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Precaution and Protection**

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Harmonization of Technical Standards in Europe – The Role of Insurance Companies

Joachim Boeke

Contents

- Information about CE, European regulations
- Status of European standards
- CEA specification and organisation
- Role of insurance
- Possible future

Questions

- EC Directives?
 - Pressure Equipment Directive
 - EMC-Directive
 - Construction Products Directive,
 - Low Voltage Directive
- Mandates?
- Harmonization?
- Notified Body?
- Conformity assessment procedure?

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Construction Products Directive



Fixed Fire Protection Systems

- Fire Extinguishing Systems
- Fire Detection and Alarm Systems
- Smoke and Heat Exhaust Systems

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Specific characteristics CPD

- The CPD takes effect only together with **Technical Specifications**, in case of Fire Protection with **Harmonised Standards (hEN)**.
 - ⇒ No large dorp sprinkler
 - ⇒ No ESFR Sprinkler
 - ⇒ No ...
- **Harmonised Standards (hEN)** become laws for CE-Marking of Components / Kits / Systems

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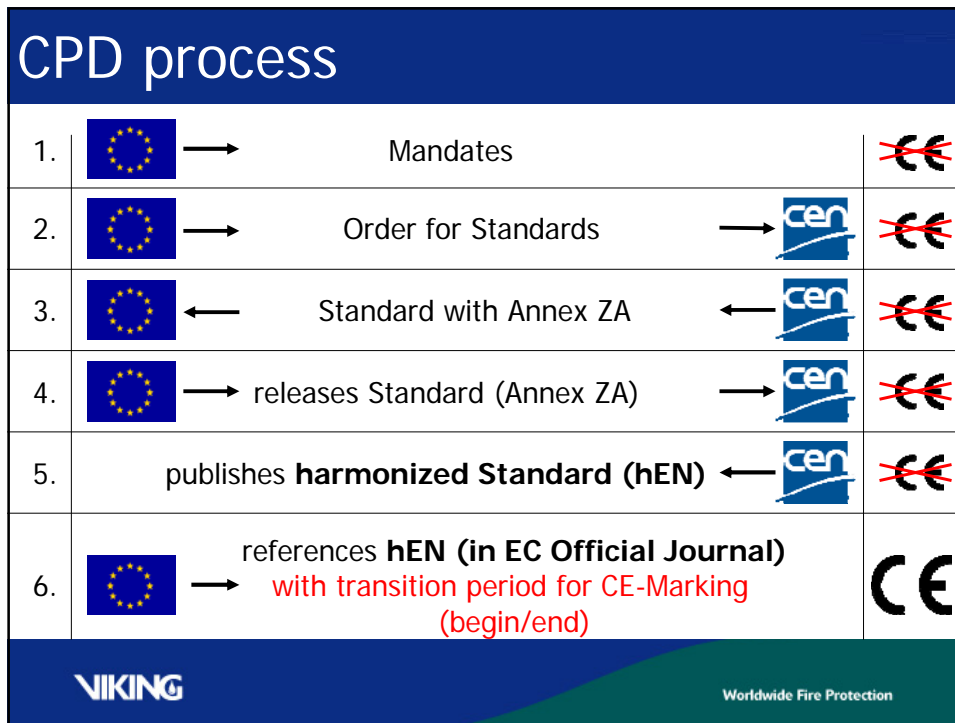
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Harmonisation

- Vision
 - EU shall become a homogeneous economic area
- Aim
 - Equal conditions of competition and free circulation of goods
- Way
 - Same requirements for products in the member states of the EU
- *Economic issues, compromises??*


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Notified bodies

- There are conformity assessment procedures, where the manufacturer has to involve an independent body. Information about CE, European regulations
- Those bodies are approved by the respective member state and the EC is **notified** of this approval (**Notified Body**).
 - ⇒ No common requirements for Notified bodies, Quality?
 - ⇒ Some notified bodies are linked to insurance associations but there is „legally only one CE“


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Conformity assessment

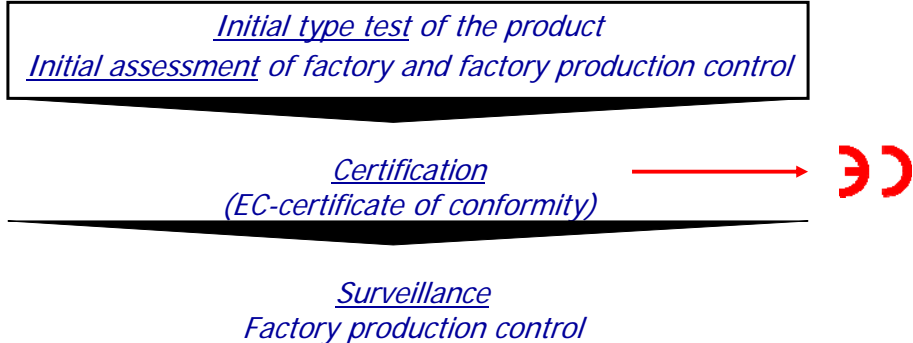
For all products for fire protection systems, the so-called System 1 has to be applied.

