IRCC GLOBAL POLICY SUMMIT

ON

PERFORMANCE BASED BUILDING CODES

The role of European technical specifications and their impact on national regulations for building and construction:

The Road towards Harmonization

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INTRODUCTION

I would like to take this opportunity to congratulate the organization of this event for the approach given to the Summit, I think it is a paramount opportunity for all parties involved to exchange information, experiences and ideas. I would also like to thank them for giving me the opportunity to share my knowledge, experiences and ideas with all of you.

Spain, as part of Europe, is undergoing an extremely hectic process which is affecting many agents and and sectors.

However, I shall refer exclusively to the construction sector affected by a set of directives dealing with specific products, including one which deals with most of the construction products: the Construction Products Directive, or CPD.

NEW CONDITIONS FOR TRADE

Roots of the CPD

1 Cassis de Dijon case (European Court of Justice case 120/78).

The Court resolved:

A Products legally manufactured and marketed in one country should, in principle, move freely throughout he Community, where such products meet equivalent levels of protection to those imposed by the MS of exportation and where they are marketed in the territory of the exporting country.

B In the absence of Community measures, MSs are free to legislate in their territory.

C Barriers to trade, which result from differences between national legislations, may only be accepted if national measures:

a) are necessary to satisfy mandatory requirements (such as health, safety, consumer protection and environmental protection);

b) serve a legitimate purpose justifying the breach of the principle of free movement of goods; and

c) can be justified with regard to the legitimate purpose and are proportionate with the aims.

2 New Approach to technical harmonization and standardization (Council Resolution of 1985).

Principles of the Resolution:

A Legislative harmonization is limited to essential requirements that products placed on the Community market must meet, if they are to benefit from free movement within the Community.

B The technical specifications of products meeting the essential requirements set out in the directives are laid down in harmonized standards (and technical approvals in case of the CPD).

C Application of harmonized or other standards remains voluntary, and the manufacturer may always apply other technical specifications to meet the requirements.

D Products manufactured in compliance with harmonized standards (and technical approvals) benefit from a presumption of conformity with the corresponding essential requirements.

3 Global Approach to certification and testing (Council Resolution of 1989)

Principles of the Resolution:

A) A consistent approach is developed in Community legislation by

a) devising modules for the various phases of conformity assessment procedures, and

b) by laying down criteria for

i) the use of these procedures,

ii) the designation of bodies operating these procedures, and

iii) the use of CE marking.

B) The use of European standards relating to quality assurance (EN ISO 9000 series), and to the requirements to be fulfilled by conformity assessment bodies operating quality assurance (EN 45000 series) is generalized.

C) Setting up of accreditation systems and the use of inter-comparison techniques are promoted in MSs and at Community level.

D) Mutual recognition agreements (MRA) concerning testing and certification in the non-regulatory sphere are promoted.

E) The differences of existing quality infrastructures (such as calibration and metrology systems, testing laboratories, certification and inspection bodies, and accreditation bodies) between MSs and between industrial sectors are minimized by programs.

F) International trade between the Community and third countries is promoted by means of mutual recognition agreements, cooperation and technical assistance programs.

The CPD as a New Approach directive

All this new approach and global approach philosophy was applied to a set of directives dealing with all sorts of products and sectors with he aim of eliminating barriers to trade.

The Construction Products Directive is one of them… but with some differences with regard to the basic principles:

1. Essential requirements are set up for buildings and civil engineering works and not for construction products. This special situation required the elaboration of a set of as many interpretative documents as essential requirements in order to establish and define the link between construction works and construction products. Each of these six interpretative documents was elaborated by an ad-hoc technical committee chaired by one of the MS.

2. The set of systems of attestation of conformity differs slightly from the set of modules defined in the global approach as does not refer to such modules and the manufacturer has no freedom to choose from them.

3. Conformity with the principles of the directive has to be assessed via the application of the harmonized technical specifications. The CPD does not allow any other possibility. Thus, the harmonized technical specification becomes compulsory and not voluntary as in the rest of the NA directives.

4 The transitional period (time between approval of the directive and its obligatory application on a specific product) is not fixed for all affected construction products at once but applied to

each product one by one as harmonized technical specifications become available and are applicable.

