STRATEGIC BUSINESS PLAN (SBP)

IEC/TC or SC	Secretariat	Date
89	CANADA	2008-12-xx

Please ensure this form is annexed to the Report to the Standardization Management Board if it has been prepared during a meeting, or sent to the Central Office promptly after its contents have been agreed by the committee.

Title of TC (Technical Committee)

FIRE HAZARD TESTING

A Background

TC 89 is a technical committee with a horizontal safety function (formerly known as a horizontal committee) within the IEC to give guidance and develop standards and test methods related to fire hazards for use by other IEC Committees.

NOTE In accordance with IEC document AC/30/2006 the deprecated terms “horizontal committee” and “horizontal function” have been deleted from this document.

TC 89 has been given the responsibility by ACOS (Advisory Committee on Safety) to write BSPs (Basic Safety Publications) which are publications on a specific safety-related matter, applicable to many electrotechnical products in accordance with the guidance outlined in IEC Guide 104, *The preparation of safety publications and the use of basic safety publications and group safety publications* and ISO/IEC Guide 51, *Safety aspects - Guidelines for their inclusion in standards*. An IEC Guide is an informative document published by ISO or IEC giving rules, orientation, advice or recommendations relating to international standardization.

TC 89 monitors the work of pertinent ISO (International Organization for Standardization) committees to avoid duplication of effort and resources. TC 89 monitors the more fundamental work of fire related ISO committees, and assesses its usefulness for the specific electrotechnical environment, adopting or adapting if necessary as a means of confirming that TC 89 aims to avoid duplication of effort and resources.

TC 89 *Fire hazard testing* was formed in 1988 by the decision of the IEC Council (see RM 3139/Council Decision 29/88) to transform SC 50D *Environmental testing – Fire hazard testing* into a full technical committee. It was agreed that the fundamental aspect of fire warranted its own technical committee. Council also agreed to transfer the flammability testing of solid insulating materials from SC 15A to the new TC 89.

B Business Environment

B.1 General

Fire safety is a concern in every geographical region, and TC 89 seeks to establish global methods and guidance for assessing fire hazard in electrotechnical products.

There is a rapid global increase in the use of electrotechnical products in all application areas. The main reasons for this are the revolution in IT systems, the demand for increased functionality in buildings, structures and transport, and the general development of the infrastructure in developing economies.

Uncontrolled fires and their effluent are perceived as a significant environmental concern.

In the developed world, fire claims 10 to 20 people per million of population per annum, and fire losses amount to approximately 0,2 % of GDP per year. Occupied buildings account for the majority of fatal fires.

Electrotechnical products present two particular potential hazards in that:

- they contain or convey electrical energy and, therefore, may be a source of ignition;
- they may be an avenue of fire spread.

In common with many other safety related standardisation activities, TC 89 aims to establish a basis for assessing fire hazard which facilitates an objective evaluation and trade-off between adequate safety and minimum overall cost.

Every IEC member nation that manufactures electrotechnical products is encouraged to use the same basic test methods that are produced and maintained by TC 89.

Major world-wide organizations with TC 89 participation can be seen in Annex C of this document (attached).

B.2 Market demand
TC 89 publications are mainly used by IEC/ISO PCs (Product Committees). Before approaching any fire hazard testing they are required to perform an FHA (Fire Hazard Assessment) on their products.

TC 89 publications are also used by regulators, manufacturers, test laboratories and specifiers etc. most of whom are actively represented in TC 89 (see Annex A). TC 89 publications are widely used at the regional (e.g. European Standards) and national level.

Advances in the understanding and use of FHA (Fire Hazard Assessment) will have a positive effect on the demand for TC 89 publications, especially for test methods which provide performance based data in a format suitable for use in FSE (Fire Safety Engineering).

