

BUSINESS PLAN

CEN/TC 124 Timber structures

EXECUTIVE SUMMARY

Business environment

The wood and wood products industry is faced with cyclic demands from other industrial activities, such as construction, packaging and furniture industries. These industries are highly influenced by the evolution of the economical activity, income levels and interest rates. On a more long-term basis the increased focus in the general public opinion on lower energy consumption, sustainable building materials and the wider use of wood and wood based products are of major interest to the woodworking industries involved in CEN/TC124.

Benefits

Main benefits of the work of CEN/TC124 are the followings:

- Standards are expected to remove technical barriers to trade and open markets throughout Europe by leading to the trade of CE marked wood products;
- Standards are answering to relevant safety, health or environmental concerns in the area of European Construction Directive by supporting structural Eurocodes;
- Standards provide input values required by the European structural design standard EN 1995. Approximately 40 European Standards are available for use of timber in structural applications.

Priorities

Preparation and revision of standards for the structural use of timber in buildings, bridges and timber poles:

- including solid timber (round and sawn), glued products (glued laminated timber, laminated veneer lumber, glued laminated solid timber, cross laminated timber), prefabricated elements for roofs, floors and walls including wood based panels and their associated components such as glued joints, mechanical fasteners and connectors;
- covering
 - test methods for the determination of material and component properties, strength and stiffness, tolerances on sizes, density,
 - strength grading and strength classes, evaluation of mechanical properties,
 - essential requirements, specifications on products, testing and control of production.

CEN/TC 124 Business Plan

Date: 2020-01-30

Version: Draft V02

Page: 2

1 BUSINESS ENVIRONMENT OF THE CEN/TC

1.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal, societal and/or international dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this CEN/TC, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards.

CEN TC 124 has since 1989 been working in the framework of the Construction Products Directive (CPD) initially for voluntary European Standards and then for harmonised standards under the mandate M/112 *Structural timber and ancillaries*.

CEN/TC 124 is currently working on and revising supporting standards and harmonised standards in the framework of the Construction Product Regulation (CPR)

Stakeholders

The following major stakeholders can be identified as parties with varied levels of interest in the structural timber area:

a) Industry

Manufacturers and users of structural timber products have a technical and commercial interest in the specifications of harmonized standards and practice-oriented test methods in order to meet regulatory requirements and consumer expectations.

b) Consulting engineers

They have a mainly technical interest in this area linked with calculation by Eurocodes.

c) Community

It is in the general interest of the community that structural works and buildings are carried out in such a way that safety of the individual is best taken care of, both during the construction phase and in the end-use condition.

d) Trade and consumer groups

Standardised test methods and specifications provide a convenient way of regulating the communication between buyers and sellers and clarifying customer expectations.

e) Public authorities

Public authorities have a legislative interest in the area as standards are often linked to the Eurocodes and national building codes in the member states.

1.2 Quantitative Indicators of the Business Environment

The following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of the CEN /TC:

The following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of the CEN /TC 124:

The following informations have been provided by European Confederation of Woodworking Industries (CEI-Bois).

Production

The total production value in the woodworking industries in the European Union (EU) peaked in 2007 with 237 billion EUR. Then, as a result of the global economic crisis, the production value contracted severely up to 2009 to less than 190 billion EUR. Nevertheless it upturned in 2010 and grew further in 2011 by +1.6%, reaching more than 204 billion EUR.

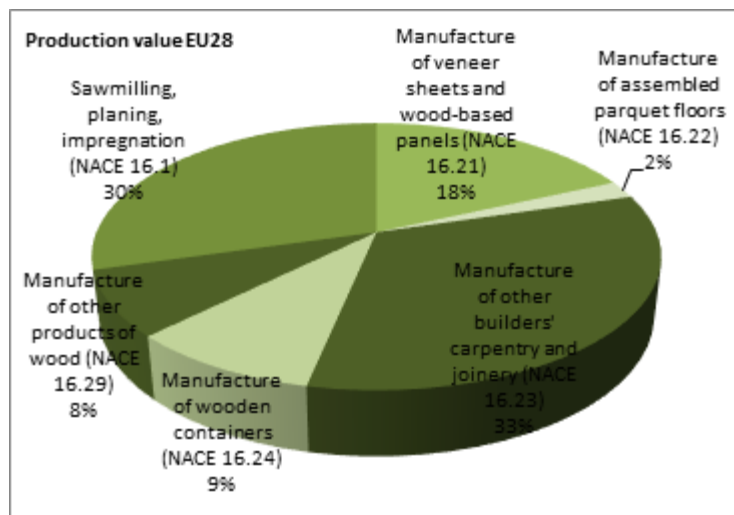
The production value of sawmill products increased the most in 2011 by 7.3% while the value of other woodworking products rose only slightly by 1.5%. Consequently, the woodworking industries stricto-sensu grew by 3%. On the other hand, the production value in the furniture sector remained relatively stable (-0.1%). However, whatever the sector considered, the peak levels of 2007 were still not reached.

