## The DERri Project

DERri is a EU collaborative research project under the FP7 research programme. It aims at the enhancement and the effective deployment of experimental infrastructures in support of the research on the Distributed Energy Resources integration in the EU energy system. As many as 16 European Institutions from 12 different countries have been cooperating in the project during four years, from Sept 2009 to Dec 2013. They include excellent Research Infrastructures with leading DER expertise and equipped with unique testing facilities.

Joint research and networking within a single cooperation infrastructure of facilities having advanced expertise in the same field and first order equipment brings several advantages to the potential and the quality of the offered service: effective development and sharing of testing methods and procedures; better deployment of technology; fruitful exchange and dissemination of information; synergies and complementarities exploitation.

The Transnational Access to the infrastructures by EU research teams responding to periodical access calls launched by DERri is a further qualifying aspect of the project, allowing to value in practice the cooperation framework among the laboratories; to identify and share pros and gaps of the offered service; to disseminate the laboratories potential in the research and industry fields and to contribute to the development of innovative solutions proposed by the users.

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#### Consortium



Austrian Institute of Technology (AIT) www.ait.ac.at

The French National Institute for Solar Energy www.ines-solaire.org

Centre for Renewable Energy Sources and Saving (CRES) www.cres.gr

The EDF group www.edf.com

Fraunhofer IWES www.iwes.fraunhofer.de

Technical University of Denmark

www.risoe.dtu.dk

TECNALIA Research & Innovation www.tecnalia.com

**DNV KEMA** 

www.dnvkema.com

National Technical University of Athens (ICCS-NTUA) www.ntua.gr

Technical University of Lodz www.weeia.p.lodz.pl

Technical University of Sofia www.tu-sofia.bg

VTT Technical Research Centre of Finland

www.vtt.fi

University of Strathclyde www.strath.ac.uk

University of Manchester www.eee.manchester.ac.uk

European Distributed Energy Resources Laboratories (DERlab) www.der-lab.net



































## Conference:

Experimental research and DER integration in the EU Energy System

in connection with the project meeting: Results, Highlights and Prospects of the EC FP7 project DERri



10 and 11 October, 2013 RSE premises, Milan, Italy



www.der-ri.net

## The DERri Event

The **Final DERri Meeting** is the platform for public dissemination of the project results and achievements.

The Event offers the opportunity to get an overview on the **Joint Test Facility Tool JanDER**, jointly developed to improve the exchange of information among the facilities and to remotely access tests and measurements performed in different laboratories.

The Networking Activities and the Research Cooperation of the laboratories, supported by specific tests will be presented. They have led to agreed guidelines for standardisation of testing procedures on storage systems and large inverters.

The **Power-Hardware-in-the-loop** concept is one of the outstanding results of DERri which will be presented with a blueprint solution of a dedicated facility for and a standardisation proposal for simulations based on agreed and validated Common Reference Models of DERs.

Finally, we will report on the transnational access of a substantial number of research teams to the DERri facilities, where they had the opportunity to use, free of charge, the installations and experimentally validate their ideas and solutions.

The <u>Conference</u> "Experimental research and needs in support of the DER integration in the EU Energy System" will emphasize the importance of the DERri outputs and will frame its objectives within the EU and the International context.

The Conference will give a picture of the progress of the research on Smart Grids, with special emphasis on the experimental and demonstration activities and needs. Initiatives from ISGAN, EERA and EEGI will be presented as well as from a number of exemplary projects encompassing some of the hottest topics around Smart Grids.

A Session of the Conference will be dedicated to **Transnational Access Researches**, with some representative cases of projects proposed by young researchers and implemented in the DERri Research Infrastructures.

Finally, a Poster Session will be open for presentations by the participants on the theme: "Research Infrastructures supporting projects and studies on DER integration".

# Programme THURSDAY - OCTOBER, 10<sup>TH</sup> 2013

Conference: "Experimental research and needs in support of the DER integration in the EU Energy System"		
8:30-9:30	Registration	
9:30-9:45	S. Besseghini (RSE): Welcome & Introduction	
9:45-10:00	M. Menna (EC): The EC funded research: the Horizon 2020 perspective	
10:00-10:15	M. Chebbo (SAP): The SmartGrids Research and Innovation in EU	
10:15-10:30	R. Bründlinger (AIT): The ISGAN Network and the Smart Grid International Research Facility Network (SIRFN)	
10:30-10:45	D. Craciun (DERlab): DERlab Association of Laboratories	
10:45-11:00	E. Ciapessoni (RSE): The EERA and the Electra Project	
Poster Section: "Research Infrastructures supporting		
projects and studies on DER integration"		
11:30-11:45	L. Consiglio (ENEL): The Grid4EU Demonstration Project within the EEGI initiative	
11:45-12:00	C. Carlini (RSE): Development of the Active Grids Control within the Ricerca di Sistema Project	
12:00-12:15	W. Heckmann (IWES): More PV to the grid - smart substation and demand response field trial	
12:15-12:30	P. Malbranche (CEA): The Sophia Project	
Visit to RSE Test Facilities		
14:30-14:45	P. Papadopoulos (Univ. Cardiff): Integration of Electric Vehicles: the DERri User Project EVOLVE-MAS	
14:45-15:00	K. Mentesidi (CENER): Hardware-in-the-loop tests in support of the studies on the DER integration: the DERri User Project DEIAgrid	
15:00-15:15	E. Rikos (CRES): DER Integration and Market issues: the MIRABEL Project	
15:15-15:30	P. Kotsampopoulos (ICCS/NTUA): New Operation paradigm to maximize the RES integration - the SuSTAINABLE Project	
Open discussion and Conclusions		

#### FRIDAY - OCTOBER, 11<sup>TH</sup> 2013

Final Meeting of the FP7 DERri project: Results, Highlights and Prospects	
8:30-9:30	Registration
9:30-9:45	R. Ambrogi (RSE): Welcome & Introduction
9:45-10:00	M. Menna (EC): Role and Perspectives of the Research Infrastructures in the EU Energy strategy
10:00-10:45	G. Franchioni (RSE): Summary of the Project
10:45-11:15	W. Heckmann (IWES): JRA1 - JaNDER development and Use Cases
11:35-11:55	N. Martin (INES/CEA): JRA2 - Testing and Characterisation methods for DER (Battery Storage Systems)
11:55-12:15	R. Bründlinger (AIT): JRA2 - Testing and Characterisation methods for DER (Large Inverters)
12:15-12:45	C. Mayr (AIT): JRA3 - Real Time simulation
12:45-13:00	C. Mayr (AIT): NA2 - common standards and procedures
13:00-13:15	S. Numminen (DERlab): Website Management and Dissemination (NA3+NA4)
14:15-14:45	G.Franchioni (RSE): Transnational Access Summary
14:45-15:15	Resp Infras: Experiences from the implementation of TA activities Representatives
15:15-15:30	G.Franchioni (RSE): Highlights summary and impact
15:30-16:30	Open discussion (with the participation of the DERri External Advisory Panel)
16:30-17:00	M. Menna (EC): Conclusions

#### **LOGISTICS**

Registration http://contacts.rse-

web.it/registrazione.asp?country=ENG&id evento=2

(open until September,10<sup>th</sup> 2013)

How to reach the venue http://www.rse-

web.it/sedi.page?docId=6533&resId=6

Accommodation http://www.rse-

web.it/sedi.page?resId=6&docId=6534&country=eng

The participation to the Event is free of charge