TC 89 also issues technical specifications and reports which review the current state of the art in fire hazard testing, and provide a critical and objective assessment of current test methods. The purpose of these technical specifications and technical reports is also to provide guidance to IEC technical committees on the selection and use of these published test methods (which are often not IEC methods), and to avoid inappropriate or extended use of outdated, or technically deficient methods.

The IEC 60695 series of technical reports provides information about the "Repeatability and reproducibility" and “Relevance of test data” with guidance on the use (or misuse) of current test methods.

Development of standardization within TC 89 continues to be very active and the amount of work on the maintenance of current standards is growing.

B.3 Trends in technology
A key driver in the field of TC 89 is the rapid growth in information technology systems, particularly relating to the accommodation of electrical and data systems into the structure of buildings.

The trend is now away from the former pass/fail criteria toward the use of test methods able to monitor and/or measure the many fire parameters used in FSE (Fire Safety Engineering) and fire models.

It is a reasonable assumption that the basic TC 89 test methods will remain unchanged for the foreseeable future but the technical details will continue to be refined as necessary.

B.4 Market trends
The market wishes ideally to see a contraction in the various and differing test methods that essentially measure the same thing. TC 89 seeks to advise in favour of adopting or adapting/extending existing methods and deprecates the introduction of new, seemingly parallel, methods.

B.5 Ecological environment
Any reduction in the incidence of uncontrolled fire can only be regarded as having a positive environmental benefit on the risk to health, post fire contamination and clean-up, and long term environmental effects.

TC 89 has recently published a series of its BSPs on ignition - IEC 60695-1-20, *Ignitability – General guidance* and IEC/TR 60695-1-21, *Ignitability – Summary and relevance of test methods*. The primary aim is to prevent ignition caused by an electrically energized component part but, in the event of ignition, to confine any resulting fire within the bounds of the enclosure of the electrotechnical product. Reducing the risk of ignition to near zero is the most effective way to minimize the impact on the environment.

In accordance with Guide 109, *Environmental aspects - Inclusion in electrotechnical product standards*, TC 89 gives careful consideration to the environmental impact of a specific test method.
TC 89 is in the process of collating and assimilating the state of the art and will advise the IEC accordingly.

C System approach aspects
Not applicable to TC 89 - see AC/37/2006.

D Objectives and strategies

Objectives – General

- to improve market relevance
- to provide appropriate guidance for TC 89 test methods
- to increase the awareness of TC 89 publications and test methods
- to continue to be responsive to the growing needs for fire hazard guidance for electrotechnical products as they arise
- to continue to attract more experts from the fire sciences to increase the pool of knowledge
- to hold seminars and workshops whenever necessary
- to assist PCs in all matters related to fire

Objectives – 3 to 5 years

- to complete test method questionnaires and inter-laboratory tests on problematic TC 89 test methods and integrate the results into future revisions where applicable
- to eliminate the use of test methods in PC publications that are similar to TC 89 but lacking any references
- to identify and work with all PCs that reference TC 89 publications
- to adjust the structure of TC 89 to accept more maintenance activities

Strategy

- to continue as an active member of ACOS (Advisory Committee on Safety)
- to continue to monitor our customers and the degree to which they take up TC 89 guidance
- to continue to work in close cooperation with the IEC, ACOS, ISO, PCs, industry etc. to achieve the stated objectives

E Action plan

- to continue to progress all projects in development as quickly as time and resources allow to meet forecast publication dates of 2010 and 2011
- to complete agreed maintenance review schedules on time to ensure timely publication of any amendments and revisions
- to monitor on a continuous basis all IEC procedural changes and integrate relevant changes into the TC89 work flow
- to attend promptly to all technical enquiries in a timely manner
- to establish a plan for improving market relevance and provide it to the members during the 2010 plenary meeting

F Useful links to IEC web site

- TC 89 web site
- IEC/TC 89 dashboard (enter 89) - includes the TC/SC Officers, Scope, Liaison committees, WG/PT structure, Membership (IEC Member Countries) , Publications issued, the Programme of Work and a link to the TC 89 web site.
- Maintenance programme – see Annex D of this document (attached).

