IMPLEMENTATION OF CEN PROCEDURES: THE CONSTRUCTION PRODUCTS DIRECTIVE

Wolfgang Schulte
Bundesanstalt für Strassenwesen, Germany

Outline

In 1985 the European Economic Community (EEC) European Council decided, among others, a further step on completing the internal market. Following the so-called "New Approach," the Construction Products Directive was developed, which includes requirements relating not only to building safety but also to health, durability, energy economy, protection of the environment, aspects of economy, and other aspects important in the public interest.

These essential requirements provide the basis for the preparation of harmonized standards at the European level for construction products. For that purpose, mandates will be given by the European Council to CEN/CENELEC. It will be explained how the planned cooperation procedure between the European communities and the CEN/CENELEC should be managed for issuing standards.

In the future, a product will be presumed fit for use if it conforms to a harmonized standard, a European technical approval, or a nonharmonized technical specification recognized at the community level.

Finally, there is some information about the required three types of harmonized European standards and the expected mandates in relation to road equipment.

Introduction

For more than 20 years the European states have tried to cooperate with each other. So now we have two alliances: (*a*) since 1958, EEC with the member states Ireland, Great Britain, Denmark, Netherlands, Belgium, Luxembourg, Germany, France, Spain, Portugal, Italy, and Greece; and (*b*) since 1960, the European Federal Free Trade Association (EFTA), now only with the member states Iceland, Norway, Sweden, Finland, Switzerland, and Austria.

In 1985 the EEC European Council decided, among others, a further step on completing the internal market. It states that, within the general policy, particular emphasis will be placed on certain sectors, including construction. That means the removal of technical barriers in the construction field, to the extent that they cannot be removed by mutual recognition of equivalence among all member states. This action should follow the New Approach set out in a council resolution in 1985, which calls for the definition of essential requirements on safety and other aspects that are important for the general well-being.

Construction Products Directive

But up until now, the member states have been responsible for ensuring that building and civil engineering works in their territory are designed and executed in a way that does not endanger the safety of persons, domestic animals, and property, while respecting other essential requirements in the interest of general well-being. Having regarded that situation and the idea of the New Approach, the council directive of 21 December 1988, on the approximation of the laws, regulations, and administrative provisions of the member states relating to construction products (89/106/EEC), abridged Construction Products Directive, was adopted by the 12 EEC member states in the first instance. Meanwhile, the EFTA member states have taken over this directive unchanged.

The basic idea of the Construction Products Directive (CPD) is explained in the following citations from the introduction of that directive:

"Member States have provisions, including requirements, relating not only to building safety but also to health, durability, energy economy, protection of the environment, aspects of economy, and other aspects important in the public interest.

. . . These requirements, which are often the subject of national provisions laid down by laws, regulations, or administrative actions, have a direct influence on the nature of construction product standards, technical approvals, and other technical specifications and provisions which, by their disparity, hinder trade within the Community.

. . . The removal of technical barriers in the construction field calls for the definition of essential requirements . . ." Therefore, the CPD provides the following six essential requirements explained in detail in Interpretative Documents:

- 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

These essential requirements constitute both the general and specific criteria with which the construction works must comply. They are to be understood as required that the said works conform with an appropriate degree of reliability with one, some, or all of these requirements when and where this is laid down in regulations.

Harmonized Standards

The essential requirements provide the basis for the preparation of harmonized standards at the European level for construction products. In that sense, harmonized standards will be established as far as, and as quickly as, possible with the following aims:

- To achieve the greatest possible advantage for a single internal market;
- To afford access to that market for as many manufacturers as possible;
- To ensure the greatest possible degree of market transparency; and
- To create the conditions for a harmonized system of general rules in the construction industry.

In general the European standards are drawn up by the European Committee for Normalization (CEN) and the European Committee for Electrotechnical Standardization (CENELEC), which are recognized as the competent bodies. In principle these standards remain nonmandatory texts. But based on special guidelines for cooperation between EEC and CEN/CENELEC, it is assigned to develop harmonized standards for the purpose of the Construction Products Directive upon a mandate given by the European Council.

Using construction as a basis for harmonized standards and other technical specifications at the European level, and for drawing up or grading European technical approval, requires that interpretative documents be established to give concrete form to the essential requirements at a technical level.