The CPD, Council Directive: 89/106/EEC, was approved by the European Council on 21 December 1988, notified to Member States on 27 December 1998, published in the OJEC on 11 February 1989 and put into force 30 months after communication. It was amended by Directive 93/68/EEC of 22 July 1993 (OJEC of 30 August 1993).

Its transposition into national legislation is necessary for its implementation in Member States.

Its main objective is the free circulation of products by means of the approximation of laws, regulations and administrative provisions in the Member States.

Its field of application is those construction products intended to be incorporated in a permanent manner in construction works and subject, in at least one Member State, to regulations containing at least one of the essential requirements (see below).

Steps towards harmonized technical specifications

1. The Essential Requirements

The essential requirements (ER) are set as performance requirements for buildings and civil engineering works. They refer to safety, protection of health and protection of the environment. They are six and are as follows:

1 Mechanical resistance and stability

2 Safety in case of fire

3 Health, hygiene and environment

4 Safety in use

5 Protection against noise

6 Energy economy and heat retention

and, as said above, are set up for works and not for products.

2. The Interpretative Documents

In order to set up the set characteristics for construction products having influence on these essential requirements (essential characteristics), six Interpretative Documents (ID) were developed. In these IDs Member States were able to reflect those characteristics which, being in a national regulation, affected one or several ERs. By this effort, the set of six IDs should be understood by the recollection of national regulations on products.

The procedure of preparation of the six IDs was longer in time than expected and they were not published in the OJEC until February 1994. These IDs were subsequently the basis for the preparation of all the standardization mandates.

The IDs are the documents where reference to regulatory classes for construction products is supposed to be made. All other classes not included in the IDs are not to be considered regulatory classes and should not be applied by Member States to put limits to the use of products in their territory.

The only regulatory classes in the ID were the classes for reaction to fire, resistance to fire and roof's external fire performance. The European Commission is participating and taking a final decision on the definition of these classes. This decision is then published in the OJEC.

3. The Mandates to CEN and EOTA

The Commission took the next step and in four more years prepared the major part of mandates to both the European Committee of Standardization (CEN) and the European Organization for Technical Approvals (EOTA). These mandates contained instructions for the preparation of harmonized standards and European technical approvals. In their four annexes the Commission included the scope and the field of application of the mandate

(products and uses covered), the technical terms of reference (definitions and set of characteristics to consider for each product/use couple), the obligatory procedure for the attestation of conformity (as established in the relevant Commission Decision) and the treatment of the requirements on regulated substances.

Each mandate is presented to Member States at several stages of the process where everyone verifies that all regulated characteristics have been included. This is supposed to guarantee that the harmonized technical specifications produced on the basis of these mandates take into account all regulatory aspects of the products concerned.

4. The Decisions of the European Commission

Before each mandate is accepted, the Commission prepares a draft decision, to request Member States opinion, in which the system/s of attestation of conformity for the products covered therein is/are established. This decision is then included in the mandate before its final discussion and published in the OJEC.

The systems of attestation of conformity are the ones suggested in Annex II of the CPD and are known as system 1+ and 1: Certification of the product; systems 2+ and 2: Certification of the factory production control; system 3: Type Certification; and system 4: Product conformity without third party intervention. In all cases, factory production control is carried out by the manufacturer. Systems 1+ and 1 require an EC Certificate of Conformity issued by a third party. All systems require a manufacturer's EC declaration of conformity.

As mentioned above, decisions on the classes for fire are published in the OJEC as such. Before approval for publication, an ad hoc group formed by national fire regulators is the forum where all necessary steps are being taken and the final proposal submitted to Member States and the Commission.

5. The Harmonized Standard

There are two types of harmonized technical specifications in the framework of the CPD: the harmonized standards and the European technical approvals.

The harmonized standard is elaborated by CEN on the basis of a mandate received from the Commission.

It is not published as a separate standard of its own but as part of a European standard: to be precise as one annex – normally designated Annex ZA - containing all the requirements for the CE marking of the relevant product.

6. The European Technical Approval

The European technical approval (ETA) is a document issued by an authorized/notified body (Approval Body) for one manufacturer, for one product, on the basis of an assessment of fitness for its intended (declared) use. This document becomes an ad-hoc one-product/one producer standard. The assessment, consisting in the performance of relevant tests, is based on a Guideline for ETAs prepared by the European Organization for Technical Approvals (EOTA). The ETA, as the harmonized standard, incorporates conditions for the CE marking of the relevant product.

