



Study Committee No : B1

WORKING BODY FORM

Group No : WG B1.21

Name of Convener : Christian Jensen (DK)

TITLE of the Group : Third Party damages on underground and submarine cables

Terms of reference

Background :

Utilities are already suffering for a long time from third party damages, the damages caused to cables from so-called external origins: usually digging activities but also indirect aggression such as overheating, corrosion or change of backfill due to other utilities. Compared with the efforts to solve "internal" damage, issues are usually treated in an off-hand or unmanaged way, although in terms of money it is a very serious problem. The last service experience statistics for underground HV cable systems relating these problems were published in 1991 for land cables and in 1986 for submarine cables.

There are presently no guidelines about third party damages helping utilities dealing with electricity transmission to warn other utilities or third parties and consequently to reduce the fault statistics of the cables.

Objectives :

To give guidance to all relevant parties involved (cable owners, utilities dealing with electricity, contractors, authorities, other utilities) as follows:

- To define the right terminology.
- To collect information worldwide about third party damage failure statistics. To collect information about main "damagers", the most sensitive areas and the most "dangerous" civil works techniques.
- To collect information about existing practices to control/solve the problem in different countries around the world.
- To propose improvements to present methods, after examination and comparison of present methods/practices.
- To propose guidelines on how to effectively control/reduce third party damages of cables.

Scope :

- AC and DC cables.
- Land and submarine cables.
- MV (whenever appropriate), HV and EHV.
- Mechanical, thermal damages and, more generally, all damages caused by human activities.

Created: **2005**, Duration : **3 years**

Deliverables and time schedule :

A standard 6 page Electra article, a final report (that will be published as a technical brochure) to be submitted and discussed at 2008 SC B1 meeting and a tutorial in collaboration with the TAG.

Other SCs concerned by the work : /

Countries represented: BELGIUM, BRASIL, CANADA, CROATIA, DENMARK, FRANCE, ITALY, KOREA, The NETHERLANDS, NORWAY, ROMANIA, SPAIN, UNITED KINGDOM

Approval by TC Chairman : Aldo Bolza

Date : December 30, 2005

a : Add Norway Sept 2006