Table 1 – Production in the woodworking industry

| Production (excl VAT) | 2007 | 2008 | 2009 | 2010 | 2011 | 2011/ 2007 | 2011/ 2010 |
|--|----------------|----------------|----------------|----------------|----------------|---------------|---------------|
| 16.1 – Sawmilling and planing of wood | 36.642 | 33.070 | 25.858 | 28.990 | 31.095 | -15.1% | 7.3% |
| 16.2 – Manufacture of products of wood, cork, straw and plaiting materials | 87.886 | 91.437 | 74.533 | 80.496 | 81.687 | -7.1% | 1.5% |
| Subtotal 16 | 124.528 | 124.507 | 100.391 | 109.486 | 112.782 | -9.7% | 3.0% |
| 31 Manufacture of furniture | 112.592 | 109.510 | 87.793 | 91.655 | 91.521 | -18.7% | -0.1% |
| Total 16 + 31 | 237.120 | 234.017 | 188.184 | 201.141 | 204.303 | -13.8% | 1.6% |

Source: CEI Bois

Figure 1: Production 2011 – Relative importance of the subsectors



Source: CEI Bois

The relative importance of the woodworking sub-sectors in terms of production remained rather stable in 2011. The share of sawmilling and planing of wood increased from 14% to 15% at the expense of the share of furniture.

After having kept each other in balance, the woodworking industries stricto-sensu are clearly growing at a stronger pace than the furniture industry in recent years. Within the other branches of

CEN/TC 124 Business Plan

Date: 2020-01-30

Version: Draft V02

Page: 4

the woodworking industry, the construction elements sector is consolidating its position as leading subsector.

Employment and number of enterprises

The figures on employment in the woodworking sector provide an indication on the overall employment, although one has to bear in mind that some countries do not take into account firms with less than 20 employees. The global figures tend thus to substantially underestimate the employment in small and medium-sized industrial sectors. Given the SME structure of the woodworking industries, the actual total number of employees in the EU-27 wood industry should be estimated at more than 2.1 million in 2011.

According to the Eurostat data, employment in the woodworking industries declined slightly by 0.3% in 2011, still exceeding the 2 million thresholds. The decrease of employment took place in the furniture sector (-0.7%) while employment remained stable in the woodworking industries *stricto-sensu*. Within the woodworking industries *stricto-sensu*, a slight drop of employment was observed in the sawmill sub-sector (-0.9%).

The relation production value–employment learns that the woodworking industries have been increasing their output significantly without increasing their employment rate. Enhanced competition urged restructuring and forced the companies to increase productivity.

According to Eurostat, the woodworking industries exceeded 314,000 companies in 2011. About 130,000 companies were active in the furniture business. Within the woodworking industries *stricto-sensu*, the sawmill industry accounted for roughly 40,000 companies, while the other subsectors of woodworking products counted some 144,000 companies. Despite improvements, these figures remained underestimations since small companies are not necessarily taken into account according to the Member State reporting. In the furniture and the construction elements sectors, the number of small companies is considerable. Therefore, the real number of firms could be estimated at more than 380,000 companies.

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC 124

- Removal of technical barriers to trade and open markets throughout Europe,
- Using of same specifications for structural timber used in buildings,
- Harmonisation of national standards in Europe,
- Coordination of strength classes allocations for visual and machine graded timber,
- Unified visual grading rules for tropical hardwoods which could provide an example for further work on European hardwoodsSupport European legislation and confer presumption of conformity with Basic Requirements of CPR by developing and revising harmonized standards,
- Increase the use of wood as a high performance material for energy efficient buildings and as one way of reducing Climate Change .