The above mentioned Guideline for ETAs has to incorporate all the requirements laid down in the relevant mandate prepared by the Commission and given to EOTA after consultation to the Standing Committee on Construction and has to give instructions to the bodies issuing ETAs on how to carry out the assessment and present the document. ETAs are normally granted to products for which a standard is not or not yet available, or when a product, having a standard for the family, does not fall under its scope.

There are two types of ETAs, one is the type that relies on the relevant Guideline as described above, and another one is the type called 9.2 ETA. The latter is considered as one exceptional case type: it's issued where the product has neither a standard nor a guideline and when, due to the short number of manufacturers (normally one or two), the elaboration of a Guideline is not justified. In this case, the relevant EOTA body develops a document

called Common Understanding for an Assessment Procedure (CUAP) which has to be approved by EOTA. Finally the ETA is granted on the basis of this CUAP.

The existence of either a harmonized standard or a Guideline makes the CE marking obligatory for the relevant families of products. The existence of a CUAP does not.

By elaborating, approving and making the harmonized technical specifications available, CEN and EOTA are elaborating, approving and making regulatory provisions available. The Administration finds itself with new scenarios for regulations. Manufacturers find themselves with new obligations for placing products on the market. Market Surveillance and Customs authorities find themselves with new references. Professionals, mainly architects and engineers, as well as builders have to realize that the goal posts are moving and that they have to keep close contact with regulations and standards (normally the professionals association will gather and provide all this information adequately "digested").

Implementation of European technical specification

1. Communications of the European Commission

Once a harmonized standard is approved by CEN or a Guideline for ETAs is approved by EOTA, the Commission publishes Communications in the OJEC informing all Members States that the technical specification is available for application and fixing both the date for voluntary application, in coexistence with the existing national standards, of the CE marking requirements and for the obligatory implementation of the CE marking and deletion of any conflicting standards.

Having this information as given, Member States have to subsequently inform all national sectors and agents concerned by publishing a similar document in the national OJ. In a similar manner, regulatory authorities at all levels, have to adapt their regulations in order to eliminate conflicting provisions.

2. Notification of approved bodies

If standardization tasks are assigned by mandates to CEN, CENELEC, ETSI and EOTA, certification tasks are assigned to the so called “Notified Bodies. These notified bodies are those bodies involved in Certification, Inspection and Testing in each Member State which are notified to the Commission in order participate in the Attestation of conformity of products in accordance with the relevant harmonized technical specification.

These bodies are included by the Commission in a list then published in the official web page: “NANDO” created for this purpose. Manufactures may then choose any of the bodies in the list when the intervention of one is necessary.

CE marking

The CE marking of products is intended to identify those products that, under the responsibility of the manufacturer or his authorized representative in the EU, comply with CPD requirements and have been submitted to the system of attestation of conformity prescribed in the relevant Commission’s Decision.

IMPACT OF THIS NEW SYSTEM ON MEMBER STATES

The role of national authorities

For the definitive implementation of the CPD Member States are active both cooperating in the tasks of the European Commission and monitoring progress. These activities are carried out at different levels in different institutions.

1. The European Parliament:

Members of the European Parliament monitor progress of implementation of directives by monitoring the implementation of the Internal Market with regard to different products.

The CPD is going at low speed to its inherent complexity. Although some considerable improvement has been observed, the European Parliament has expressed its concern in several occasions in relation to the absence of a true internal market for construction products.

2. The European Council of Ministers

Directives are European legislation approved by the European Council of Ministers of the relevant sector. Delegations of experts from Member States participate actively in their elaboration. During this process, senior officers of the national Permanent Representations in the European Union take an important role in preparing the drafts for discussion in the Council meetings.

3. Standing Committee on Construction

This Committee is created by article 19 of the CPD. It is responsible for the implementation of the CPD on the basis of the tasks assigned to it: Whenever Member States are to be consulted, or asked for an opinion, etc. regarding whatever aspect of the CPD that requires verification; it is in this Committee where these items are discussed.

National representatives (1 or 2 per Member State) are normally invited by the Commission (the Commission holds the Presidency and the Secretariat of this Committee) and may be accompanied by as many national experts as considered necessary.

