

European Standards for Water Based Fire Fighting Systems



John- Erik Holmli

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Who is CEN ?



European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

- CEN, the European Committee for Standardization, was founded in 1961 by the national standards bodies in the European Economic Community and EFTA countries.
- Now CEN is contributing to the objectives of the European Union and European Economic Area with (voluntary) technical standards which promote free trade, the safety of workers and consumers, environmental protection, exploitation of research and development programmes, and public procurement.
- CEN is a non-profit making technical organization set up under Belgian law. www.cen.eu



Who is CEN ?

The National Standard Bodies of the 27 EU countries and the 3 EFTA countries compose CEN National membership.

The National Members:

- Make up the delegations to the technical committees by finding experts from each country.
- Vote, and implement European Standard as national standards.
- Provide the secretariates for the committees
- Finance more than 50% of the work
- In turn they are largely financed by the industry, sales of standards and government grants.

Who is CEN "



EU Member States

UK, Germany, France, Italy, Sweden etc

EU Member States 2004

Estonia, Latvia, Lithuania etc.

EU Member States 2007

Romania, Bulgaria

EU Candidates

Croatia, Turkey etc

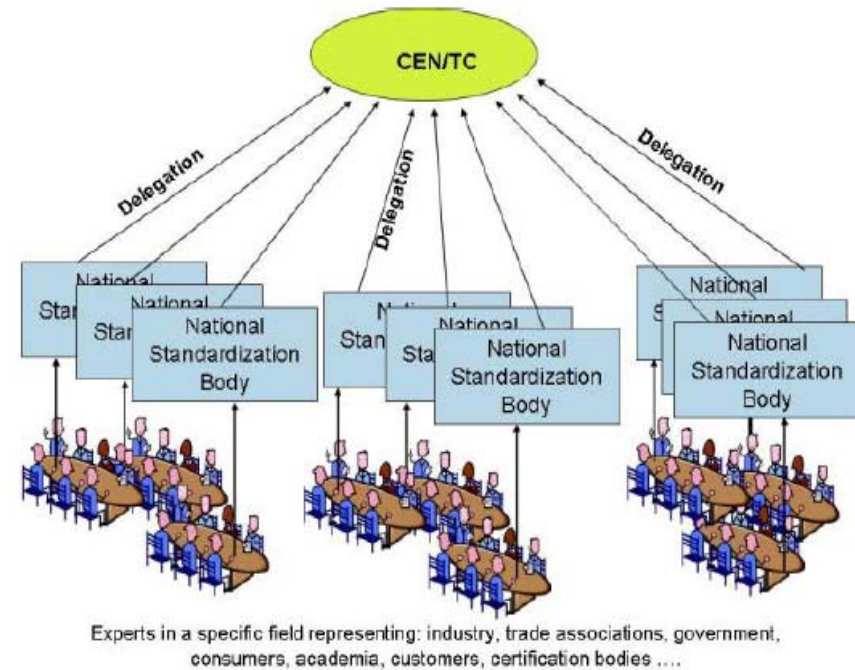
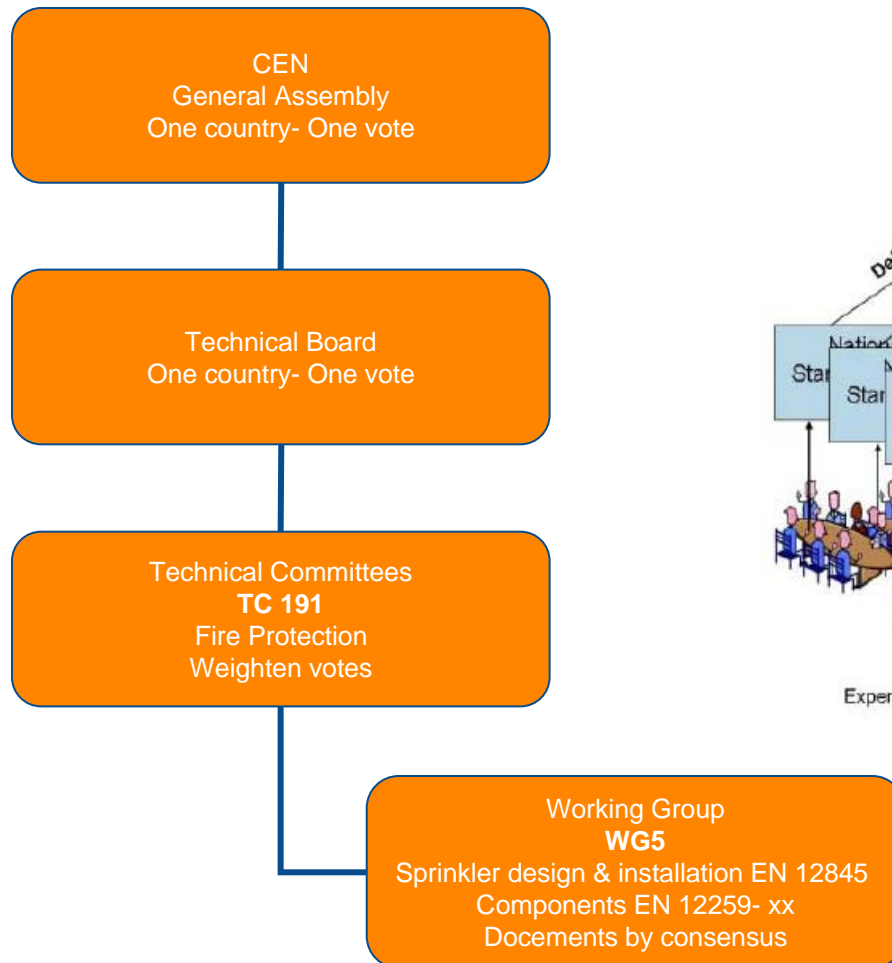
EFTA Member States

