

TECHNICAL BOARD

CEN/BT by correspondence

For decision

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SUBJECT

CEN SF Pressure equipment – New approach for maintenance of EN 13445 & EN 13480

BACKGROUND

Due to their complexity, the EN 13445 and EN 13480 series have been maintained according to an ad-hoc methodology since the publication of the first editions in 2002.

This document (1) summarizes the related historical background, (2) establishes the limitation of the current system and the need to revise it and (3) proposes an updated methodology on how to maintain the EN 13445 & EN13480 series. This proposal was elaborated jointly by CEN/TC 54 'Unfired pressure vessels', CEN/TC 267 'Industrial piping and pipelines' and the CEN Pressure Equipment Advisory Nucleus (sectoral forum) with, as common focus, to simplify the overall approach. CCMC facilitated the exchanges.

The EN 13445:2002 series of European Standards 'Unfired pressure vessels' was developed by CEN/TC 54 'Unfired pressure vessels' and adopted in May 2002.

The EN 13480:2002 series of European Standards 'Metallic industrial piping' was developed by CEN/TC 267 'Industrial piping and pipelines' and adopted in May 2002.

These are key European Standards in the field of pressure equipment which provide presumption of conformity to the EU directive on pressure equipment (2014/68/EU) and, as such, EN 13445 Parts 1 to 6, 8 & 10 and EN 13480 Parts 1 to 6 are cited in the Official Journal of the European Union.

Due to the complexity of the EN 13445:2002 and EN 13480:2002 series, with their large number of formulae, figures and tables, the Technical Board created Maintenance Help Desks (one per series) to provide users of the standards with answers to questions regarding interpretation and its application, in a quick and responsive manner. The work procedures of the Help Desks are described in detail in document BT N 7895 (BT 64/2007).

In 2007, CEN/TC 54 'Unfired pressure vessels' carried out a review, taking into consideration the fact that a substantial number of corrected pages had been issued and that many amendments to EN 13445 had already been adopted. Noting the different implementations of the corrected pages by National Standardization Bodies, CEN/TC 54 decided to issue a second edition of EN 13445 that would incorporate all the corrected pages issued and the adopted amendments. Following Resolution BT C40/2009, the EN 13445:2009 version of the code was published.

In 2012, CEN/TC 267 'Industrial piping and pipelines' carried out a review, taking into consideration the fact that a substantial number of corrected pages had been issued and that many amendments to EN 13480 had already been adopted. Noting the different implementation of the corrected pages by National Standardization Bodies, CEN/TC 267 decided to issue a second edition of EN 13480 that would incorporate all the corrected pages issued and the adopted amendments. Following Resolution BT C47/2012, the EN 13480:2012 version of the code was published.

Following the same methodology, CEN/TC 54 and CEN/TC 267 have, since then, been preparing new editions of EN 13445 and EN 13480 every 5 years. This methodology is summarized in document BT N 9598. The decision to continue using this methodology was confirmed in 2014 by BT Decision C67/2014.

Rationale for modifying the methodology

The reasons supporting a revision of the maintenance methodology of EN 13445 & EN 13480 include:

- The European Commission will issue a new Standardization request on pressure Equipment by Q4 2021/Q1 2022. Until today, the pressure equipment directive was still supported by the open mandate M/071 accepted in 1994. Considering this is an open mandate, all the amendments to each of the EN 13445 & EN 13480 series could be offered for citation in the OJEU. This will no longer be possible once the new Standardization request is approved. Amendments will have to be planned ahead of time.
- Both series have gained in maturity/stability since their first edition (2002). It is no longer necessary to amend most of the parts as regularly as it used to be.
- The possibility to draft an unlimited number of amendments on each of the series parts has been overused. (For instances 19 amendments were initiated on EN 13445-3:2014). This is unnecessarily costly in term of resource allocation (CCMC production, HAS assessments...).
- The current system is confusing for the standards users.
- UNM wishes to limit the responsibilities of the helpdesks to the customer support only in the future. Until now, the helpdesk responsibilities were subcontracted to UNM. This included the editing work.

