

University of Belgrade Faculty of Forestry

**QUALITY HARMONIZATION OF WOOD FLOORING
EXPORTED FROM SERBIA WITH REQUIREMENTS OF
THE EU TECHNICAL REGULATIONS IN THE FUNCTION
OF INCREASING THEIR COMPETITIVENESS**

Glavonjić Branko, Nešić Milan, Petrović Slavica, Sretenović Predrag

Šibenik, 7-9.10.2009

The New Approach Directives

- adequate **legal enactments and regulations** which refer to their products:
 - quality requirements and
 - health and safety requirements.

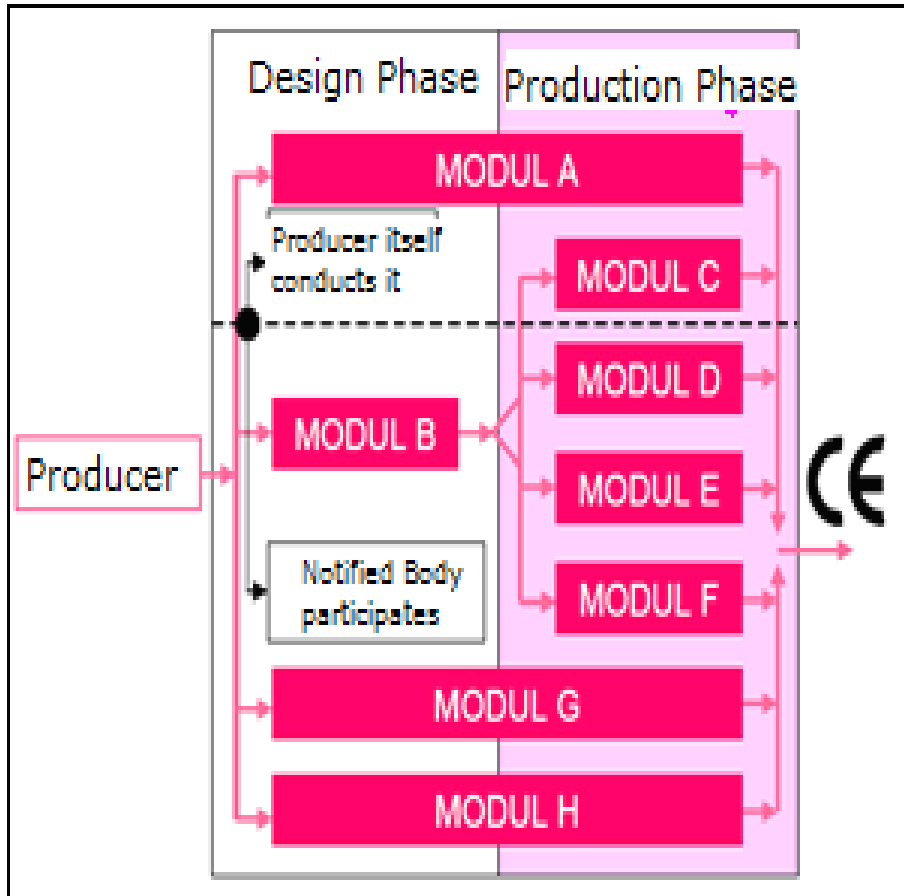
(The New Approach Directives – **essential health and safety requirements**):

Directives are written documents which regulate the public interest of people's health and safety, protection of consumers, business transactions and environment.

- essential requirements require high level of people and environment health and safety protection during usage of products;
- they are obligatory and therefore only the product which fulfills essential requirements can be placed, traded and used on the EU market;

The New Approach Directives do not specify or anticipate technical solutions of products for achieving essential health and safety requirements;

- the New Approach Directives allow the producers to select adequate technical solutions and technology in order to fulfill essential requirements.



Picture 1. Simplified diagram of the flow of product conformity assessment procedures

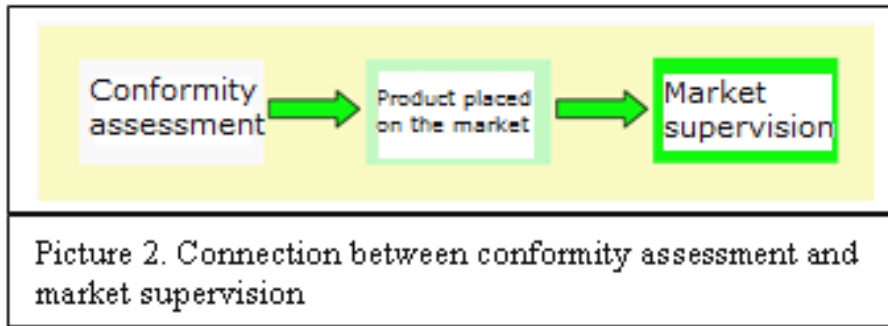
Eight modules for conformity assessment (from the simple ones which allow the producer to perform interior checks and make the Declaration of Conformity itself to extremely complex checks of each product element performed by a notified control organization).

