

**APPLICATION FORM
FOR
CREATION OF A WORKING GROUP**

CIGRE Study Committee: D1

WG number: WG D1.23	Name of Convener: G.C. Montanari (IT)
Title: Diagnostics and accelerated life endurance testing of polymeric materials for HVDC application	
Terms of reference	
Background: There is a renewed interest in high voltage direct current (HVDC) transmission and particularly in the use of polymeric materials as insulation in HVDC equipment. However, many polymers accumulate space charges that can increase the local fields and may cause premature failure of the insulation. Thus space charge formation and dynamics play an important role in the ageing of polymers under HVDC. Partial discharge measurements as a quality control tool will be also influenced by the space charge formation.	
Scope: The working group will prepare a guide that will address the following: <ul style="list-style-type: none">• Examine fundamental processes that can be used to develop methods to accelerate the aging• Examine existing techniques for the quality control of materials and their interfaces for HVDC in the factory and onsite• Examine existing diagnostic techniques to measure the aging of materials and their interfaces under HVDC	
Deliverables and time schedule: Technical Brochure and Electra paper in 2010 WG to be established in 2008 WG to be disbanded in 2010 after reporting to the SC and Electra report	
Other SCs concerned by the work: SC A3, B1, B3, B4	
Approval by Technical Committee Chairman	Date :