Proposal

In the above-mentioned context, CCMC consulted CEN/TC 54 and CEN/TC 267 in November 2020 to evaluate how the system could be improved. A first round of comments was collected and discussed during an Ad-hoc meeting on 7 December 2020 and at the PE/AN plenary meeting of 18 January 2021. Based on the feedback collected and further analysis, CCMC proposed two alternative methodologies. Some unforeseen complications were identified later with one of the two proposals which had to be disregarded.

The following proposal emerged from subsequent discussions held by TC 54, TC 267, the CEN/PE/AN and CCMC

- **Revision cycle and consolidation:**

- The series will be revised every 5 years.
- The revision will consist of a "clean" (without tags) consolidation version of the amendments published during the cycle with parent standards.
- The consolidated versions will be adopted by BT decision.
- The consolidation version will include an Annex Y tracking the modifications from one edition to the next one.

- **Amending the series in between revisions**

- During the first four years following the publication of a new edition, a maximum of one amendment per part and per year may be published.
- There can be no amendment started during the fifth year and until the new edition of the series has been published.
- These amendments will go through the standard development process (New work item registration + CEN Enquiry + Formal Vote + assessments by the PED HAS Consultant).
- Each amendment will be consolidated with the parent standard in accordance with the current CEN publication Rules. Tags will be used to indicate the

modifications introduced in the clauses and/or paragraphs. The consolidated versions will be offered for citation in the OJEU.

- The list of corrected pages (with the addition of short titles for the main modifications) will continue to appear in the dedicated informative Annex Y.

- **Role of the helpdesk**

- The helpdesks will carry on their customer support activities.

The main differences with the current system are:

- (1) The number of amendments is rationalized to a maximum of 4 amendments per parts throughout the 5 years cycle.
- (2) The concept of yearly issues is abandoned.
- (3) The consolidation of the amendments into the parent standards will be done by CCMC in accordance with the current CEN publication Rules.
- (4) The provision of the new edition, to be approved by BT decision, will be under the responsibility of the TC secretariat (instead of the helpdesk).

Transition period

EN 13445: Multiple amendments in development in 2019 were put on hold until the new edition of EN 13445 was published (EN 13445:2021). Out of these amendments, it has been agreed with CEN/TC 54 that

- Amendments which have neither been submitted to FV nor are ready to be submitted to FV should be cancelled.
- All other amendments should be merged into a single amendment per part. These amendments will be (re)submitted for FV by November 2021.

EN 13480: no transition period is needed. The new system will become effective upon publication of the 2022 edition.

PROPOSAL(S)

BT,

- noting
 - Resolution BT C57/2002 setting up the Maintenance agency for EN 13445 'Unfired pressure vessels';
 - Resolution BT 64/2007 granting the EN 13445 series the exceptional authorization to follow an ad hoc process (as summarized in BT N 9598);
 - Resolution BT C47/2012 setting up the same process for EN 13480 'Metallic industrial piping' as for EN 13445;
 - Decision BT C67/2014 confirming to continue applying the ad hoc process to both EN 13445 and EN 13480;
 - the rationale behind a revision of the system as described in the background to this proposal;
- decides that
 - the maintenance system of EN13445 and EN 13480 should be adapted according to the process described in the background to this proposal, meaning that, practically, CEN/TC 54 and CEN/TC 267 will no longer be allowed to develop an unlimited number of amendments;
 - the new system respect the following principles:

Revision cycle and consolidation:

- The series will be revised every 5 years;
- The revision will consist in the consolidation of the amendments published during the cycle with parent standards;
- The consolidated versions will be adopted by BT decision;
- The consolidated version will include an Annex Y tracking the modifications from one edition to the next.

Amending the series between revisions:

- During the first four years following the publication of a new edition, a maximum of one amendment per part and per year may be published;
- No amendment may be started during the fifth year and until the new edition of the series has been published;
- These amendments will go through the standard development process (ENQ+FV) as any other amendment and will be offered for citation in the OJEU;
- Each amendment will be issued as a consolidated version in accordance with the current CEN publication rules.

Role of the helpdesk

- The helpdesks will continue with their customer support activities.
- this system will take affect
 - starting in January 2022 for the EN 13445 series, in order to allow for the backlog of amendments to be published
 - upon publication of the 2022 edition for the EN13480 series.

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