Iceland, Norway & Switzerland.

Who is CEN ?

- CEN produces a number of different standards publications.
- All European Standards (**EN**) and drafts (**prEN**), as well as any other approved document (Technical Specifications (**CEN TS**), Technical Reports (**CEN TR**) and CEN Workshop Agreements (CWA), can be obtained from any of our National Members. CEN itself does not sell these publications.
- So far, CEN has published **13.214** publications (end September 2008).

Who is CEN ?



What is a Standard ?

A standard is a document established by consensus and approved by a recognized body containing a series of specifications (requirements) or recommendations in relation to products, systems, processes or services.

Standards can also be used to describe a measurement or test method or to establish a common terminology within a specific sector.

What is a Standard ?

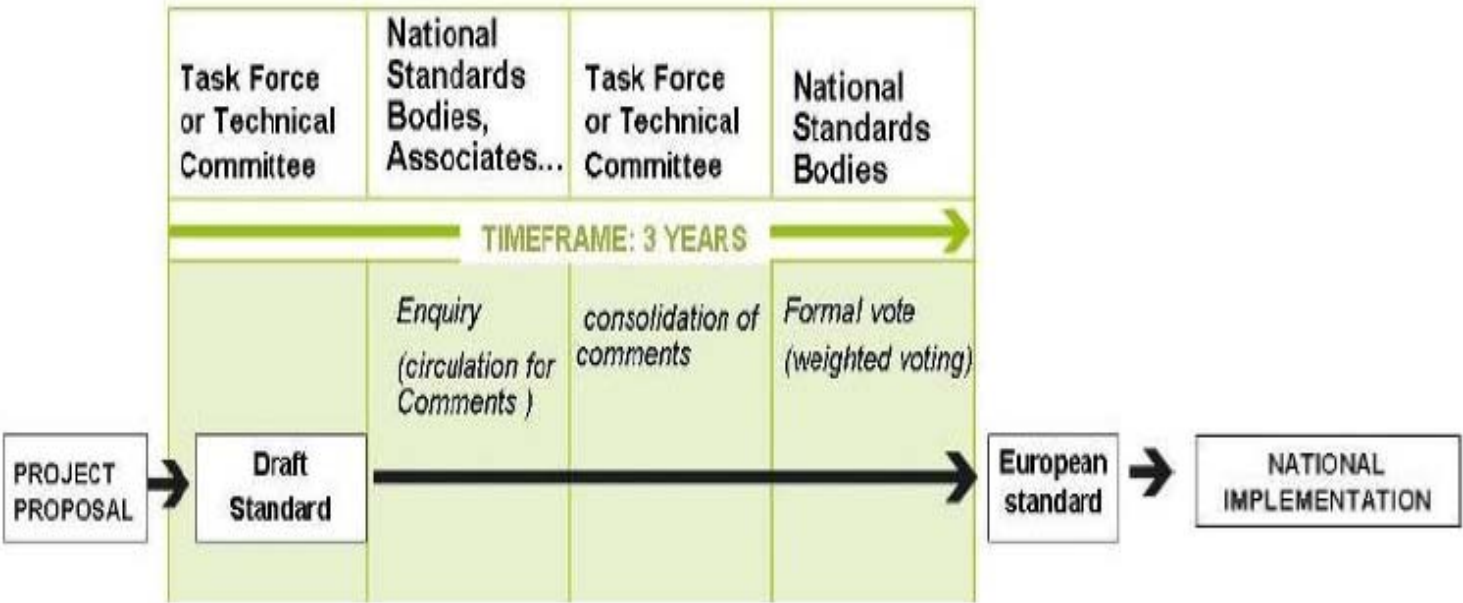
Are standards mandatory?