4. Implementation of harmonized technical specifications at national level.

Once the European Commission has published the list of harmonized technical specifications with dates of voluntary and compulsory implementation of CE marking, the relevant national authorities publish a similar list indicating additionally which national Notified Bodies are authorized to assist manufacturers in the Attestation of Conformity procedure.

At the same time, regulators at different levels adapt, respecting the existing levels of safety, legal and administrative provisions concerning the products listed therein in order to meet the requirements of the harmonized technical specifications.

5. Safeguard clauses

The directive provides means for Member States and the Commission to act in case of infringement of national provisions on safety.

a) Regarding Harmonized Technical Specifications:

On the one hand, article 15.1 of the construction products directive, gives Member States and the Commission the possibility and the means to react against approved harmonized technical specifications which, in the understanding of national authorities, do not allow maintaining the level of safety guaranteed by existing national ones. Even though approved harmonized technical specifications are supposed to comply with mandated requirements – some Consultants dedicated to the assessment of standards so verify - there are numerous details which may require intervention of authorities before giving a definitive green light to the documents.

It has to be explained that technical specifications are under CEN and EOTA procedures and national authorities may, in some cases, not be satisfactorily represented by national delegates participating in the relevant Technical Committees. And it has to be remembered as well that the Commission has given this regulatory work to CEN and EOTA which may not always share the interests of the national administrations. In any case, when aspects of safety, health and protection of environments are at stake national authorities have the responsibility, and the obligation I would say, to react and avoid the unjustified lowering of existing levels.

The procedure for making use of this safety clause requires the intervention and a report of the Commission and the Member States before removing the harmonized standard or ETA Guideline from the list of those harmonized technical specifications already published in the OJEU and into force.

b) Regarding products with incorrrect CE marking

On the other hand, if during Market Surveillance operations, authorities detect or are informed of incorrect or misleading CE marking of some construction products, article 21 of the CPD offers the possibility and means to react and, if necessary, to withdraw the product from the market or to even destroy it if necessary.

Impact on regulatory authorities.

It is a twofold impact: on the one hand, as regulators for trade and for building and construction and on the other as clients and contractors of public works

In the first case, as regulators, the Administration, responsible for the safety and health of citizens as well as for the protection of the environment, has to adapt/update all the regulatory provisions where the emerging harmonized technical specifications introduce new conditions.

In order to be placed on the market and for incorporation in the works, construction products with harmonized technical specification have to be CE marked. Specifications of those products (classes, minimum or maximum values (levels)) have to be revised when new test methods are required. All this has to be done by the relevant regulatory authorities, at all levels, and may require revision of their codes and by-laws in accordance.

In the second case, public contracts and all the relevant supporting documents have to be revised in order to take account not only of Public Procurement Directive but also of the obligations derived from the different New Approach directives, in particular the CPD.

As mentioned above, the safeguard clause on new harmonized technical specifications is a possibility opened to MS in article 15.1 of the CPD. This is a task imposed on authorities responsible for maintaining levels of safety and the like.

Another obligation on authorities comes from Directive 98/34/CE. This directive requires notification of all sorts of Regulations in elaboration by regulatory authorities in MSs previous to its definitive approval and publication in the national OJ. This task obliges regulatory authorities to make a special effort because all relevant European provisions existing at the time of elaboration of drafts must be taken into account. This procedure of notification to the Commission represents a minimum delay of three months before the definitive document can be published in the national OJ

MSs must also do a follow up of what is happening both in their country and in Europe (the Commission) in order to both retrieve information in the former and to defend national positions in the latter. This is what representatives in the Standing Committees of the directives have to do permanently.

Involvement in the implementation of articles 16 and 17 of the CPD for products under the directive not yet having a harmonized technical specification is assumed as a transitional procedure but requires also some dedication.

The Spanish administration is also concerned about the impact on SMEs, in particular on their ways of doing business at national level. And it is making an effort to support national industry when facing the challenges of the new situations.

Impact on national standardization bodies

Management of standards has changed. National standards are no longer made by a national team of experts and under the control of the national agents. Standards are elaborated by an international team of experts under the control of... those groups who can afford traveling, having employees dedicated to the task and supporting secretariat work: large and strong (mainly multinational) companies and sound standardization bodies (say British, German and French ones). The work at national level consists mainly in making comments to first drafts at the time of Enquiry and voting (weighted votes) the final drafts at

the time of Formal Vote. Once approved standards are translated and published by the national standardization bodies.