In all modules, a Notified Body has to be involved:

Initial type test of the product
Initial assessment of factory and factory production control

Certification
(EC-certificate of conformity)

Surveillance
Factory production control



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Elements of CE Certification

- Before certification:
 - Initial type testing
 - Initial assessment of factory and factory production control (FPC)
- After certification:
 - Surveillance of factory production control
- No product re-testing
Is the product still the same?
Insurance linked approval bodies normally doing product re-testing

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CEA (Comité Européen des Assurances)

- **Mission:**
To resolve issues of strategic interest to all European insurers focusing on the regulatory environment
- **Mission Areas**
 - European Union
 - Insurance and Society
 - Global Opportunities


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CEA Members

<ul style="list-style-type: none"> ➤ Belgium Insurance Association ➤ Swiss Insurance Association ➤ Insurance Association of Cyprus ➤ Czech Insurance Association ➤ German Insurance Industry Association ➤ Danish Insurance Association ➤ Estonian Insurance Association ➤ Spanish Union of Insurance and Reinsurance Companies ➤ Federation of Finnish Insurance Companies ➤ French Federation of Insurance Companies ➤ The British Insurers' European Committee ➤ Association of Insurance Companies-Greece ➤ Association of Hungarian Insurance Companies ➤ The Irish Insurance Federation 	<ul style="list-style-type: none"> ➤ Association of Icelandic Insurance Companies ➤ National Association of Insurance Companies ➤ Liechtensteinischer Versicherungsverband ➤ Lithuanian Insurers Association ➤ Association of Luxembourg Ins. Companies ➤ Latvian Insurers Association ➤ Malta Insurance Association ➤ Dutch Association of Insurers ➤ Norwegian Financial Services Association ➤ Polish Chamber of Insurance ➤ Portuguese Insurance Association ➤ Swedish Insurance Federation ➤ Slovenian Insurance Association ➤ Slovak Insurance Association ➤ Association of Insurance and Reinsurance Companies of Turkey
<ul style="list-style-type: none"> ➤ ASSOCIATE MEMBERS ➤ Association of Bulgarian Insurers (ABZ) ➤ Croatian Insurance Bureau ➤ National Association of Insurance and Reinsurance Companies from Romania (UNRAR) 	


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European Standards

- CEN:
 - Sprinkler, Water spray, Water mist, Gas, Foam
 - Planning and design
 - Harmonised component standards
- CEA:
 - Sprinkler, Gas
 - Planning and design
 - Component standards are the basis for CEN

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European sprinkler standards

- Mid 80 start of European standard work
- 1995 publication of CEA specification
- 1997 Publication CEN draft prEN 12845, technical enquiry
- 1999 CEN final draft EN 12845
- 2000 new CEA specifications (e.g. ESFR)
- 2001 CEN Standard accepted
- 2002 TC 191 asked EU to withdraw the mandate
- 2003 Final version of EN 12845 for publication, German appeal because of formal mistakes
- 2006 Final Version now correct
- 2006 New draft of CEA specification

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Harmonised planning and design??

- Planning, design and maintenance are not harmonised at the moment.
- There is not CE marking of "sprinkler kits" required or possible (even if annex ZA for CE marking is in some published version)
- **The insurer is not forced on European level to use CEN Planning and design standards!!!**
- **Some components need CE marking!**

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„Innovation CEA“

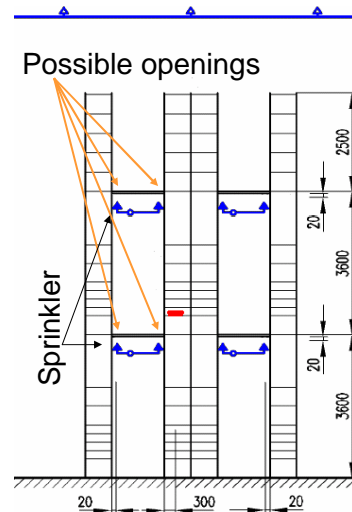
- 2000 Edition:
 - ESFR
 - Movable racks
- New draft (2006)
 - New material classification
 - Technical details
 - Flushing connections
 - Velocity in suction pipe
 - ...
 - Protection of Recycling Plants
 - Special rack protection (based on fire tests)
 - Domestic protection (based on fire tests)

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Concept for special rack protection

- Sprinklers for rack protection
- Ceiling protection
- AFFF foam
- vertical metal sheet barriers



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Role of insurance in CEN

- CEN
- Harmonised standards are a legal question of free trade.
- In the working groups for the design standards "only" one insurer (FM) sends an expert
- Some insurance linked test organisations are present
- Life safety? Property protection?
Example: In EN 12845 no requirements for the water supply except for life safety systems

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What about CEA?

- Results are much faster.
- Insurance driven.
- Because of Eurofeu, problems to involve other experts
- Acceptance inside insurance world?
- Acceptance by industry, end user?
- Less acceptance from the government, they refer to CEN
- The intellectual property of CEA specifications belong to CEA

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Insurers and installed systems?

- Initial requirements are normally defined by building authority: Reference to CEN
- CE marking (if needed) is legally sufficient and required
- If required by the authorities having jurisdiction the system will be inspected by an (private) inspection body
- Insurance engineers have to define requirements early in the process!
- Insurance engineers have to inform inspection bodies early about special requirements!

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Possible future

- Insurers should be more involved in the standard writing process.
However because the number of CEN experts per country is limited participation have to be on national level?
- CEA is fast and can be used by the insurers to set up additional requirements (e.g. CEN as basis + insurance requirement)
- NFPA process: fast and flexibility but too much influence from "lobbyists"?
- CEA should be more open for other experts
- Insurance engineers should also be directly present in CEA
- Differing opinions within insurance industry creates technical problems?!