BCA – Technical Newsletter – Issue No. 40
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1 Construction Products Regulation (CPR)

Since the previous Newsletter, the progress of the industry's work has been the subject of severe delay due to inaction by the European Commission. This has now been overcome, and at a meeting on 17th July 2015 the Commission confirmed that:

- The product standard for Reaction to Fire (EN 50575) will be listed under CPR in the OJEU, probably as early as July 2015;
- It will need a small bureaucratic corrigendum to align especially the scope and the legal Annex ZZ with latest regulatory requirements;
- The Date of Applicability will be given as 1st December 2015;
- There will be a one year co-existence (transition) period.

Therefore manufacturers can now accelerate final preparations:

- To make, if they so wish, a Declaration of Performance (DoP) and apply CE marking as from 1st December 2015;
- To prepare for the fact that as from one year later (1st December 2016) it will be mandatory to make a DoP and apply CE marking.

In parallel, organisations such as BASEC and LPCB will be able to obtain Notified Body status, and then make the Assessment and Verification of Constancy of Performance – AVCP (effectively approval).

A separate paper will give more details.

If you have a particular member of staff responsible for CPR matters, please advise the BCA office so that they can be updated with further information at the earliest opportunity.

The parallel work on standards covering Resistance to Fire continues within ECBL and CENELEC, although completion of this is thought to be some way off.

2 Directives and Regulations (excluding CPR)

The expected consultation for the revised **Electrical Equipment Safety Regulations**, (consequential upon the "re-cast", Low Voltage Directive) is still awaited. An announcement from BIS is expected shortly.

Full details of the re-cast LVD are in document C 3591.

3 Data communication cables

The ever-increasing demand for rapid and voluminous data transfer continues to challenge the requirements for the cables and cabling. In response to the needs of data centres with cabling system operation at data rates of up to 40 Gb/sec and at frequencies of 2,000 MHz, CENELEC has approved new work for:

EN 50288-12.1 – *Multi-element metallic cables used in analogue and digital communications and control - Part 12.1 -Sectional specification for screened cables characterised from 1 MHz up to 2 000 MHz – Horizontal and building backbone cables.*

The requirement for this standard, its frequency range and operating characteristics are a part of the IEEE 802 project.

4 Eurodatacab TC

Congratulations are due to Neil Mabbott (Prysmian, Washington), who was recently appointed as the new chairman of EDC TC, in succession to Jean Gombert of France.

5 Recent publications

A number of new or revised cable standards have recently been published, including:

BS EN 50618 *Electric cables for photovoltaic systems*

The development of this standard was controversial and UK voted against it. This did not prevent its publication, but did lead to a special statement being added to the national version. For the reference of all members this is annexed to this Newsletter.

BS EN 60702 *Mineral insulated cables and their terminations with a rated voltage not exceeding 750 V.*

There are two parts, which are revisions:

- Part 1: Cables
- Part 2: Terminations

Part 3 of the standard, being the Guide to Use, is new and is expected early in 2016.

BS EN 50393 *Test methods and requirements for accessories for use on distribution cables of rated voltage 0,6/1,0 (1,2) kV.*

This is a new edition of the standard for LV joints and terminations.

6 Fire resistant cables - Update

Since the previous Newsletter, progress has been made in respect of all three of the standards for fire resistant cables.

- The full revision of **BS 7629-1,** covering cables for fire alarm and emergency circuits**,** has passed all technical stages. Its publication may be delayed whilst an objection is resolved.

- The obstacle to the updating of **BS 7846** (1 kV armoured for power applications) has been overcome. It is now at Draft for Public Comment (DPC) stage.

- Work to develop the new standard for single core fire resistant cables has been accepted by BSI, and has been allocated the number **BS 8592**. Detailed development is in progress.

7 Miscellaneous

a) **MV submarine cables -** A formal proposal has been made in IEC to begin work on a standard entitled:

Submarine power cables with extruded insulation and their accessories for rated voltages from 6 kV (Um = 7,2 kV) up to 60 kV (Um = 72,5 kV) - Test methods and requirements

An equivalent standard for HV is expected later.

b) Identification threads – The practice of including coloured threads in cables as a means of identification of manufacturer is coming under scrutiny. Registers of ownership are difficult to maintain, and it is believed by some that the practice is outdated and less well used than before. Any views on the matter are welcomed.