Standards are no longer DIN, AF, AENOR, etc but DIN EN, AF EN, AENOR EN, etc. After the Vienna agreement, contact with drafting activity is even more costly and difficult. Standards are then DIN EN ISO, AF EN ISO, AEOR EN ISO, etc. and SMEs find themselves under procedures they can no longer control.

Work of experts is necessarily done in only one language, normally in English. To find standardization experts is not easy as they have to have to have both professional and language skills.

Necessary presence in CEN is an obvious deduction, as in ISO. Those wanting to have a say in standardization have to update both their policy in this regard and their investment in human resources in order to be able to participate.

A side effect of this situation is the fact that the disseminated standardization work of multinational firms in the past may now concentrate their effective although in a decreasing slope.

Compliance with directive 98/34/CE is an obligation imposed on all national and European standardization organizations by which each one is obliged to communicate to the European Commission and the rest of national standardization organizations (via CEN) all standardization initiatives that it plans to undertake. The rest of the standardization bodies may react to this communication as believed necessary.

One important aspect of this directive is the *standstill* required to national standardization bodies once CEN has communicated the beginning of a new standardization work item: all national standardization work regarding the subject covered by that work item must be stopped, although the affected standardization organizations may request for provisional solutions if that stop in work affects the national industry or the previous agreements between the Administration and the national standardization organization.

Impact on Industry

From a quantitative point of view the impact on SMEs is larger than on big enterprises. Most of the new requirements can be satisfactorily fulfilled by large industries without big structural changes whilst SMEs need to introduce new ways which are a great expense compared with the firm's income. Although the directive recommends the application of the less onerous systems consistent with safety, some MSs find that what in most cases is the less onerous system to others it is not a correct level for them to guaranty safety.

Sectors have noticed that the goal-posts are moving and some of them are reacting to most "national adaptations" of European provisions into regulations. In some cases, it is late for such a reaction: everything has been previously decided during the standardization period; in some cases, even before, during the preparation of mandates. in other cases, where it is still possible, the reaction is no longer a national one: some sectors are moving as a European block approaching authorities of most Member States (at least of those where such sector have interests to take care of) so as to "persuade" regulators not to go into a "harmful" direction.

The case of thermal insulation products is a good example. The limiting values of parameters of Euroclasses for reaction to fire are not fully accepted by the sector unless adaptation to each use is previously done.

The adaptation of the new Euroclasses for reaction to fire is taking longer than foreseen: the results obtained for some reaction to fire parameters with the prescribed test method depend greatly on the "mounting and fixing" of the test specimen. This means that a product may be classified differently depending on its declared/intended/final use. In some MSs, moving from previous national classes to Euroclasses alters the classification of some products in a way which is not accepted by national sectorial industry. Pressure is being put on regulators to maintain product's capacity to compete as before.

Impact on importers and authorized representatives of non European producers, etc.

New rules for the game: products must be CE marked and the person putting the product on the market has to assume the responsibilities of the foreign manufacturer. He/she is the person responsible for passing on the information accompanying the product and is accountable for market surveillance inspections.

National standards and certification systems may no longer apply, all these agents must update their knowledge of the market they are interested in.

For compliance with the CPD requirements, manufacturers may apply the harmonized standard partially by taking only into consideration those characteristics which are regulated in the market of the country he/she is interested in.

New markets: once a product is placed in the market of one of the EEA (EU + EFTA) countries, products may circulate freely in the rest. Only one warning: under the CPD, the use of the NPD option represents the closure of some European markets

Impact on Market Surveillance authorities and Customs

Products will have to have in the future the CE marking in order to be placed on the European market or to be the subject of a mutual recognition agreement (MRA). In both cases products are allowed to circulate freely.

Because of all these new approach directives, products will often be accompanied by references to totally new standards: they will no longer be national standards with the national designation system but European standards with new designation and, very often, totally new number. The CE marking represents a way of placing products on the market which is not as friendly as one would like it to be. Market Surveillance and Customs authorities require a lot of new information. It is like starting anew.