Name or signature of the secretary

Nic Maennling

Annex C

Major companies, test houses and trade associations with TC 89 participation.

Major Companies	
Cablebel	Belgium
AFME	Spain
BASF	Germany
Bayer Industry Services	Germany
BEAMA	UK
Bergische Universitie	Germany
British Cables Association	UK
British Plastics Federation	UK
Bticino SPA	Italy
DSM Engineering Plastics	The Netherlands
EURONIL SPA (branch of Nilit Chemical Industries - Israel)	Italy
France Transfo	France
Furukawa Electric Co. Ltd.	Japan
KTH Fiber	Sweden
Legrand	France
Legrand Electric Ltd.	UK
Mitsubishi Electric Cables	Japan
MK Electric Limited	UK
Sycabel	France
Teijin Chemicals Ltd.	Japan
Tyco Electronics UK Ltd	UK
Unex Aparellaje Electrico S.L.	Spain
Test Houses	
CSA-International	Canada
CESI Group of Labs	Italy
IMQ	Italy
Interscience Communications Ltd.	UK
IREQ Institut de Recherches d'Hydro	Canada
Japan Electric Cable Technology Center	Japan
Japan Engineering Plastics	Japan
Underwriters Laboratories Inc.	USA
National Institute of Technology and Evaluation	Japan
National Maritime Research Institute	Japan
Philips Intellectual Property & Standards	The Netherlands
SABIC Innovative Plastics	The Netherlands
Schneider Electric	France, Spain
SOLVAY Research & Technology Center	Belgium
Trade Associations	
AMDEA	UK

Annex D

TC 89 Maintenance Programme

Publication no.	Date of publication	Maintenance review date	Maintenance result date	Responsibility (Maintenance Team)
IEC 60695-1-20	2008-02	2009	2012	WG 12
IEC 60695-1-21	2008-05	2009	2012	WG 12
IEC 60695-2-10	2000-10	2008	2011	WG 12
IEC 60695-4	2002-11	2009	2012	WG 10
IEC 60695-5-1	2002-11	2014	2017	WG 11
IEC 60695-5-2	2002-09	2014	2017	WG 11
IEC 60695-5-3	2002-09	2011	2014	WG 11
IEC 60695-6-30	1996-10	2012	2015	WG 11
IEC 60695-6-31	1999-04	2012	2015	WG 11
IEC 60695-7-1	2004-05	2008	2011	WG 11
IEC 60695-7-2	2002-06	2008	2011	WG 11
IEC 60695-7-3	2004-02	2008	2011	WG 11
IEC 60695-7-50	2002-09	2014	2017	WG 11
IEC 60695-7-51	2002-03	2014	2017	WG 11
IEC 60695-8-1	2008-03	2009	2012	WG 11
IEC 60695-8-2	2008-01	2011	2014	WG 11
IEC 60695-8-3	2008-04	2010	2013	WG 11
IEC 60695-9-1	2005-09	2009	2012	WG 11
IEC 60695-9-2	2005-07	2009	2012	WG 11
IEC 60695-10-2	2003-07	2009	2012	WG 12
IEC 60695-10-3	2002-04	2012	2015	WG 12
IEC 60695-11-2	2003-07	2011	2014	WG 12
IEC 60695-11-3	2004-04	2009	2012	WG 12
IEC 60695-11-4	2004-04	2009	2012	WG 12
IEC 60695-11-5	2004-12	2009	2012	WG 12
IEC 60695-11-10	2003-06	2008	2011	WG 12
IEC 60695-11-20	2003-06	2008	2011	WG 12
IEC 60695-11-21	2003-06	2010	2014	WG 12
IEC 60695-11-30	2001-08	2012	2015	WG 12
IEC 60695-11-40	2001-02	2009	2012	WG 12