

Does the CPD Improve Safety in Case of Fire?

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Conference in Luxembourg
17-18 October 2001



Does the CPD Improve Safety in Case of Fire ?



How strong is the combination?

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Does the CPD Improve Safety in Case of Fire??

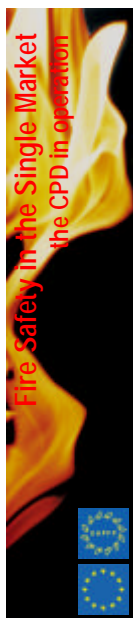
CPD – Objectives?



Level of **SAFETY?**



What kind of **Fires?**

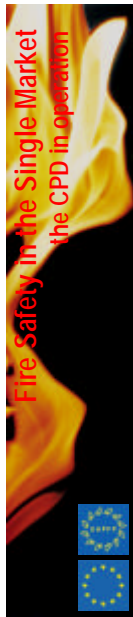


Does the CPD Improve Safety in Case of Fire ?

The CPD objectives Safety in case of Fire

Fundamental Requirements

- * Fire Safety Requirements
- * Fire Safety Strategy
 - Fire Prevention
 - Harmonisation Standards
 - Technical Approvals
- * Fire Safety Engineering



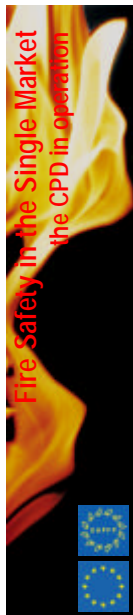
Does the CPD Improve Safety in Case of Fire ?

The CPD objectives Safety in case of Fire

Fundamental Requirements

- * Fire resistance of the building
- * Fire and Smoke development
- * Fire spread to other buildings
- * Evacuation of occupants
- * Safety of fire brigades

! No lower safety level !



Does the CPD Improve Safety in Case of Fire ?

CPD – 6 requirements:

- *stability*
- *fire safety*
- *health, environment*
- *safety in use*
- *noise protection*
- *energy economy*



WHY ? Less importance

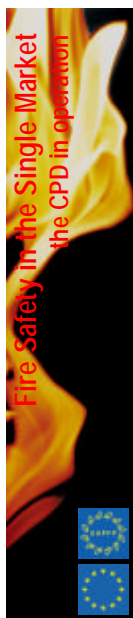


Does the CPD Improve Safety in Case of Fire ?

Safety level



- * **Basic European Safety level?**
- * **Relation with European Fire Statistics**
- * **Improving National Regulations**
- * **Higher Life safety**
- * **Less damage for Environment**
- * **Less Property damages**
- * **Influences on Insurance**

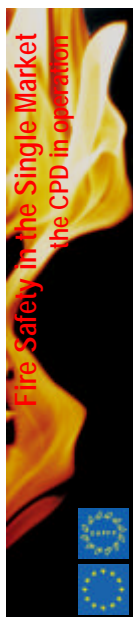


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The CPD - What kind of fires?

Member states decide!

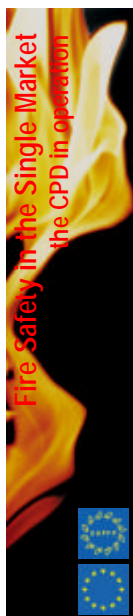
- * **Politicians**
- * **Fire Brigades**
- * **Insurance**
- * **European Consumers**
- * **Scientists**
- * **Building Owners**



Does the CPD Improve Safety in Case of Fire ?

CPD - Objectives ?

- * **What are the advantages??**
- * **Free Trade in the EC?**
- * **Fire Safe Constructions?**
- * **Paperwork?**
- * **Long-term research programmes**
- * **Realistic scenario's**
- * **Certification of products?**



Does the CPD Improve Safety in Case of Fire ?

Are we on the right track ??

After so many years.

What is the result till now.

What are the benefits in future

Who has advantages

Who pays this bill



What was the target,

Do we have the same target now!