3 PARTICIPATION IN THE CEN/TC

All the CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organizations is also possible under certain conditions. To participate in the activities of this CEN/TC 124, please contact the national standards organization in your country.

Furthermore, CEN/TC124 keeps bilateral contacts with different TCs involved in the area of timber, wood based panels and timber structures and with associated members representing European federations or associations.

4 OBJECTIVES OF THE CEN/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC

Most of Standards regarding solid timber and glued products are available, so the main objectives are:

- To finalize harmonized standards on cross laminated timber, glued laminated timber made from hardwoods and prefabricated elements;
- To revise harmonized standards on structural timber, laminated veneer lumber, trussed rafters made from punched metal plate fasteners and wood poles;
- To revise testing standards being reference standards to the above mentioned harmonised standards;
- To develop a reference standard on choice of adhesive, testing of bonds and minimum production provisions for the production of structural glued products;
- To extend the list of species regarding strength classes assignments,
- To revise ENs if necessary to keep them as close to the market needs as possible,
- Update the standards symbols in order to comply with Eurocodes symbols.

4.2 Identified strategies to achieve the CEN/TC.s defined objectives.

CEN/TC124 as approved a working program for the preparation of standards for the structural use of timber covering solid timber, glued laminated timber, glued solid timber, cross laminated timber and other timber and structural wood based components.

The work items are grouped to product families, which are covered by the different working groups established under the responsibility of the TC.

CEN/TC124 has given the priority to drafting harmonized standards and necessary supporting standards. These standards refer to durability and fire classification made by CEN/TC38 and CEN/TC127, respectively.

Machine strength grading of structural timber is an area which is developing fast. In order to prevent standardization to slow down this trend a fast procedure has been agreed for amendment of relevant standards.

Coordination with CEN/TC 250 SC5 has been sought in order to adopt standards to the future Eurocode 5.

Furthermore, in order to avoid duplication of work and the creation of new technical barriers to trade, liaisons with ISO/TC165 have been established.

4.3 Environmental aspects

Review of the key environmental issues associated with the scope of the work covered by the CEN/TC124:

- natural resources coming from forests answering sustainable forest management;
- emissions into air and leaching in normal use;
- re-using, recycling or energy sources at the end of life;
- carbon cycle and CO₂ saving;
- regulated dangerous substances.

Wood does not emit regulated dangerous substances.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC WORK PROGRAMME

CEN/TC124 has about 45 work items. This has been a big effort, and human resources allocated for the work are now critical with irregular participation by working group members.

It is essential that adequate resources are allocated to the standard drafting work and to the research needed as background information. This is critical in the area of CEN/TC124 where industry is predominantly of small or medium size and has limited expert resources to support the work.

Publication and utilization of candidate harmonized product standards has been heavily affected by the following factors:

- There has been no or late response on answers to the mandates. CEN/TC 124 asks for quicker response and a fixed time schedule for such responses.
- Templates have been changed during the elaboration of candidate harmonized product standards. If a new Template on Annex ZA is introduced within the Formal Vote procedure, this might hinder later publication of the respective standard in the OJEU. Within the CEN rules, changes of the Templates, especially of the Template for Annex ZA, should be taken as editorial changes. This would allow for late adjustments within the Formal Vote process.
- Guidance papers and Templates have not been available or have been issued at a very late stage of the drafting process of the standards. Guidance papers and Templates should be available in due time. Templates should not be changed in short time intervals.
- Some candidate harmonized product standards have been published as EN Standards but have not been cited in the OJEU. They are not binding according to building laws but can be binding according to civil law. The process of publication should be adjusted in a way, that no candidate harmonized product standard is published as an EN, unless it is clear, that it will also be cited in the OJEU. The process for citation within the OJEU could e.g. be

made part of the Formal Vote procedure. The power of Veto might be given to the EU with respect to the citation in the OJEU.

- It is unclear, when a delegated act on classes or threshold is needed. The process of getting a delegated act is very time-consuming. CEN/TC 124 assumes, that a questionnaire on possible barriers to trade by classes or thresholds could be incorporated in the Formal Vote procedure.
- For citation of hENs in the OJEU a transparent procedure with a fixed time schedule is urgently needed.