Standards, unlike legislation, are essentially voluntary in application unless called up into legislation or cited as part of a contract.

Legislation can also refer to a standard as a mean of compliance. This means that compliance with the standard is indicated as a possible way of fulfilling legal requirements. Other ways to comply with the legal requirement may be chosen, but those using the standard have the presumption of being in conformity with legal requirements.

Once ratified by CEN, a European Standard (EN) has to be implemented by CEN members as an identical national standard and any conflicting national standards must be withdrawn. A European standard, therefore, potentially replaces 30 different national standards.

Development of European Standard (EN)



Standards and Technical Specifications

- EN 12259- xx: Sprinkler components
 - 1: Sprinklers
 - 2: Wet alarm valve
 - 3: Dry alarm valve
 - 4: Water Motor Gong
 - 5: Water flow switch
 - 6: Pipe Couplings
 - 7: Pipe Hangers- No standard. Covered by EN 12845.
 - 8: Pressure Switch
 - 9: Deluge valve
 - 10: Open
 - 11: Open
 - 12: Pumps

- EN12845, Design, Installation and Maintenance

Standards and Technical Specifications

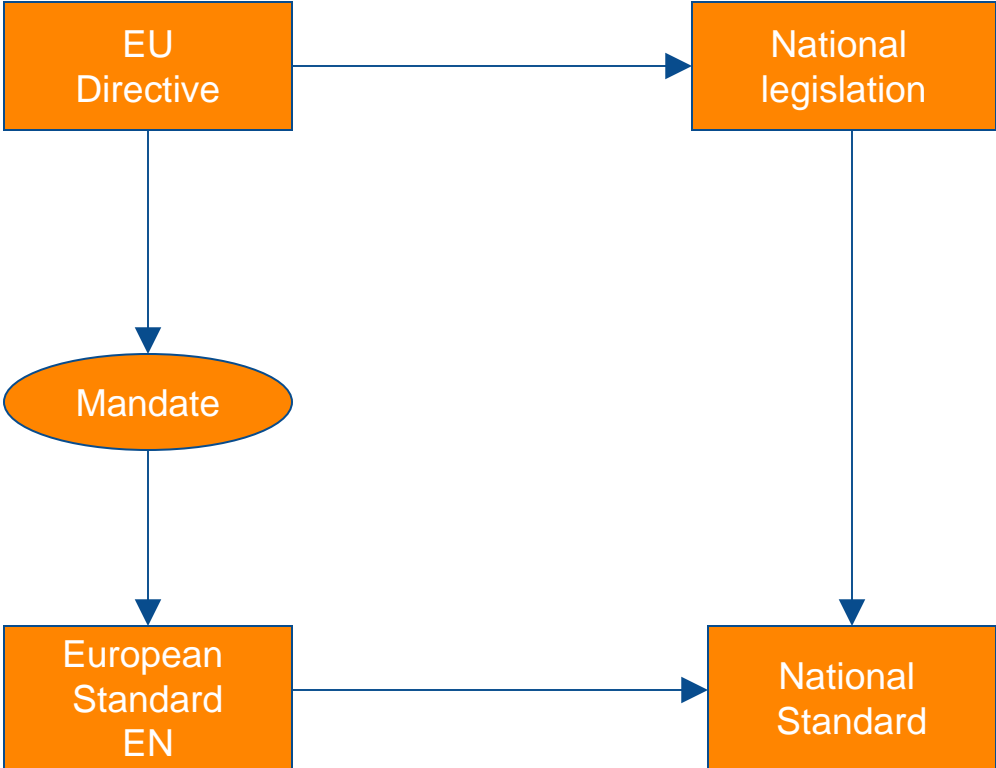
TS 14816: Water Spray Systems
Not a Standard but a TS.

