



## DELIVERABLE

EU Project No.: 228449

**DERri**

**Distributed Energy Resources Research Infrastructures**

**Integrating Activity: Combination of Collaborative Project and Coordination and Support Action**

**SEVENTH FRAMEWORK PROGRAMME**

**Capacities Specific Programme**

**Research Infrastructures**

## **Journal articles and conference presentations – Collection 3**

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further input from all project partners

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Dissemination Level		
PU	Public	x
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium and the Commission Services	



## Revision History

Revision	Date	Author	Organisation	Description
R-0	2012-11-05	Wolfram Heckmann	Fraunhofer IWES	
R-1	2012-11-09	Wolfram Heckmann	Fraunhofer IWES	Update publication list

### Statement of originality:

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

### NOTES:

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For more information on the project DERri, link to <http://www.der-ri.net>



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## 1 Executive Summary

This document contains a list of all publications in international journals and international conferences that have been made concerning the results of the Joint Research Activities (JRAs) of DERri in the time span from September 2011 to October 2012.

## 2 Publications

The following research results were published regarding the time span from September 2011 to October 2012.

- [1] P. Kotsampopoulos, A. Kapetanaki, G. Messinis, V. Kleftakis, N. Hatziaargyriou: A PHIL facility for Microgrids. Submitted to the International Journal of Distributed Energy Resources, in press - appears end of 2012.
- [2] F. Andr n, F. Lehfuss, and T. Strasser: A Development and Validation Environment for Real-Time Controller-Hardware-in-the-Loop Experiments in Smart Grids. International Journal of Distributed Energy Resources, pp. 1–24, in press - appears end of 2012.
- [3] R. Brandl, H. Hernandez, D. Geibel: HIL-Methods Supporting the Development Process from Simulations to Real Environment Testing. Submitted to the International Journal of Distributed Energy Resources, in press - appears end of 2012.
- [4] G. Lauss, B. Bletterie, C. Mayr, F. Lehfuss, and B. Br ndlinger: Power-Hardware-in-the-Loop Simulations for Electrical Generators in LV Grids. International Journal of Distributed Energy Resources, pp. 1–21, in press - appears end of 2012.
- [5] T. Strasser, F. Lehfu , P. Kotsampopoulos, P. Crolla, C. Tornelli, S. Numminen: Harmonising hardware-in-the-loop simulation procedures for power systems and distributed energy resources components. Abstract submitted to IRED 2012, Berlin, Germany, December 04-06, 2012.
- [6] R. Brandl, T. Degner, D. Geibel, A. Seibel: Active & Smart Substations: Development and Testing of Intelligent Control Strategies for LV-Networks with High Share of DER. Abstract submitted to IRED 2012, Berlin, Germany, December 04-06, 2012.
- [7] P. Kotsampopoulos, V. Kleftakis, G. Messinis, N. Hatziaargyriou: Design, development and operation of a PHIL environment for Distributed Energy Resources. Presentation at the 38th Annual Conference of the IEEE Industrial Electronics Society (IECON'2012), Montreal, Canada, October 25-28, 2012.
- [8] P. Kotsampopoulos: Laboratory Experiences With Power-hardware-in-the-loop Simulation for Distributed Energy Resources. Presentation at the IEEE PES Innovative Smart Grid Technologies (ISGT) conference, Berlin, October 17, 2012.
- [9] T. Strasser, M Stifter, W. Hribernik, E. Lambert, P. Kotsampopoulos, P. Crolla, C. Tornelli: Improving the Portability and Exchangeability of Model Data for Smart



Grids focusing on Real-Time Simulations – Definition of a Common Reference Model. CIGRE Session 44 Paris, France, August 2012.

- [10] F. Lehfuss, G. Lauss, P. Kotsampopoulos, N. Hatziargyriou, P. Crolla, A. Roscoe: Comparison of multiple Power Amplification types for Power Hardware-in-the-Loop Applications. IEEE Workshop on Complexity in Engineering (COMPENG 2012), Aachen, Germany, June 11-13, 2012.
- [11] B. Kleftakis, P. Kotsampopoulos: PHIL simulation and voltage increase due to the Photovoltaic production in Low Voltage grids. 5th conference of electrical and computer engineering students of Greece, Xanthi, Greece, April 2012.

### **3 Further Dissemination Activities**

#### Special Sessions at Conferences:

- [1] T. Strasser, P. Crolla, O. Faruque, P. Kotsampopoulos, Organization of the Special Session “Real-time Simulation and Validation Methods for Power and Energy Systems”, 38th Annual Conference of the IEEE Industrial Electronics Society, IECON 2012, Montreal, Canada, October 25-28, 2012.

#### Technical Committees:

- [2] IEEE Power & Energy Society (PES) – Task Force on Real-Time Simulation Methods for Power and Energy Systems – AIT (G. Lauss, F. Lehfuß, T. Strasser), NTUA (P. Kotsampopoulos), USTRAT (P. Crolla)
- [3] IEEE Industrial Electronics Society (IES) – Technical Committee on Smart Grids – AIT (M. Stifter, T. Strasser)