



## STUDY COMMITTEE B2

### Terms of reference of Working Group WG B2.21 : 2007- 2010

<b>Working Group title:</b> "Arc protection and diagnosis for composite string insulators"	
<b>Convenor:</b> F. Schmuck	<b>Secretary:</b> To be nominated
<p><b>Needs of Target Groups :</b></p> <p>Evaluation of Composite Insulators in Service</p> <ul style="list-style-type: none"><li>+ Effects of Deterioration/Degradation of Surface – Aging Effects</li><li>+ Impact of Insulator Hardware to String Performance</li><li>+ Deduction of a Guide for Assessment of old Insulators</li></ul> <p>Power Arc Protection for Composite Insulators Strings</p> <ul style="list-style-type: none"><li>+ Corona versus Power Arc Protection</li><li>+ Effect of Power Arc to Insulations along a Transmission Line</li></ul> <p>Collaboration with WG D1.14 on the Behaviour of Composite Insulators also under Consideration of Flame Cases</p> <p><b>Terms of reference:</b></p> <p>WGB2.21 deals with Electrical and mechanical aspects of insulators used on overhead lines up to 1100 kV Lines . Its main issues concern assessment of their performance and reliability. The duration of the WG is 3 years : 2007 – 2010</p> <p>With the participation of the Brazilian, Czech, Italian members, a direct support by internationally accredited laboratories is given. Members of the group are simultaneous member in WG's of IEC TC 36 and CIGRE D1.14, which provides a good coordination of the activities and dealt matters.</p> <p><b>Specific Actions are :</b></p> <ol style="list-style-type: none"><li>1- Power Arc Protection for Composite Insulators Strings Supplementing Paper to Corona Publication, Technical Brochure and/or Electra Paper in 2008</li><li>2-Evaluation of advanced Tools for Composite Insulator Diagnostics in Service. Duration 3 years, Technical Brochure and Electra Paper in 2010.</li><li>3- Collaboration with WGD1.14 on the Behaviour of Composite Insulators also under Consideration of Flame Cases.</li></ol>	
<b>Links with other SCs:</b> <b>WGs :-SC A3, SCB4, SC D1 &amp; IEC TC 36</b> <b>IEEE :-</b>	
<b>Approval by Technical Committee Chairman: Klaus Fröhlich     Date: June, 22<sup>nd</sup>, 2007</b>	