

EU CONSTRUCTION PRODUCTS DIRECTIVE

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Lam Pham

CSIRO Manufacturing & Infrastructure Technology

WHY STUDY EU CONSTRUCTION PRODUCTS DIRECTIVE?

- Example of how performance-based system can be used to promote free trade
- Australia and New Zealand have begun free trade negotiation with ASEAN (our third largest export market after Japan and EU - \$12.3 billion of products and \$5 billion of services)
- EU free trade model could be adopted for use in this region (why reinvent the wheel?)
- Similarity between Australia's position in Asia and the UK position in Europe

The last time Britain went into Europe with any degree of success was on 6 June 1944.

(Daily Express 1980)

CONTENT OF PRESENTATION

- The New Approach
- Construction Products Directive
 - Harmonised Technical Specifications
 - Attestation of Conformity
 - Notified Bodies
 - CE Mark and Products
- Implications

The New Approach

European Community institutions have produced European beets, butter, cheese, wine, veal and even pigs. But they have not produced Europeans.

(Observer, 1980)

The New Approach (common for all products)

- New Approach Directives: mechanism to ensure free movement of goods within EU communities.
- Key elements:
 - Essential Requirements
 - Harmonised Standards
 - CE Marking
 - Choice of conformity assessment procedures

The New Approach Directives (common for all products)

- 21 directives (for CE marking): toys, explosives, lifts, construction, machinery etc.
- 3 directives (not for CE marking): packaging, high speed rail systems, marine equipments
- 'Placing on the market' & 'Putting into service'

Construction Products Directive

- A bit different from other directives
- 'Essential requirements' do not concern 'products' but 'works'
- Do not consider 'putting into service' only 'placing in the market'
- 'Interpretative Documents' to link 'essential requirements' (of works) to product characteristics

Construction Products Directive

- Construction products: any product incorporated in a permanent manner in construction works
- Goal of CPD is to ensure that:
 - only products 'fit for intended use' are 'put on the market'
 - there are no unjustified technical barriers in the free movement of construction products

Construction Products Directive

- 10 Chapters
- 3 Annexes
- 12 Guidance papers
(Details provided in Appendix)

Essential Requirements (Annex I of the CPD)

- Mechanical resistance and stability
- Safety in case of fire
- Hygiene, health and the environment
- Safety in use
- Protection against noise
- Energy economy and heat retention
- (Durability is a precondition – explained in Guidance Paper F)

Harmonised Technical Specifications (Chapter 2 & 3)

- A name for harmonised European product standards (hEN) by CEN or European Technical Approval (ETA) by EOTA (when hEN is not available)
- Purpose: to ensure that test methods and methods for declaration of results will be the same for any Member State – although their values may be different between States

Attestation of Conformity (Chapter 5)

- Degree of third party assessment for conformity – agreed to and decided collectively by the Member States
- Six levels of attestation are used
 - 1+ Product conformity cert. with audit
 - 1 Product conformity cert. without audit
 - 2+ Factory control cert. with cont. surveil.
 - 2 Factory control cert. without cont. surveil.
 - 3 Initial type testing
 - 4 Manufacturer's declaration

Notified Bodies (Guidance Paper A)

- Attestation Bodies: bodies approved by Member States to do designated attestation tasks
- ETA Approval Bodies: bodies designated by Member States to issue European Technical Approval (separate from attestation – if any)

CE MARKING OF PRODUCTS (Guidance Paper D)

- Not a quality mark – only addresses regulatory requirements
- Not necessarily suitable for use - only a 'passport'
- Six levels of attestation
 - Product conformity with/without audit (1+/1)
 - Factory production with/without surveillance (2+/2)
 - Initial type testing (3)
 - Manufacturer's declaration only (4)

CE MARKING INFORMATION (Guidance Paper D)

- Identification number of the notified body
- Identification mark of the producer
- Year in which the marking was affixed
- No of EC certificate of conformity (if appropriate)
- Indications of product characteristics (if appropriate)

EUROCODES (Guidance Paper L)

- 10 subjects covering Basis of Structural Design, Actions, Geotechnics, Earthquake Resistance and structural materials: concrete, steel, composite, timber, masonry and aluminium
- Address Essential Requirements
 - 1 Mechanical Resistance and Stability
 - 2 Fire Safety

EUROCODES (Guidance Paper L)

- Framework for harmonised technical specifications
- Means for demonstrating compliance with national regulations and essential requirements of the CPD
- Nationally Determined Parameter (NDP) – to be listed in the National Annex
- Differentiation of Principles (no alternative) and Application Rules (recommended methods for achieving the Principles)

USE OF EUROCODES IN PRODUCT DESIGN (Guidance Paper L)

- CE marking requires certain properties of product to be declared
- These properties are obtained by:
 - Testing: must take into account assumptions in design according to Eurocodes and NDP
 - Calculation: by means of Eurocodes and NDP

IMPLICATIONS FOR PRACTITIONERS

- CE marking essential for export to EU
- Manufacturers need to know:
 - What technical specifications are applicable to their products
 - Basis for CE marking
 - Which notified body is relevant
 - Performance values required by regulations of the particular country

IMPLICATIONS FOR PRACTITIONERS

- Designers need knowledge of Eurocodes if they practice in Europe or in other countries that have adopted Eurocodes (eg. Singapore)
- Traders of construction products in Australia/NZ and ASEAN: the European model could be used if a free trade zone is established between these nations.

Appendix Construction Products Directive

- 10 Chapters - 3 Annexes – 12 Guidance papers
- Chapter 1: Field of Application – Definitions – Requirements – Technical Specifications – Free movement of goods (Art.1-6)
- Chapter 2: Harmonised Standards (Art.7)
- Chapter 3: Technical Approval (Art.8-11)
- Chapter 4: Interpretive Documents (Art.12)
- Chapter 5: Attestation of Conformity (Art.13-15)

Appendix Construction Products Directive

- Chapter 6: Special procedures (Art.16-17)
- Chapter 7: Approved Bodies (Art.18)
- Chapter 8: Standing Committee(Art.19-20)
- Chapter 9: Safeguard (Art.21)
- Chapter 10: Final provisions (Art.22-24)
- Annex 1: Essential Requirements
- Annex 2: European Technical Approval
- Annex 3: Attestation of Conformity

Appendix Guidance Papers

- A: Notified Bodies
- B: Factory Production Control
- C: Kits and Systems
- D: CE Marking
- E: Levels and Classes
- F: Durability



Appendix Guidance Papers (cont.)

- G: Fire Performance
- H: Dangerous Substances
- I: Article 4(4) of CPD
- J: Transitional Arrangement
- K: Attestation of Conformity
- L: Application and Use of Eurocodes