BENEFITS AND DISADVANTAGES OF THE EUROPEAN STANDARDIZATION

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Since the beginning of the European standardization, there has been a global uncertainty about the benefits and disadvantages of this common standardization, and how it will affect the sector.

Taking this into account, some organizations have been created to promote this harmonized standardization, improving the efficiency of standardization, getting a cooperation and cohesion and to show the advantages of working in a single market.

The single Community market is a reality for European Industry and common technical standards have been developed progressively at European rather than national level. It is clear that the output of the European standardization bodies has risen spectacularly because over 800 standards have been adopted in the last six years, three times as many as in the previous twenty years. But the completion of the Internal Market requires the adoption of at least 800 additional standards.

MEANING OF A COMMON STANDARDIZATION

European standardization has led to the cooperation among countries to rise up with agreements on common documents about how to act in different fields.

One of the effects of this harmonization is the reality of a Single Market. This has meaning the elimination of technical barriers to trade. European standardization is also being perceived as a tool by which to obtain the full economic benefits of that market, as well as being a means of eliminating regulatory barriers to trades. European standards are becoming an economic objective their own right.

The new approach to technical harmonization and standardization, which is now the basis of the community technical legislation, refers to voluntary standards as the appropriate method of giving technical expression to the essential requirements of Community Directives. This legislation confines itself to laying down the essential requirements to which products must comply in order to ensure the protection of public health or safety, of the environment or the consumer. European standards are developed respect of each Directive In order to provide manufacturers with a set of technical specifications recognized In the Directive as giving a presumption of conformity to the essential requirements. The European standards concerned, the so-called " harmonized standards, remain voluntary; manufacturers are still able to put on the community market products which either met other standards or no standards at all, subject to fulfilling the procedures for assessment of conformity laid down by the Directive.

The main motive for promoting any standardization activity is economic. The motivation for standardizing products, processes or services at the national level -namely, to reduce costs for producers and to improve transparency of the market for consumers - clearly exists at the European level. Given the current fragmentation of the European market, economic gains is much higher from European standardization than from previous national
standardization. Common European standards reduce research, production and distribution costs for producers, and promote more intensive competition, to the benefit of consumers, in respect of the non-standard features of products.

Harmonized European standards have a prominent role in the opening up of public procurement markets.

BEGINNING OF THE EUROPEAN STANDARDIZATION

Almost 20 years have passed since the beginning of the idea of a European Standardization, and so many investigations, discussions and agreements have been made in between to rise up with the actual reality of the Harmonization of standards.

The process towards the European system has been characterized for the by the following stages:

- Before 1990, every country has its own national standards (BS, CEN, NF, UNE, etc.) to fulfil with the national requirements, so there was a complete range of different methods depending on the country regulation, what was clear for every country but supposed a problem for international manufacturers.
- During 1990-2000, the establishment of the definitive European single market is the starting-up for working on harmonization standards to remove the national systems and get a common way of working with the implication of all European Countries.
- During 2000-2005, after some investigations and discussions, and with the technical cooperation of all European Countries, the final version of several EN standards are developed, this grows up to the development of new EN test methods and EN classification standards, as the EN 13501-series. Some other important documents are produced as extended applications rules (EXAP’s), some product standards, European Technical Approvals (ETAG’s), and so on. Factors that leads to the elimination of trade barriers.
- During 2005-2008: The ending of the transition period requires the acceptance of EN standards at national level, removing all previous national standards related to the same item. But as there are standards under development still, this system will (probably) never be finalized, not on a short period of time.

DISADVANTAGES OF A COMMON STANDARDIZATION

When a big change is made, it always rises up some kind of disadvantages depending of the point of view. The introduction of the Harmonized European Standards is not an exception, and some “cons” are easy to find.

One of the disadvantages of this common standardization is the necessity of updating all national requirements according to them, so that implies an effort from the government on developing a new regulations (i.e: technical code on construction) or improving the existing ones including the new requirements of the standards.

On other hand, the change made on fire standards and fire requirements has supposed the necessity of updating some test devices or the acquisition of new test equipments according
to the new European Standards, with the effort of a big investment from the laboratories involved on this kind of tests.

Related to this, the acquisition of new equipments (most of them quite expensive) has caused, in most of cases, an increase on the prices of tests, compared to the prices set up on national levels, because the new system of testing is more real but more complicated also, and the devices used to reach up a classification are rather sophisticated.

This is other of the disadvantages; the new classification system implies an extra effort on understanding the new parameters for the classification and the new classification itself. It is not easy to understand some kind of classifications, for example, to know what means B-s2,d0 (combustible material, with very limited contribution to fire, with a medium smoke production and no dropping) is simple, but to understand this classification:

**EI 90-V-X-B-W25 TO 60**

May be difficult to know:

- **E**: Integrity
- **I**: Isolation
- **90**: minutes
- **V** (orientation): vertical supporting construction-vertical joint
- **X** (movement capability): no movement
- **B** (type of spices): Both, manufactured and field
- **W**: joint widths range (in mm)

And it shows the difficulty on understanding the whole classification criteria, although, when it is read twice then is easy to understand every symbol of the new classification of products.

**BENEFITS OF THE EUROPEAN STANDARDIZATION**

European testing standards exists for most construction products, i.e. components and systems, and are increasingly applied in all countries of the EU. European Notified bodies such as AFITI-LICOF deliver test and classification reports accordingly to those standards, resulting in a harmonisation of the testing market.

When a harmonized product standard exists, products can be provided with a CE mark, enabling marketing of such products throughout the EU and that means the increasing of trade among countries which is important not only for manufacturers and architects/engineers, but also for the European economy.

For non-CE marked products, the European standards stimulate the use of the results of tests performed in one country, that means the existence of trade barriers, which are taken away using the European standards, because one of the main items of the CE marking is the free circulation of CE marked products on all Europe.
Other important benefit of having a common standardization in the fact of having the same standards for all the countries, including the classification standards which set up the rules about how to classify a product. This is highly important in the field of fire on which there was a terrible confusion about the classification required with the previous “national standards”, because in every country there were different methods to test products and to classify them.

By using the harmonized classification standard, now each person in every country have the same interpretation about the requirements for products and how to test them, and furthermore, because of this common understanding of the classification standards, all the European citizens can understand the national safety levels requirements on different European countries.

One of the main benefits, at the manufacturer’s point of view, is the fact that having this harmonized standards testing a product in one country the CE mark obtained in this country is valid all around Europe, accordingly to the free circulation of products, so it is not necessary to repeat the test in every country which save money to manufacturers.

Before the start of this European harmonization on standards, when a fire occurs in a country, only technicians of the country investigates the reasons of it and the effects of this fire, and it was difficult to ask for experts from other countries because of the different existing methods. Nowadays, the fact of having common standards highly increases technical relationships on fire investigations; due to this Europe is having one of the best safety levels.

Finally, and taking into account previous considerations, it is clearly understanding that having a harmonized standardization system save time and money not only to manufacturers but also to administration, governments and increases highly the European economy.