

STANDARDIZATION IN SUSTAINABLE CONSTRUCTION. NATIONAL AND INTERNATIONAL SCOPES

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ABSTRACT

Sustainable development term and how conscience of its profits contribute to quality of life and development in a country is relatively new, and it is taken into account as an important fact, once stability has been reached in a country in the more essential aspects considered. When that happens, sustainable development becomes one of the main political targets.

Referring to Construction, efforts must be pointed out that are being developed all around the world to improve all aspects that are related within this sector, to start with Standardization Organisms, responsible for tasks such as organization and homogenisation of different standards in order to create a common working environment. There are diverse organisms of standardization at international, European and national scopes and they are classified according to sectors in which their main activities are developed.

"The construction of Europe aimed at the emergence of a single big marketplace as well as the continuous increase in international exchanges have led to the setting up of European and international standardisation bodies in order to offer a common language to the different players of the economy and society" (www.afnor.fr).

This common language is developed by means of standards. Standards must be understood as necessary tools which *"contribute to making the development, manufacturing and supply of products and services more efficient, safer and cleaner"* (www.iso.org). In a wider context, they improve and make easier national and international free trade and provide governments with a technical base for health, safety and environmental legislation. They aid in transferring technology to developing countries. Standards also serve to *"safeguard consumers, and users in general, of products and services - as well as to make their lives simpler"* (www.iso.org).

KEYWORDS: sustainable construction, standardization.

INTRODUCTION

BACKGROUND IN SPAIN

In the last 25 years, Spain has suffered plenty of changes. It had to overcome a time span that had left the country in a precarious development stage, compared with the development of its neighbours of the European continent. Therefore in this period of time political and economical work has been mainly concerned with improving the general situation of the country.

So, sustainable development and the awareness of its profits contribute to the quality of life and improvement in the country is relatively very new, and it is taken into account as an important fact. Once stability has been reached and the more essential aspects of its

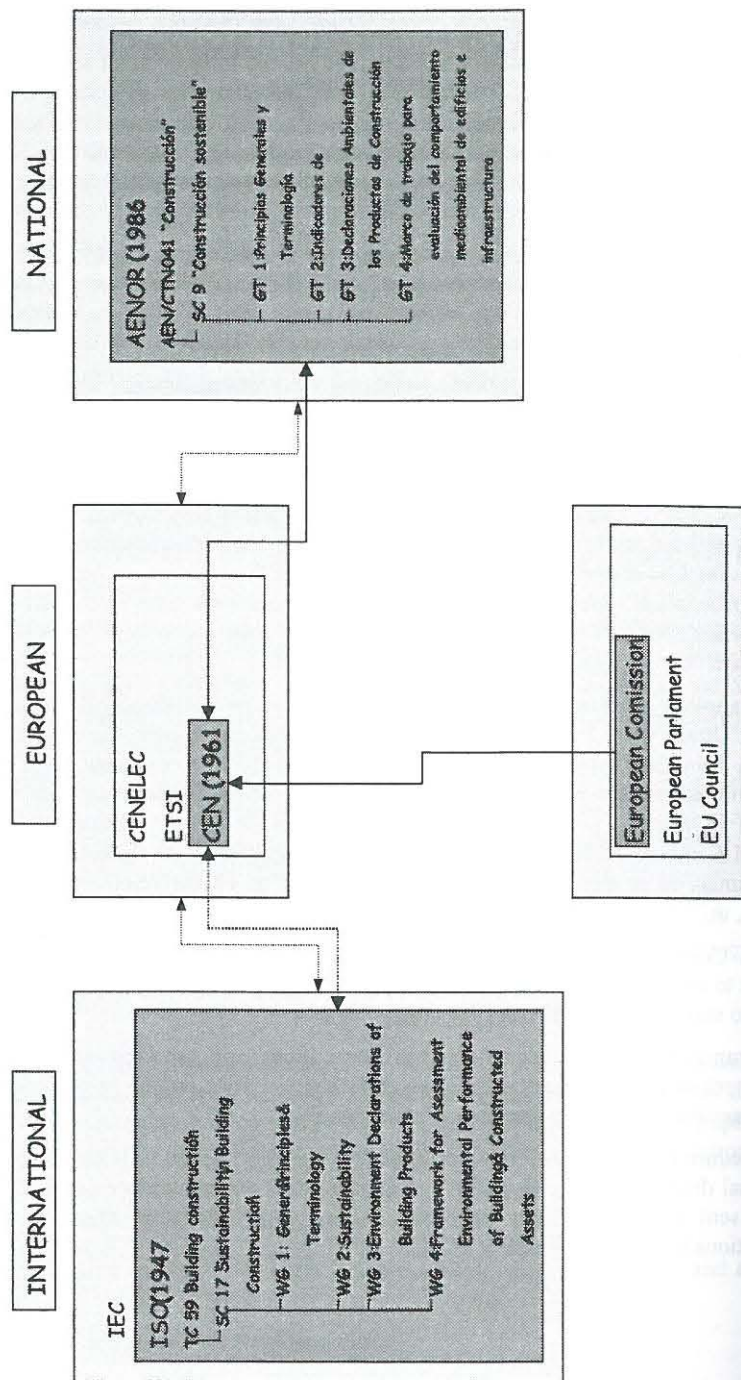


Figure 1. Standardization bodies and their interrelations.

There is a permanent committee for the Construction sector (defined in article 19, Directive 89/106/CEE Construction Products, December 21st), from which the Commission has developed a series of mandates given to CEN which must develop technical standards. At a national level, these mandates are adopted by official bodies (ex. AENOR in Spain), whose committees are responsible of studying, following and adopting these standards.

This permanent committee of construction has also approved a series of guidelines aimed at a better performance of the Directive. It includes, as to say, working group Sustainable Construction TG 4: Whole Life Costing, in charge of developing recommendations and guidelines about life cycle costs, of elements and construction units which will improve sustainability.

It is important to mention the new established working group Integrated Environmental Performance of Buildings CEN/BT WG 174 (in 2004/09/13-14), from Commission mandate, which is about to become a committee.

NOTE. There is also a Working Group Sustainable urban construction, one of the 4 expert working groups established from the EU Expert group urban environment.

Spain

Spanish standardization organization, AENOR, is responsible for the development of Spanish standards (UNE Standards) and the adoption of standards developed by CEN. It was first established in 1986 by a Ministerial order which developed Real Decreto 1614/1985, as the only one recognized body to be in charge of standardization and certification tasks in our country, and ratified in RD 2200/1995, December the 28th (www.aenor.es).

AENOR has adopted the same structure of committee and working groups as ISO a mirror committee in the sustainable construction field. So, Sub-committee SC 9 Sustainable Construction (*Construcción Sostenible*) is part of Technical Committee AEN/CTN-041 Construction (*Construcción*), and it is in turn divided into:

- GT 1: General Principles and Terminology
- GT 2: Sustainability indicators
- GT 3: Environmental Declarations of Building Products
- GT 4: Framework for Assessment of Environmental Performance of Buildings and Constructed Assets

This Subcommittee, recently established (18th February, 2004), is represented by almost every implied agent in the Construction sector (Administration, professional bodies, universities and research centres, manufacturers, related enterprises and user representatives).

Sub-committee AEN/CTN41/SC9 participates by means of its own members in development of ISO and CEN committee projects, and it will be responsible for elaborating future UNE standards about Sustainable Construction.