



**“CONSTRUCTION PRODUCT DIRECTIVE – NEW ENVIRONMENTAL REQUIREMENTS PUT IN A NORDIC PERSPECTIVE”**

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## OUTLINE OF PRESENTATION

- CPD and ER3
- Organization of CEN standardisation work "TC 351"
- Nordic perspective and drivers
- NICE project



## CONSTRUCTIVE PRODUCTS DIRECTIVE - A new approach directive

Concerns construction works under normal conditions of use (buildings, engineering works e.g. bridges)

- ✓ Removal of technical barriers to trade (technical harmonisation, legal framework)
- ✓ Products need to fulfil essential requirement (ER) in order to receive CE-marking
- ✓ CE marking requires common test methods
- ✓ Intended use, not whole lifecycle, accidents etc.



**NOTE! CPD is now under revision!**

## ESSENTIAL REQUIREMENTS (ER) DEFINED IN CPD:

- ER 1 Mechanical resistance and stability
- ER 2 Safety in case of fire
- ER 3 Hygiene, health and the environment**
- ER 4 Safety in use
- ER 5 Protection against noise
- ER 6 Energy economy and heat retention



### **ER3:**

Focus on release of dangerous substances. Work divided in two parts:  
emissions to indoor air

**emissions to soil, ground water and surface water**

## BACKGROUND TO STANDARDISATION WORK IN CEN

- ✓ a mandate to CEN to produce standards (a new TC 351 "Assessment of release of dangerous substances" established in 2006)
- ✓ the scope for ER3 mandate covers "regulated dangerous substances":
  - dangerous substances:
    - refers in the CPD to substances causing a recognised danger to human health and/or the environment, making it relevant to deal with in harmonised European standards (and ETA´s)
  - regulated substances:
    - substances regulated in one or more Member States and notified to Commission
    - regulated by stating limit values

## DANGEROUS SUBSTANCES OF RELEVANCE

- Mandate M 366
  - Heavy metals/trace elements (e.g. cadmium, lead, mercury, nickel, chromium, copper, zinc, cobalt, thallium, vanadium)
  - Sum parameters for organic carbon (such as TOC, DOC).
  - Organic substances or groups of substances, such as benzene, phenols, PAH, PCT, PCB, dioxin, furan, creosote, hydrocarbons, pentachlorophenol.
  - Inorganic substances such as arsenic, chloride, sulphate, fluoride, cyanide,
  - Asbestos.
- Database on existing legislation on restriction of dangerous substances in construction products (e.g. Finland: 2005-735-FIN)
- Other regulations
  - *Water framework directive (Directive 2000/60/EC)*
  - Groundwater Directive (1980/68/EEC),
  - Directive Surface water intended for abstraction of drinking water (75/440/EEC),
  - REACH (Registration, Evaluation, Authorisation and of Chemicals, COM(2003)644)
- EAS (European Acceptance Scheme concerns Construction Products in contact with Drinking Water )

## ORGANIZATION OF STANDARDISATION WORK CEN/TC 351



### TASK GROUPS:

- TG1 Barriers to Trade (Technical report)
- TG 2 & 4 Horizontal testing, use of horizontal test methods (TR)
- TG3 Methodologies for "Without Testing" and "Without further testing" (TR)
- TG5 Complement to sampling (TR)
- TG6 Content (TR)

### WORKING GROUPS:

- WG1 Release into soil and ground/surface water
- WG2 Emission to indoor air

## APPROACH IN STANDARDISATION WORK

### Scenarios:

- Granular products placed on soil
- Monolithic products placed on soil
- Runoff (wet/dry) from monoliths
- Construction debris
- Pipes (e.g. drinking water pipes)
- Monolithic products in water (e.g., coastal works)
- Runoff from metal plates

### Products (examples):

- paint
- plastic products
- cement products
- treated wood
- roof materials
- secondary raw materials (e.g. demolition waste)

Existing CEN-methods  
(e.g. percolation,  
diffusion, compliance test)

(methods selected by Product TC,  
material specific decision  
approved by EOTA)

## WHY PARTICIPATION IMPORTANT?

- To ensure that Nordic construction products conform with coming regulations (product development, choice of materials)
- Growing importance of CE-marking in future in marketing
- CE-marking in future obligatory in Sweden/Finland?
- To prevent and foresee conflicts between different approaches (ER 3, utilisation of by-products, EOW concept)
- To bring up Nordic aspect in applications and utilisation conditions for the conformity assessment of construction products
- To help authorities with background data for national discussions and for establishing national limit values

## A NICE PRE-RESEARCH PROJECT IN 2005 ON NORDIC STATUS:

- ✓ Overview on planned environmental requirements for CE-marking of construction products
- ✓ Project focused on Nordic status (competence), drivers for CE-marking and needs of Nordic stakeholders
- ✓ A workshop was arranged related to the project with invited stakeholders

### Examples of Nordic drivers recognized:

- ✓ Market globalisation, customer awareness and needs, branding, product liability (product producers)
- ✓ Environmental awareness, comparison and choice of products (consumers)
- ✓ Uniform information on products, transparent quality and environmental systems (EPAs)
- ✓ Practical, standardised and harmonised test methods (testing labs)

## Project:

### ”General guidelines for environmental assessment related to CE-marking of construction products – regional requirements and test methods”

**Financier:** Nordic Innovation Centre

#### Partners:

- VTT, Finland (Margareta Wahlström, co-ordinator)
- DHI, Denmark (Ole Hjelmar)
- SGI, Sweden (David Bendz)
- SP, Sweden (Hans Gustafsson)
- Sintef, Norway (Christian Engelsen)
- Linuhönnun, Iceland (Harpa Birgisdottir)

**Timetable:** 16.9.2006-30.6.2008



## OBJECTIVES:



**Focus:** *construction products in contact with soil and/or water and falling under the requirement of testing of release to soil and water*

- ✓ to address applications and environmental conditions for typical construction products in Nordic countries to be taken in testing and interpretation of test results
- ✓ to point out CEN-test methods related to typical applications and to bring up critical aspects in testing by experimental work on construction products
- ✓ to give an approach for interpretation of test results (also taking into account regional aspects, e.g. material requirements, critical exposure routes, climate, characteristics for soil and water)
- ✓ to transfer and exchange information with construction producers, legislators and other relevant stakeholders on relevance of ER3 for Nordic construction products

## OUTCOME

- Handbook (practical guidance “how to proceed if testing required”, target group; construction product producers)
- Background documents for CEN-work
- Project flyer
- Workshop for stakeholders
- Conference presentations
- www-page