Within that, harmonized standards terms of product performance should be expressed as far as possible. Performance requirements to be fulfilled by products in the future of the member states shall be laid down and shall take account of different levels of essential requirements for certain works and different conditions prevailing in the member states.

Harmonized standards should include classifications that allow construction products that meet the essential requirements and that are produced and used lawfully in accordance with technical traditions warranted by local climatological and other conditions to continue to be placed on the market. These standards may not reduce the existing and justified level of protection in the member states.

A product is presumed fit for use if it conforms to a harmonized standard, a European technical approval, or a nonharmonized technical specification recognized at the community level. Products thus considered fit for use are easily recognizable by the EC mark; there must be allowed free movement and free use for their intended purpose throughout the community.

In the case of products where European standards cannot be produced or foreseen within a reasonable period of time or of products that deviate substantially from a standard, the fitness for use of such products may be proved by recourse to European technical approvals on the basis of common guidelines. The common guidelines for the granting of European technical approvals will be adopted on the basis of the interpretative documents, too.

Developing Mandates

The following will explain how the planned cooperation procedure between the European communities and the CEN/CENELEC should be managed for issuing standards. The procedure follows.

First Stage

For each interpretative document, the European Council prepares some draft provisional mandates with the assistance of the Standing Committee, and the council sends the provisional mandates to CEN.

Second Stage

CEN and the relevant CEN technical committees study the provisional mandates, and propose (*a*) programs of work, including work items, and (*b*) target dates. CEN then sends these elements to the council. The council, assisted by the expert group, examines these proposals and sends back a definitive mandate to CEN.

Third Stage

Before publishing the references of the mandated standards, as harmonized standards in the sense of the

Construction Products Directive, the council will consider if they comply with the mandate.

Member state authorities responsible for national regulations should be able to participate through the national delegations to CEN/CENELEC and present their points of view adequately in all stages of the drafting process.

A European standard based on a mandate and adopted by the council is characterized as harmonized. These harmonized standards are obligatory for all member state authorities. Corresponding to that fact, member states have to choose levels and classes among those fixed at the European level within such standards.

Types of Standards

Finally, they should be given some information about the required three types of harmonized European standards. The types are defined as follows.

Category A

These are fundamental standards related to the design and execution of works and to the basic data of products and are closely linked to the relevant essential requirements; for instance, definition and determination of the acoustic insulation of a wall.

Category Bh

These are intermediate standards related to whole families of products and applied to common characteristics of these product families; for instance, definition and measurement of the impact severity of safety barriers.

Category B

These standards apply to more or less homogenous product families or products and, where applicable, differentiate for intended uses. The standards define the products and spell out their principal characteristics, specific requirements and/or performances related to the essential requirements, the interpretive documents, and, where applicable, the intended uses and related requirement performance levels. Where necessary the standards may include indications of their production process as well as their application.

Signification of Standard Types in Relation to Road Equipment

Relating to the directive mandates respectively, harmonized standards will be established for road equipment as far as this equipment may be characterized as construction products. This term refers to products that are produced for incorporation in a permanent manner in the construction works. This means (*a*) that its removal reduces the performance capabilities of the works or of parts of the works; and (*b*) that the dismantling and the replacement of the product are operations that refer to building and civil engineering activities.

Furthermore, it is sure that there will not be a Category A standard for road equipment. Therefore, it is expected that mandates for Category Bh and Category B will be given for the following:

- Permanent road vehicle restraint systems;
- Road marking materials for permanent and temporary horizontal road signs as far as they are fixed on a road surface;
- Permanent road vertical signs but none for equivalent temporary products;
- Permanently installed traffic control devices;
- Noise protection walls; and
- Other permanent road equipment such as antiglare screens and emergency telephone posts.

IMPLEMENTATION OF U.S. PROCEDURES

Harry W. Taylor
Federal Highway Administration

U.S. Procedures

U.S. acceptance procedures encompass regulatory requirements along with actual practices. Existing U.S. barrier acceptance procedures have slowly evolved in a step-by-step fashion. Like a European castle or palace built over a period of time that has evolved wing by wing, with major overhauls when necessary, the U.S. procedures have developed requirement by requirement in response to a need or problems, becoming more and more formalized as the conditions and the public interest has required it. Since they were not developed at one time, they are based on regulations along with practice. Specific details of this evolution are addressed in TRB Circular 396, May 1992.