

**IEA Implementing Agreement on
Electricity Networks Analysis, Research & Development
(ENARD)**

**Annex I Workshop
“Markets & Regulation -
Financing the Smart Grid”**

to be held

at Union Fenosa Distribution,
Madrid,
Spain,

Tuesday 28th and morning of Wednesday 29th September 2010.

1. Introduction

ENARD is the International Energy Agency (IEA) Implementing Agreement on Electricity Networks Analysis, Research & Development. It provides an international forum for information exchange, research, analysis and collaborative research and development across a range of electricity transmission and distribution (T&D) network issues. Its vision is to facilitate the uptake of new operating procedures, architectures, methodologies and technologies in electricity T&D networks, such as to enhance their overall performance in relation to the developing challenges of network renewal, renewables integration and network resilience. Further information on ENARD and its activities may be obtained from the ENARD web-site at www.iea-enard.org.

ENARD's Annex I work programme is concerned with the structured collation, analysis and dissemination of a range of T&D related information and data, whilst also serving as the essential mechanism, to help define and structure future activities. The definition of such future activities is addressed via the organization and delivery of a series of topical Experts' Meetings and Workshops, including the forthcoming Workshop, to be held in Madrid, Spain. The rationale for this Workshop is entirely consistent with the findings of the Joint ENARD/IEA Grid Policy Workshop, held Paris, France, 28th April 2010, which identified market, regulatory and financing issues as key items to be addressed, in the realization of the Smart Grid vision.

The Workshop is aimed at stimulating discussion in relation to the considerable challenges to be addressed in relation to financing the significant investments required, to realize the Smart Grids vision, in its various forms throughout the world. Undoubtedly, the structuring and operation of electricity markets, in combination with the development and application of appropriate regulatory frameworks, are likely to be major influencing factors in determining the sector's ability to finance the levels of investment required, over the next decade and beyond. The Workshop will therefore aim to establish the extent and magnitude of the challenge to be addressed, prior to examining associated regulatory, implementation, market and economic related considerations. The

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requirements for future actions and initiatives will be identified and these will be encapsulated, in terms of messages for policy makers.

2. Programme

The Workshop will be held over the one and a half days, Tuesday 28th September and the morning of Wednesday 29th September 2010. It will be preceded by an optional Technical Visit to the Toledo PV power station (www.toledopv.com), on the afternoon of Monday 27th September, subject to a minimum level of support. The Workshop programme is as shown below.

Day One: Tuesday 28th September 2010	
08:30	Registration
09:00	Welcome & introductory remarks – Stig Goethe, Chair of ENARD Implementing Agreement and President of Power Circle, Sweden
Keynote Address	
09:10	The Smart Grid - Incentivising Investments in the Spanish Context – Mrs Blanca Losada Martin, Director of Electrical Network Management, Union Fenosa Distribution (Spain)
ENARD and the Present Markets and Regulation Workshop	
09:40	Introduction to ENARD and the Present Workshop - John Baker, Operating Agent, ENARD Annex I
Session 1: The Challenge Ahead	
09:50	Financing the Smart Grid: Revenues, Allocations and Regulatory Options – Richard Cowart, Director, European Programs, Regulatory Assistance Project (USA)
10:15	The Smart Grids Challenge – a Worldwide Perspective – Taco de Vries, Accenture (UK)
10:40	Coffee
Session 2: Markets and Economics	
11:10	The Smart Grid – enabling a new market dynamic – Christian Feisst, MD Business Development Smart Grids – Cisco (Germany)
11:35	European Legal Realities and Opportunities for Smart Grids – Simone Pront van Bommel – University of Amsterdam (The Netherlands)
12:00	The Economics of the Smart Grid:- interim results from studies at the IEA Secretariat – David Elzinga, IEA Secretariat

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Session 3: Morning Panel Session	
12:25	Panel Discussion
13:00	Lunch
Session 4: Energy Storage and Distribution Level Considerations	
14:00	The Economics of Energy Storage in Electricity Markets – an EdF Perspective – Bruno Prestat, Power Systems Economics Manager, EdF R&D (France)
14:25	Enabling the Uptake of Distributed Generation – Tomas Gomez San Roman – Distribution Team Leader – Instituto de Investigacion Tecnologica, Universidad Pontificia Comillas (Spain)
14:50	Tea
Session 5: System Level and Regional Market Considerations	
15:15	Development of Regional Electricity Markets in Support of Low Carbon Policy Agenda – Gunnar Lundberg, Vattenfall (Sweden)
15:40	The Spanish Transmission System and its role in the development of the Mediterranean regional plans - José Luis Mata Vigil-Escalera, Head of Regulation and Studies, RED Electrica de Espana (Spain)
16:05	Transmission System Planning and Market Analysis – Results from ENARD Annex IV – Kjetil Uhlen (Norway) & Diego Cirio (Italy), ENARD Annex IV Operating Agents
Session 6: Afternoon Panel Session	
16:30	Panel Discussion
17:00	Close of Day One

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Day Two: Wednesday 29th September 2010	
Session 7: Formation of Working Groups	
08:30	Introduction to aim and objectives of Working Groups - John Baker, Operating Agent, ENARD Annex I
08:45	Formation of Working Groups – election of facilitators
Session 8: Working Group Discussions	
09:00	Working Group discussions <ul style="list-style-type: none"> • Regulation • Markets • Investment
10:30	Coffee
10:55	Working Groups report <ul style="list-style-type: none"> • Regulation • Markets • Investment
11:45	General Discussion
12:00	Workshop Overview and Implications – John Baker, Operating Agent, ENARD Annex I
12:15	Lunch and Close of Workshop

3. Who Should Attend?

The Workshop will appeal to all those with an interest in the development, regulation and financing of Smart Grids and electrical power systems, in the decade ahead and beyond. It is anticipated that the Workshop will especially appeal to those with a keen interest in developing market structures, regulatory frameworks and financing mechanisms. The Workshop is therefore likely to be of particular interest to personnel drawn from the following communities:-

- Distribution System Operator Planning Engineers;
- Transmission System Operator Planning Engineers;
- Electricity Suppliers;
- Electricity Traders;
- Aggregators;
- Investment Planners and Managers;

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- The Power Engineering Equipment Supply Base;
- Regulators;
- Market Developers;
- The Financial Services Sector;
- Strategists and Policy Makers; and
- Academia.

4. Outputs

The principal workshop outputs will include:-

- full discussion and debate of a range of pertinent issues in relation to market, regulatory and financing aspects;
- identification and evaluation of current limitations and barriers;
- identification of potential solutions mechanisms;
- recommendations for future actions and initiatives; and
- key messages for policy makers.

5. Further Information and Registration

To register and receive further information in relation to the Workshop and the associated optional Technical Visit, please contact Michelle Chambers, at EA Technology Consulting (e: Michelle.Chambers@eatechnology.com ; Tel. +44-(0)151-347-2425; Fax +44-(0)151-347-2406).

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