Know Your Standards

Recap

Over the last two issues, we looked at the standards-making bodies and their characteristics, how one can obtain standards economically, **what to do with them when you have them (most important!)** and how one can participate in standards work (masochism is not essential, but it helps).

Types of standards publication

There is a problem with terms, because the word 'standard' is used, even by standards-making bodies, to mean various sorts of publication, only one of which is a 'standard' as normally understood, i.e. a prescriptive document, using 'shall' as the verb for its provisions. Not so many years ago, the then edition of BS 0 ('A standard for standards') listed ten types of publication, and used 'specification' to mean the prescriptive type, which nevertheless are called 'standards'. Furthermore, the terms differ between standards bodies.

IEC and ISO publications

These publications are numbered as IEC [prefix] NNNNN-nn-nnn, ISO [prefix] NNNNN-nn-nnn or ISO/IEC NNNNN-nn-nnn. The '-nn-nnn' refer to Parts and Sections of multipart standards and are absent from single standards. At one time, especially in IEC, the first N was 6, but now other numbers appear in that position for standards on different major topics.

- Standards (no prefix) – prescriptive documents;
- Technical reports (TR) – usually descriptive documents, may give recommendations, using 'should', but definitely not prescriptive;
- Technical specifications (TS) – 'wannabe' standards - NOT to be regarded as standards but they use prescriptive language. May be turned into standards after experience has been gained of their use or they may continue to exist as a 'halfway house';
- Guides (numbered in their own series); in spite of the name, many of them are prescriptive; they concern the content of standards, their relations with other standards and how they are to be developed.
- Publicly-available specifications (PAS) – documents originated elsewhere that are candidates for adoption as standards after experience has been gained of their use.

CISPR

Although CISPR is part of IEC, it has its own Constitution and its own numbering system. Publications are numbered in the form CISPR [prefix] NN-nn-nn. The only prefix is TR for Technical Report, like an IEC TR. Generic EMC standards produced by CISPR are numbered in the IEC 61000-6 series.

CEN and CENELEC

These publications are numbered as EN (or TR) NNNNN-nn-nnn, but in CEN, the number of Ns may be fewer. ENs are 'European Standards', **not** 'Euronorms' which are quite different publications, from a different source.

- Standards (EN) – prescriptive documents;
- Technical reports (TR) – usually descriptive documents, may give recommendations, using 'should', but are definitely not prescriptive;
- Technical specifications (TS) – 'wannabe' standards - NOT to be regarded as standards but they use prescriptive language. May be turned into standards after experience has been gained of their use or they may continue to exist as a 'halfway house';
- Harmonized documents (numbered in their own series HD NNNNN-n-nnn) – prescriptive documents adopted when due to different legal or other circumstances in EC member states, an EN could not be implemented verbatim in all states. The number of Ns is variable. Examples are standards for cables and those for electrical installations, such as BS 7671, which is the British implementation of HD 60364;
- Guides (numbered in their own series); these are **not** the same as IEC or ISO Guides and are usually not prescriptive.

In CENELEC, the first two Ns indicate the origin and nature of the standard:

- EN 50NNN-nn-nnn – a standard prepared and published by CENELEC;
- EN 55NNN-nn-nnn – a standard adopted from CISPR, therefore an EMC standard. The last two Ns and any ns are taken from the CISPR number;
- EN 6NNNN-nn-nnn – a standard adopted from IEC; the 6 may be replaced by another digit except 5;

EN 55NNN and EN 6NNNN standards are **very similar** to the original CISPR or IEC standards but are **never** identical; the difference may be trivial or very significant, and that varies from case to case. A difference may be trivial to others but profoundly affect your product.

These standards adopted from IEC or CISPR may include 'Common Modifications', which apply across Europe, and Special National Conditions, which apply only in the states which request them. A few standards still include 'A deviations', which are necessitated by legal provisions or infrastructure conditions that cannot be readily or reasonably changed. The Normative References are replaced by references to ENs and HDs if they exist, and EMC standards include an Annex that details how the standard matches the provisions of the Directive. There may be other differences between the EN and the standard from which it was derived.

Harmonized

There is another terminology problem with this word. Originally, all ENs and HDs were 'harmonized' – meaning 'implemented in all EU states'. But the Commission hi-jacked the term (probably inadvertently and no-one bothered to challenge it) to mean **only** those standards listed in the Official Journal, conformity with which conveys *prima facie* evidence of compliance with a Directive.

Implementation

IEC and ISO standards are recommended to the organizations' members – the national standards bodies – for adoption nationally. **They are not 'recommendations' in the sense of**

being only advisory. Problems have been caused by some National Committees implementing standards that are referred to in legislation, such as safety and EMC standards, immediately on publication by IEC or ISO. A case occurred some years ago where products were legal when put in a ship but illegal when taken out of it in a far country! IEC and ISO do not specify 'transition periods' but call the attention of National Committees in the Forewords of such standards that transition periods may be required at national level so that industry has time to manufacture products conforming to the new standard.

In CEN and CENELEC the procedure is more detailed. National Committees **must** implement published ENs, even if they voted against them. There is a sequence of critical dates, some of which are listed in the actual publication:

date of ratification (dor)

date when the Technical Board notes the approval of an EN (and HD for CENELEC), from which time the standard may be said to be approved

date of availability (dav)

date when the definitive text in the official language versions of an approved CEN/CENELEC publication is distributed by the Central Secretariat

date of announcement (doa)
latest date by which the existence of an EN (and HD for CENELEC), a TS or a CWA has to be announced at national level

date of publication (dop)

latest date by which an EN has to be implemented at national level by publication of an identical national standard or by endorsement

date of withdrawal (dow)

latest date by which national standards conflicting with an EN (and HD for CENELEC) have to be withdrawn

All these are determined by CEN or CENELEC, but there is also another one, of very high importance, that is determined by the Commission. This is the fabulous beast **'docopocoss'** – the (BIG breath!) date of cessation of presumption of conformity of the superseded standard. This is listed against each standard notified in the Official Journal as providing *prima facie* evidence of conformity with a Directive. A newly-listed standard **can** be used immediately, but industry has a transition period, usually of three years, before the former standard reaches the docopocoss and may no longer be referred to in Declarations of Conformity.

The docopocoss is normally the same as the dow, but the Commission reserves the right to set a different date, and occasionally exercises that right.

FAQ

FAQs used to be all the rage but they seem to have fallen out of favour over recent years. Even so, I do get many questions over and over again, so I wonder if a 'standards FAQ' on the Compliance Club web site would be useful. If you think so, I recommend that you email the Kindly Editor (and copy me) with your views.

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