the transition from today's passive distribution networks to the active distribution networks which will increasingly be required in the future.

Eight countries are presently participating in Annex II, with Arsenal Research hosting its inaugural Experts' Meeting in Vienna, May 2008.



**Inaugural Annex II Experts' Meeting, Vienna, May 2008**

**Annex III "Infrastructure Asset Management"** is led by EA Technology, UK. The objectives of the first phase of the Annex III programme-of-work, which runs through to December 2009 are to:

- develop an authoritative, substantive and robust international information base in relation to the ageing, degradation, failure and End-of-Life characteristics of the principal asset categories within the distribution asset base;
- develop a detailed understanding of risk based definitions and methodologies;

- source, collate and systematically analyse relevant case study information, providing practical examples of the use of asset information in condition or risk based asset management decision making;
- cross reference this information and data with that available in relation to the transmission system asset base and to elicit similarities and differences; and
- distil the above into a comprehensive information base and digest, for use and application within the participating countries

Five countries are presently participating in Annex III, with EA Technology hosting its inaugural Experts' Meeting at its Capenhurst offices, near Chester, April 2008.

#### United States Joins ENARD

Delegates at ENARD's Spring Annex I Workshop and ExCo meeting, as reported below, were very pleased to welcome the United States to the ENARD Implementing Agreement as ENARD's 12th member country and, significantly, its first extra-European member.

The United States will be represented on the ExCo by the Department of Energy's (DOE's) Office of Electricity Delivery and Energy Reliability (OE).

The membership and participation of US DOE represents a further milestone in the development of ENARD and both DOE and the participant base to date look forward to a mutually beneficial exchange of information, knowledge and experience.

#### Capenhurst Spring Meetings Programme, April 2008

EA Technology, as Annex I Operating Agent and ENARD Secretariat, was pleased to welcome delegates from around the world to the Spring 2008 meetings programme at its Capenhurst facility, near Chester, 14th-16th April 2008.

The meetings started with a highly topical one and a half day workshop on the subject of Intelligent Distribution Networks, micro-Grids and Active Network Management. The workshop drew the support of 41 participants from 14 countries and comprised a series of expert presentations, an introductory presentation to ENARD Annex II and a series of national overview presentations, all complemented by ample open discussion and dialogue.



**Delegates at Annex I Workshop, Capenhurst, April 2008**



The one and a half days of presentations, discussion and dialogue succeeded in providing a wealth of information and data, both to feed into Annex II, in the short term, and also for consideration by the ExCo in relation to the medium/longer term development of the Implementing Agreement itself.

The majority of workshop delegates then enjoyed a highly informative half day technical visit to the First Hydro 1,800 MW pumped-hydro storage facility in North Wales.

The 4th ENARD ExCo meeting followed on the third and final day of the meetings programme, where the ExCo reviewed the progress of the Implementing Agreement to date and discussed its future development and activities.

#### **Development of Annex IV on Transmission System**

The ExCo meeting was pleased to receive an initial presentation on the development of a proposed new Annex on transmission systems. This is now to be developed further over the Summer months by SINTEF Energy Research and CESI Ricerca, with a view to a further and more detailed presentation to ENARD's 5th ExCo meeting, to be held September 2008.

#### **ENARD Contributes to IEA NEET Workshop on Sustainable Rural Energisation**

John Baker, ENARD Annex I Operating Agent, EA Technology, was pleased to contribute to the recent IEA NEET (Networks of Excellence in Energy Technology) workshop, held at the IEA Office in Paris, 28th-29th May. The workshop brought together delegates from the world's major developing economies and the framework of IEA Implementing Agreements for one and a half days of presentations and discussion on the subject of sustainable rural energisation. The workshop succeeded in its primary objective in relation to the development of a mutual understanding of the various parties needs and capabilities and as to how the IEA framework of Implementing Agreements may most appropriately contribute.

#### **5th ExCo Meeting**

ENARD's 5th ExCo meeting is to be hosted by US DOE in Washington DC, 22nd-23rd September, immediately ahead of the topical GridWeek conference ([www.gridweek.com](http://www.gridweek.com))

#### **Future ENARD Annex I Workshop**

The ExCo Spring 2008 meeting agreed that the next two Annex I workshops should address:-

- communications and control; and
- balancing technologies

Parties interested in participating in these workshops are invited to establish contact via the ENARD Secretariat, as below.

#### **Further information**

Further information on ENARD, including participation in the Implementing Agreement and its activities, may be obtained from the ENARD web-site, at [www.iea-enard.org](http://www.iea-enard.org) or from the ENARD Secretariat at EA Technology:-

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ENARD, also known as the IEA Implementing Agreement on Electricity Networks Analysis, Research and Development, functions within a framework created by the International Energy Agency (IEA). The views, findings and publications of ENARD do not necessarily represent the views or policies of the IEA Secretariat or of all its individual member countries.