TS 14972: Water Mist Systems
Not a Standard but a TS.

TS lives for 2 x 3 years.

Will be withdrawn if it not becomes a Standard.

EU Directives and harmonized Standards



EU Directives – Annex ZA

- A harmonized Standard will have a Annex ZA which gives the requirements for de CE- marking.
- Annex ZA sets out the regulatory requirements, and transforms all or part of a European product standard into a harmonised European product standard. It does this in two ways: firstly by identifying those clauses of the standard (or referring to clauses in another standard) which cover the essential characteristics in the mandate, and secondly by reproducing the system(s) of attestation of conformity for the product(s) necessary for CE marking. Annex ZA is compulsory for CE marking.

EU Directives – Annex ZA

- - **Clauses of this European Standard addressing the provisions of the EU Construction Products Directive.**
- **ZA.0 Scope of this annex**
- The scope as given in clause 1 is applicable.
- **ZA.1 Relationship between EU Directive and this European Standard**
- This European standard has been prepared under a Mandate given to CEN by the European Commission and the European Free Trade Association.
- The clauses of this European standard shown in this annex meet the requirements of the Mandate given under the EU Construction Products Directive (89/106).
- Compliance with these clauses confers a presumption of fitness of the construction products covered by this European standard for their intended use.

EU Directives – Harmonised Standards

<input type="checkbox"/> EN 12259-1:1999 + A1:2001	EN 12259-1:1999 + A1:2001 - Fixed firefighting systems - Components for sprinkler and water spray systems - Part 1: Sprinklers	01/04/2002	01/09/2005
<input type="checkbox"/> EN 12259-1:1999+A1:01/A2:04	EN 12259-1:1999+A1:01/A2:04 - Fixed firefighting systems components for sprinkler and waterspray systems - Part 1:Sprinklers	01/03/2005	01/03/2006
<input type="checkbox"/> EN 12259-2:1999/A1:2001	EN 12259-2:1999/A1:2001 - Fixed firefighting systems - Components for sprinkler and water spray systems - Part 2: Wet alarm valve assemblies	01/01/2002	01/08/2007
<input type="checkbox"/> EN 12259-2:1999/A2:2005	EN 12259-2:1999/A2:2005 - EN 12259-2:1999/A2:2005 - Fixed firefighting systems - Components for sprinkler and water spray systems - Part 2: Wet alarm valve assemblies	01/09/2006	01/08/2007
<input type="checkbox"/> EN 12259-2:1999/AC:2002	EN 12259-2:1999/AC:2002 - Fixed firefighting systems - Components for sprinkler and water spray systems - Part 2: Wet alarm valve assemblies	01/06/2005	01/06/2005
<input type="checkbox"/> EN 12259-3:2000/A1:2001	EN 12259-3:2000/A1:2001 - Fixed firefighting systems - Components for sprinkler and water spray systems - Part 3: Dry alarm valve assemblies	01/01/2002	01/08/2007
<input type="checkbox"/> EN 12259-3:2000/A2:2005	EN 12259-3:2000/A2:2005 - EN 12259-3:2000/A2:2005 - Fixed firefighting systems - Components for automatic sprinkler and water spray systems - Part 3: Dry alarm valve assemblies	01/09/2006	01/08/2007
<input type="checkbox"/> EN 12259-4:2000/A1:2001	EN 12259-4:2000/A1:2001 - Fixed firefighting systems - Components for sprinkler and water spray systems - Part 4: Water motor alarms	01/01/2002	01/04/2004
<input type="checkbox"/> EN 12259-5:2002	EN 12259-5:2002 - Fixed firefighting systems - Components for sprinkler and water spray systems - Part 5: Water flow detectors	01/07/2003	01/09/2005

What does CE marking mean to me?

..... it depends on who you are and your point of view.

What is CE marking about?

Any product bearing the  mark meets *all* the appropriate provisions of the *relevant* legislation implementing certain European Directives.

CE Marking allows *easy* access to the European Market without adaption or rechecking.

The CE mark...

... as a manufacturer.

- Access to Single European Market
- Free movement of goods across EU
- Acceptability without further test

The CE mark...

... as a user / specifier.

- The product is legal in the EU
- Fire protection equipment is independently verified by expert bodies
- Acceptable without further test

The CE mark...

... as a member state.

- Sets the acceptability criteria for 'safe' products entering the market
- Harmonises all varying national regulations in European Member States, so that the Single Market is encouraged

Why is it a good idea to CE?

