

## **Official Project Announcement**

### **InterOP**

### **A research project to investigate interoperability of IEC 61850 technology**

#### **Project Coordinator FGH e.V., Mannheim, Germany**

FGH e.V. is a non-profit research association of electricity supply industry and electrical industry with the aim of developing and providing competence and practice-oriented technical knowledge together with its members. The bundling of these tasks and the independent safeguarding of the member's interests attain increasing meaning in the liberalised market. Here, our members and partners from network operation, industry, service and science profit by the activities of FGH.

With the background of early research projects and ongoing works on IEC 61850 dealing with the development of the standard and of investigating conformity of devices FGH gained experience in the new technology. On behalf of its members FGH initiated an interoperability research project and asked different suppliers to join and investigate interoperable behaviour of devices.

#### **Purpose and scope**

One central goal of the standard IEC 61850 is to provide comprehensive interoperability in substation automation systems between control, protection and station level devices of different suppliers. The purpose of InterOP is to investigate the challenges that emerge from this requirement, to support standardization activities and to derive guidelines and recommendations to ease future engineering processes. Therefore a number of test cases will be defined and executed at FGH e.V. facility in Mannheim, Germany.

The scope of InterOP is IEC 61850 Edition 1. All interoperability tests will be based on this Edition while the results will potentially serve as valuable input for further Editions of the standard and guidelines for using it. The scope is in no way limited to the German market or the project participants and all test cases will use common and typical scenarios found in substations. The task of the project is to support the current standardization process.

#### **Research project description**

FGH e.V. as project manager and initiator of InterOP has invited 5 suppliers of IEC 61850 devices to jointly define and investigate interoperability test cases. These suppliers are ABB AG, A. Eberle GmbH & Co. KG, AREVA T&D, Maschinenfabrik Reinhausen GmbH and Siemens AG. Every participant has profound knowledge and experience in substation automation and protection. As an independent and non-profit research institute FGH coordinates and supervises the project and serves as project manager.



During the initial phase technical and functional specifications for the test cases will be defined. The test case specifications will be based on typical applications and examples found in substations of large electric grids. Therefore parts of the DKE IEC 61850 substation model will be used wherever applicable. To guarantee the benefit for every user of IEC 61850 technology every interested party is invited to review and comment the functional specification.

### **Invitation for comments**

In order to comment the functional specification interested parties are invited to register at FGH e.V. for free by submitting contact information and experience of IEC 61850. The specifications will then be disclosed for commenting. For more information on registration process please visit the homepage of FGH e.V. or contact us directly (see below).

### **External Communication**

The results will be published on-going during the project execution. At the end of the investigations FGH e.V. will publish a detailed report summarizing all achieved results and recommendations on dealing with interoperability issues. The report will be sent to standardization committees, working groups and other official bodies related to IEC 61850 and will be available for free for all interested parties at FGH e.V.

Starting date of InterOP was September 4th, 2008. The final results and public report are expected in first quarter of 2010.

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