8 Standardization and resources

Evidence is mounting that cable manufacturers, both in the UK through BCA, and in Europe through ECBL, are increasingly unable to sustain the necessary resource to make an effective contribution to standards-making.

Over a period of 20-30 years strenuous efforts have been made to reduce the burden so that standards can be developed on a wider basis (internationally or at least pan-European) such that the purely national work can be reduced. In UK, only the Energy sector has a significant national programme – Data and Telecom sectors are almost entirely covered via IEC and/or CENELEC.

Nevertheless, it is increasingly difficult to find experts, not only to serve on committees and travel to meetings, but crucially to draft standards according to relevant rules and to do so in acceptable English. Recent reports to Board meetings at Europacable level have highlighted this very strongly and pleas have been for assistance. Demography also plays a part; significant retirements are ever closer.

The major standards-making bodies (BSI, CENELEC) offer training courses and hold open sessions to build up new expertise. They also, somewhat controversially, continue to demand ever-faster processing of drafts, comments and votes, making the task of the remaining experts ever more onerous.

Without sound attention, standards will decay, and new ones for emerging technologies delayed. Alternatively other actors (material suppliers, system operators, test houses and other users) will begin to take over.

Members are invited to seek ways of continuing to support the UK's role, both nationally and elsewhere, in order to secure sound standards for safe cable products over the years to come. This can include introduction to our committees on a "shadowing" basis in order to gain experience.

Contacts for technical information:

Mike Hagger – Tel: 020 8891 2091; e-mail: mike.hagger@btconnect.com
Paul Sweet – Tel: 01296 655495; e-mail: paul.sweet@btconnect.com
Reg Nash – Tel: 01942 495378; e-mail: regnashuk@yahoo.co.uk

Annex – National statement in BS EN 50618

National foreword

This British Standard is the UK implementation of EN 50618:2014.

The UK participation in its preparation was entrusted by Technical Committee GEL/20, Electric cables, to Subcommittee GEL/20/17, Electric Cables - Low voltage.

BSI, as a member of CENELEC, is obliged to publish EN 50618:2014 as a British Standard. However, attention is drawn to the fact that during the development of this European Standard, the UK committee voted against its approval as a European Standard.

The main reasons for this negative vote are as follows:

- The scope includes statements about the lifetime of the cable in relation to maximum conductor temperature and the number of years of service that may be expected from the cable. While such a performance objective is supported, in the opinion of the UK committee the means of determining such performance are insufficiently robust.
- Table B.1 requires the insulation and the sheath materials of the cable to undergo testing for thermal endurance, this being the principal basis for the statements about lifetime expectation. These tests (to EN 60216) are complex, lengthy and specialized. They are of great use for research purposes and for materials development but, if they are to be used for tests on end products, it is necessary to define the sampling, the test temperatures, the test durations and the failure criteria in greater detail than is given in EN 50618. The absence of detail given in EN 50618 provides a high risk of variability of testing within manufacturers, suppliers, test laboratories and certifiers.

The UK committee advise users to be aware of these concerns when applying this standard, particularly in the context of any expectation that a minimum lifetime of 25 years, under any and all exposure conditions, is somehow guaranteed.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 28 February 2015.

Amendments/corrigenda issued since publication

Date	Text affected
28 February 2015	Extra national foreword text inserted

Previous Newsletters

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1 May 2001 (C/2851);
2 September 2001 (C/2872);
3 February 2002 (C/2910);
4 June 2002 (C/2925);
5 September 2002 (C/2938);
6 March 2003 (C/2974);
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12 May 2005 (C/3094);
13 October 2005 (C/3121);
14 February 2006 (C/3135);
15 May 2006 (C/3160)
16 October 2006 (C/3177);
17 Special CPD issue –December 2006 (C/3197)
18 March 2007 (C/3202)
19 June 2007 (C/3220)
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33 September 2012 (C/3528)
34 Spring 2013 (C/3540)
35 June 2013 (C/3552)
36 November 2013 (C/3574)
37 Spring 2014 (C/3587)
38 Summer 2014 (C/3600)
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