

CIGRE Study Committee C6, «Distribution Systems and Dispersed Generation»

PROPOSAL FOR CREATION OF A NEW WORKING GROUP

WG C6.21	Name of Convenor: Eduardo Navarro (SPAIN)
Title: Smart Metering – state of the art, regulation, standards and future requirements	
Scope, deliverables and proposed time schedule of the Group :	
Background	
<p>Smart Metering is positioning as a first step for the establishment of the Active Distribution Networks (AND) because of its capability, if being in an Advanced Metering Infrastructure (AMI), of creating value for different stakeholders within the energy sector, from network operators and retailers to energy consumers.</p> <p>There exist commercial systems capable of supporting AMI but at the same time these systems show a lack of interoperability among them. It is thought that open standards, if widely accepted, will be able to guarantee interoperability of systems and devices from different manufacturers.</p>	
Scope:	
<ol style="list-style-type: none">1. To report on regulatory approaches in different countries (applicable standards, AMI deployment agenda, principal requirements and objectives...).2. To make a map of the state of the art around the world with the AMI actually on-going or in progress and assess the different standards and architectures already used compared to others (communication technologies with emphasis on PLC solutions, interoperability, communication protocols and data structures).3. Review the most widely used communication standards and protocols (e.g. IEEE/IEC, Zigbee, Homeplug, Wifi etc.) and make observations and recommendations. Both interoperability and security are important aspects to consider.4. Testing procedures already used for AMI.5. Collect functionality requirements of the smart meters considering customer needs in the future and make a gap analysis. Home energy management systems and the connection of smart appliances, loads and plug-in hybrid vehicles are closely related to smart metering. Recommendations in this area will be important to help guide policy makers, utilities and manufacturers.	
Deliverables: Technical brochure with summary in Electra	
Time Schedule: start August 2010	Final report: August 2012
Comments from Chairmen of SCs concerned.	
Approval by Technical Committee Chairman: Klaus Fröhlich Date: 25/05/2010	