

**PROPOSAL FOR CREATION OF A NEW WORKING GROUP**

<b>WG* N° D1.36</b>	<b>Name of Convenor :</b> Uwe Riechert (CH)
<b>Title of the Group : Special requirements for dielectric testing of Ultra High Voltage (UHV) equipment</b>	
<p><b>Background :</b>  The increase of the voltage level of transmission systems up to 1200 kV AC and 800 kV DC requires an adaption of some high voltage testing procedures. The technical requirements for dielectric testing of equipment exceeding a rated voltage up to 1200 kV have largely been developed by individual users, manufacturers and laboratories such that there is limited worldwide standardization</p> <p><b>Scope :</b>  Evaluation of experiences, influence of test parameter on dielectric behavior, recommendations for standardization  Evaluation of calibration methods, recommendations for standardization  Evaluation of experiences, influence of test parameter on dielectric behavior, recommendations for standardization  Data collection, summary of performed tests, if necessary measurement plan and find laboratories, recommendations for standardization  Review the present state-of-the-art and problems during dielectric testing of UHV equipment compared to the applicable international standards. Recommendations will be made regarding future testing and standardization of dielectric testing of UHV equipment exceeding 800 kV, up to and including 1200 kV.  Particular areas of focus for the recommendations will be</p> <ul style="list-style-type: none"> <li>• Lightning Impulse voltage tests up to 3 MV, particularly with respect to front time and overshoot</li> <li>• Linearity of measurement system</li> <li>• Switching Impulse voltage / AC and DC tests, Combined voltage tests, particularly with respect to compensation of voltage drops</li> <li>• Atmospheric corrections: identify the differences to IEC 60060-1 and provide recommendations</li> </ul> <p>With regard to component specific issues of measurements techniques possible cooperation with</p> <ul style="list-style-type: none"> <li>• IEC TC 42 High Voltage Testing Techniques, WG19: Adaption of TC 42 standards to UHV test requirements,</li> <li>• CIGRE WG C4.306 Insulation Coordination for UHV AC Systems</li> <li>• CIGRE A3.22 Technical Requirements for Substation Equipment exceeding 800 kV</li> </ul> <p><b>Deliverables :</b> Report to be published in Electra and technical brochure with summary in Electra  <b>Time Schedule :</b> start : 2010 <span style="float: right;"><b>Final report :</b> 2013</span></p>	
<b>Comments from Chairmen of SCs concerned :</b> A2, A3, B1, C4	
<p><b>Approval by Technical Committee Chairman :</b> Klaus Fröhlich  <b>Date :</b> 14/08/2010</p>	