- Because the law requires it
- Because the market demands it
- Because a customer expects it

Not much choice if we are to be legal and win business

Any other reasons to CE mark?

- A faster market access time?
- A lower market access cost?
- To get a competitive advantage?

Market access is improved but the advantages only occur if you're first!

What we all know about CE

- Only if product is under a Directive
- Only if a *harmonised standard* exists
- Only if harmonised standard applies
- May involve a *Notified Body*
- It is *not* a *Quality Mark*

Harmonised Standards....

- Listed in the EU Official Journal
- Compiled and revised by CEN
- Can take a very long time to create
- May not keep pace with innovation

Who are the Notified Bodies?

- Organisations who help manufacturers to apply the CE mark.
- 2000 NBs in EU member states.
- Cover all Directives or parts of them.

CE for fire protection...

- Construction Products Directive (CPD)
- *Some* harmonised standards exist
- *Some* harmonised standards apply

If the design of your product is not covered – don't CE mark *but* have to meet National rules.

EN 12845

- **Fixed firefighting systems — Automatic sprinkler systems - Design, installation and maintenance**
- **The document (EN 12845:2004) has been prepared by Technical Committee CEN/TC 191, "Fixed firefighting systems", the secretariat of which is held by BSI.**

EN 12845 - Future changes

- 1st & 2nd amendment approved.
- 3rd amendment required.
- Working on 1st revision which will include Large Drop, Extended Coverage and ESFR sprinklers

EN 12259 - XX

Part 1 – Sprinklers

This standard has been issued and is mandated.

We have already had a corrigendum and 2 amendments incorporated.

More work is now necessary for correction purposes and to include components in use such as ESFR sprinklers. Clauses are being drafted by the Rules Panel for these systems to be included in 12845 and therefore the component work is urgent.

EN 12259 - XX

Part 2- Wet Valves

Part 3 – Dry Valves

These documents have been issued and are mandated.

Amendments have already been incorporated as required by manufacturers. Further work is imminent to consider recommendations from users to correct purported errors.

EN 12259 - XX

Part 4 – Water Motor Alarms

This document has been issued and is mandated.

Part 5 – Water Flow Detectors

This document has been issued and is mandated. An extensive list of recommended changes has been received from a manufacturer and these are awaiting consideration.

EN 12259 - XX

Part 9 - Deluge Valves

Work on this Standard has been proceeding over 5 years, and still continues. After “guidance“ from CEN the document was revised to comply, submitted to enquiry and all responses dealt with. It was then sent to CEN to issue for the final vote. A 42 page document of further corrections needed by CEN was then received. These have been dealt with apart from those recommendations which are causing confusion, and we have asked for a meeting with the Consultant which is due to take place at the next Component Panel meeting.

EN 12259 - xx

Part 10 – Multiple controls

The Components Panel has asked for this document to be withdrawn from the CEN list due to very limited applications.

Part 11 – Medium and High Velocity Watersprayers

The Components Panel has asked for this document to be withdrawn from the CEN list due to a wide range of variables which are manufacturer specific. The system document has been withdrawn as a Standard and is now a Technical Report.

Part 12 - Sprinkler Pumps

A sub-committee of the Components Panel (chaired by John Stephens) has been producing a draft for consideration by the Components Panel. Problems have been encountered relative to clauses and proposed clauses in BS EN 12845 and a discussion between interested parties is to follow the WG5 meeting to attempt resolution.

EN 12845

Amendment 1 and 2 of EN 12 845

These amendments correspond to a number of modifications mainly editorial and correction of mistakes for the first amendment and technical modifications that are necessary to apply properly the EN 12 845, for the second amendment. These amendments include modifications related to the withdrawal of M 109 mandate, annex Z and kit definition.

UAP vote started The 21st of August 2008 and will end the 21st of January 2009. A1 and A2 accepted !

EN 12845

First revision and 3rd amendment EN 12 845

WG5 is currently working on a first revision of the EN 12845 (127 proposal of modifications and improvements). It appears that some urgent modifications are needed. The modification rated priority 1 are now completed (a last check and review is still necessary) and , WG5 would like to have them published before the 1st revision is issued. The first revision would take 2-3 years and our request is to create a new work item for a third amendment.

As an indication target dated could be as follow:

Amendment 3 : mid 2009

Rev 1: 2010 / 2011

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& Building Products*

Thank You !

