



CIGRE Study Committee D2

PROPOSAL FOR THE CREATION OF A NEW WORKING GROUP (1)

WG* N°D2.32	Name of Convenor: : Armando Guillermo Maxit (AR) E-mail address: agmaxit@enersa.com.ar
Technical Issues # (2): 8	Strategic Directions # (3): 1 & 2
The WG applies to distribution networks (4): NO	
Title of the Group: Optical Cables Links in Power Utilities - Mounting, Commissioning, Maintenance and Management	
Scope, deliverables and proposed time schedule of the Group: Background: The present network of most power utilities is extensively composed of different optical transmission technologies, which are formed by the transmission electronic equipment as well as the transmission medium consisting of optical fiber cables. In practical use of this infrastructure, and more specifically in optical links sections, some failures are usually detected, some of them repeatedly in different locations, which require corrective actions to be taken and also provisions made during the mounting works. This working group aims to collect experiences and requirements for assembly, mounting, commissioning, maintenance and management of fiber optic cables that allow identifying and analyzing most common failures and possible solutions to them. Scope : The scope of the Working Group shall include the following aspects: <ul style="list-style-type: none">• collect and determine the most common failures in optical cables, amplifiers, repeaters, optical distribution frames, splice boxes, etc.• collect information about long term experience with fiber installations (degrading / environmental influence / high optical power influence / availability etc.).• analyze the causes of failures and its consequences• identify possible solutions and practical recommendations• discuss the use of new tools for maintenance like Supervision and Management Systems Deliverables: Technical brochure with summary in Electra. Time Schedule: Start: January 2012 Final report: December 2013	
Comments from Chairmen of SCs concerned:	
Approval by Technical Committee Chairman: Klaus Fröhlich Date: 30/03/2012	

- (1) Joint Working Group (JWG) – (2) See attached table 1 – (3) See attached table 2
(4) Delete as appropriate

Table 1: Technical Issues of the TC project “Network of the Future” (cf. Electra 256 June 2011)

1	Active Distribution Networks resulting in bidirectional flows within distribution level and to the upstream network.
2	The application of advanced metering and resulting massive need for exchange of information.
3	The growth in the application of HVDC and power electronics at all voltage levels and its impact on power quality, system control, and system security, and standardisation.
4	The need for the development and massive installation of energy storage systems, and the impact this can have on the power system development and operation.
5	New concepts for system operation and control to take account of active customer interactions and different generation types.
6	New concepts for protection to respond to the developing grid and different characteristics of generation.
7	New concepts in planning to take into account increasing environmental constraints, and new technology solutions for active and reactive power flow control.
8	New tools for system technical performance assessment, because of new Customer, Generator and Network characteristics.
9	Increase of right of way capacity and use of overhead, underground and subsea infrastructure, and its consequence on the technical performance and reliability of the network.
10	An increasing need for keeping Stakeholders aware of the technical and commercial consequences and keeping them engaged during the development of the network of the future.

Table 2: Strategic directions of the TC (cf. Electra 249 April 2010)

1	The electrical power system of the future
2	Making the best use of the existing system
3	Focus on the environment and sustainability
4	Interactive communication with the public and with political decision maker