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Safety in case of Fire - lessons of fires

Some Examples:

- * **High rise buildings**
- * **Tunnel fires**
- * **Ferryship fires**
- * **Airport fires**
- * **Hotel fires**
- * **Industrial fires**
- * **Explosions**



Does the CPD Improve Safety in Case of Fire ?



Flash-over in 40 seconds.



Does the CPD Improve Safety in Case of Fire ?

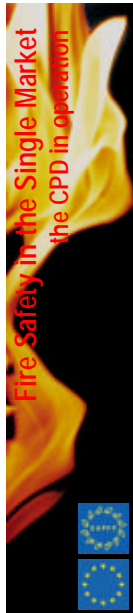


Shipyards fire - fire started in waste on the floor

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Empty Building = No internal Fire load

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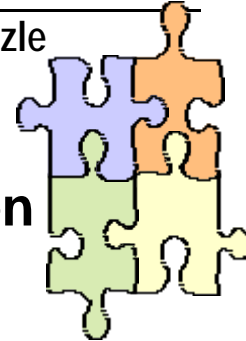


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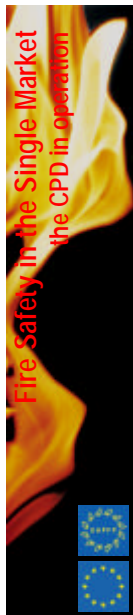
Safety in case of Fire – a complex puzzle

Fire safety design:

- * **Passive Fire Protection**
- * **Active Fire Protection**
- * **Safety Organisation**
- * **Fire Safety Engineering**



The safety-puzzle is complex and can fall in pieces every moment!!



Does the CPD Improve Safety in Case of Fire ?

Improving fire safety

<i>Fire scenario's</i>	<i>worst case</i>
<i>Fire reaction</i>	<i>acceptable</i>
<i>Fire resistance</i>	<i>how long</i>

START = >





Does the CPD Improve Safety in Case of Fire ?

The Building is the start :

- * **Passive Fire Protection is the starting point for safety engineering.**
 - * **Fire protection installations are fit **in and to** the building.**
- But?**
- * **What is the optimal solution.**
 - * **The optimal solution is not always a safe solution.**



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The Tools for Risk assesment !

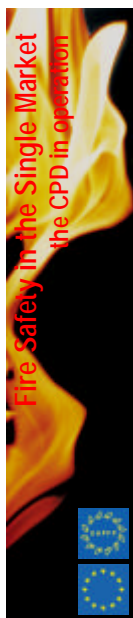
- * **A European safety model based on realistic values.**
- * **A model with all basic assumptions of the passive and active levels.**
- * **A Fire Safety Guideline**



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Why a Safety Guideline ?

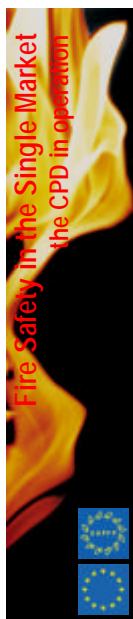
- * **Commercial influences affect the safety-level.**
- * **Un-realistic expectations of fire protection**
- * **Worst-case scenario's instead of optimistic views**
- * **In case of failures which safety level is left?**



Does the CPD Improve Safety in Case of Fire ?

Some examples!

- * **Missing basic building rules in Fire protection rules**
- * **Smoke detectors lower fire resistance**
- * **Calculations programmes mis-used commercially.**
- * **Calculation 40 min.
Practice, building collapse after 12 min.**
- * **ITT of materials in best condition,
in practice not the same level.**



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Advantages for INDUSTRY?

- * Free Trade in the EC?
- * Economical benefits!
- * Less testing?
- * Less Paperwork?
- * Practical solutions!
- * Realistic scenario's
- * Certification of what?
- * Technical approvals



Does the CPD Improve Safety in Case of Fire ?

CONCLUSIONS:

- * The CPD gives some tools for a better fire safety
- * The missing links are a Basic European safety-level
- * Every country gets the fires they deserve.
- * Use the experiences of the real specialists