The CPD represents a **Special CE marking** as it offers manufacturers the possibility to adapt it to national requirements: characteristics which are not regulated before the coming into force of a harmonized technical specification and the CE marking of the relevant product, may remain so afterwards and manufacturers need not to declare such characteristics in the information accompanying the CE marking. This is known as the “No Performance Determined” option. Market Surveillance authorities must be informed of all these specialties in order to avoid wrong actions against producers or authorized representatives.

Market Surveillance authorities are no longer dealing with the national market as an isolated, independent market, with the new situation they become part of the European Market Surveillance structure. It is very important that cooperation between authorities is guaranteed. Administrative cooperation has become a means to exchange knowledge and information between Member States and to stop products not complying with requirements from being distributed in the European internal market.

Customs have to limit its work, with regard to construction products, to products still not having harmonized technical specification in force (application of articles 16 and 17 of the CPD) or products coming from outside the EEA (EU + EFTA). It has to be highlighted that the internal market for construction products is still not fully implemented.

Impact on consumers

Being the last link in the trading process the consumer has little to say and it is still a little early, I am referring myself to the construction products sector, to verify the impact of the new system on buildings and homes as the number of CE marked products is still small.

IMPACT ON WORLD TRADE

Europe has now a system which opens markets of all Member States at once. This makes things simpler for those who want to trade with any of the Member countries – and those to come in the near future.

However, there are some basic principles that guarantee that such possibility is given a chance. That is, countries wanting to exchange goods with full confidence should find that there exists:

1. Compatibility of approach:

Approaches to product regulation should be compatible, if not identical, at least within defined sectors.

2. Coherence of regulations

Technical requirements (regulations) for specific products should be the same, or recognized as equivalent for the purpose of fulfilling the same regulatory objectives

3. Coherence of standards

Standards, where they have either a regulatory impact or a major market impact, should be the same, or technically equivalent, or at least be recognized as fulfilling the same technical objectives not conflicting with each other. Although entirely voluntary, standards in efect have some prescriptive force because they provide a fundamental reference for market participants.

4. Transparency and impartiality of regulations and standards

Both standards and technical regulations should be transparent and available to those who will use them, be based on recognized international work wherever appropriate, and not be such as to favor the products of one party over those of another.

5. Appropriate level regulation

Technical regulations, and standards with regulatory or quasi-regulatory force, should be only as stringent as is necessary for the achievement of legitimate public policy aims (such as those set out in Art. 95 (3) of the EC Treaty for a high level protection of health, safety, environmental protection and consumer protection), taking account of new scientific developments. The TBT Agreement provides that regulations and standards shall not be more trade-restrictive than necessary to fill a legitimate objective.

6.Transparency and impartiality in obtaining certification

Certificates, where required, must be available by procedures that are the same whatever the nature and nationality of the entity seeking them.

7. Recognition of certificates

Certificates, where required, must be recognized by all authorities impartially as giving access to the market. As a consequence of this, there must be transparency as to the nature of the bodies issuing the certificates and guarantees as to the quality of certificates. Where appropriate (for example, when certificates are granted by independent certification and assessment bodies rather than directly by public authorities), there will be a requirement for agreement on accreditation or other assessment of certification bodies, and on relevant metrology requirements

8. Compatibility of market surveillance

market surveillance procedures – both before and after sale – must work in practice. That is, they should be effective, compatible and impartial, and not favor the products of one entity over those of another.

9. Development of infrastructure

A country must have the capacity and infrastructure necessary to make the relevant systems work, including the capacity for regulation. The necessary certification bodies, standard bodies, laboratories and other facilities must exist and be sufficiently effective.

Imbalance between developed and developing economies may result in barriers to trade, for example where producers in developing economies cannot meet other countries' mores sophisticated product regulations, or where developing countries' governments must rely on

ex ante rules for market access because they do not posses sufficient resources for efective *ex post* market surveillance

The 1996 Commission Communication on “Community external trade policy in the field of standards and conformity assessment, formulates two basic principles:

1. To reduce or prevent the emergence of new standards and conformity assessment barriers for industrial products in other markets;

2. To promote, where possible, the adoption overseas of standards and regulatory approaches based on, or compatible with, international and European practices, in order to improve the market access and competitiveness of European products.