The conformity assessment includes:

- Product design phase,
- Production phase,
- Or both phases and some of the modules require intervention of a notified body.

Depending on the risk, adequate model for conformity assessment is determined for each product.

Controlling



conformity assessment is done **before** product placement on the market, while market supervision is done **after** product placement on the market.

Product conformity with the New Approach Directives is checked by:

- **Producers** (before placing the product on the market),
- **Customs officers** (upon entrance of a product with non EU origin),
- **Bodies for market supervision** (after placing the product on the market) and
- **Judiciary** (when an incident occurs).

Pursuant to the Directive 89/106/EEC, essential requirements which construction products, and thus wood flooring as a part of these products, have to comply with are the following:

- Mechanical strength and stability,
 - Safety in case of fire,
- Hygiene, health and environment,
 - Safe for usage,
- Noise protection and energy saving and
 - Heat retention.

Procedure for Affixing CE Mark on Wood Flooring

In order to affix CE mark on wood flooring it is necessary to conduct adequate procedure which consists of the following steps:

- 1) Determining which **directive** (or directives) refers to a certain product (wood flooring - Directive 89/106/EEC);
- 2) Determining the **conformity assessment procedure** which should be applied;
- 3) Determining the list of **harmonized European standards** for a certain product;
- 4) Check if the product is **in accordance with the requirements** of the directive;
- 5) Determine if it is necessary for an **independent third party** to assess conformity. This is stated in the directive itself and depends on the product type;
- 6) Prepare **technical documentation**;
- 7) Prepare **Declarations of Conformity** and the necessary documentation which proves that;
- 8) Check if the country on to whose market a product is placed has certain **additional requirements** (national standards, marking or packaging);
- 9) Affixing **CE mark** on a product and/or package and documentation.

CE marking

CE mark is an administrative mark (“**passport**”) and it shows that a product:

- Is designed and produced in accordance with essential health and safety requirements of all relevant directives,
- Was subject of adequate conformity assessment procedures in accordance with all applicable directives.

CE mark:

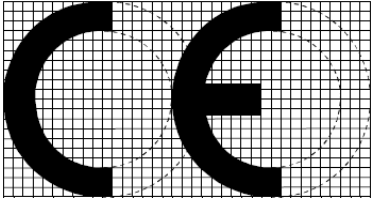
- Is obligatory for products included in New Approach Directives,
- Has to be affixed by the producer or its authorized representative-importer,
- Is directed towards institutions of **market supervision** system,
- **Is not a quality mark,**
- **Is not a mark of origin,**
- Has to be affixed on the product/package/ and accompanying documents,
- Has to be visible, readable, indelible,
- Cannot be combined with quality marks,
- Has to be affixed after obtaining EC Declaration of Conformity.

Essential characteristics tested in wood flooring pursuant to the clauses of EN 14342 Standard as the basis for conducting the procedure of CE marking

Essential characteristics	Requirement clauses in this standard (EN 14342)	Mandated classes	Notes
Reaction to fire	4.2 and 5.1	Classes A1fl to Ffl	According to EN 13501-1 or Table 1
Emission (release) of formaldehyde	4.2 and 5.2	-	Class E1 or E2 according to Annex A
Emission (content) of pentachlorophenol	4.2 and 5.3	-	No indication if PCP \leq 5 ppm and "PCP > 5 ppm" in all other cases
Breaking strength*	4.2 and 5.4	-	Max load (in kN) (and span distance(in mm))
Slipperiness	4.2 and 5.5	-	Value determined according to CEN/TS 15676
Thermal conductivity	4.2 and 5.6	-	Value (in W/m K) determined according to EN 12664 or taken from Table 2
Durability (biological)	4.3	-	Class according to EN 335-1 and EN 335-2
*Applies only for self-supporting floorings.			

When full conformity of the tested wood flooring with the conditions from the tables of EN 14342 standard is achieved, certification body should make a Declaration of Conformity, which entitles the producer to affix CE mark on its product.

Before the act of affixing CE mark on the product, the producer has to make a declaration with all information relevant for CE marking.

		CE conformity marking, consisting of the "CE" symbol given in Directive 93/68/EEC.
Neko Co Ltd. 08		Name or identifying mark and registered address of the manufacturer. Last two digits of the year in which the marking was affixed.
EN 14342:2005+A1 Solid parquet strip with tongues and grooves, to be nailed		Number of this European Standard Description of product and intended use
Reaction to fire linked with the minimum mean density and the minimum overall thickness	C _{fl} -s1 500 kg/m ³ 20 mm	Information on regulated characteristics.
Emission of (release) formaldehyde	E1	
Emission of pentachlorophenol	> 5 ppm	
Breaking strength (max. load) and span	200 N and 400mm	
Slipperiness	USRV 100	
Thermal conductivity	0,17 W/m K	
Biological durability	Class 1	

Current situation regarding the obligation to affix CE mark for wood flooring in the European Union is such that in the last two years it has been postponed for the third time and the new starting date for its implementation is March 1, 2010. Until then, all producers, exporters, distributors or agents dealing with wood flooring production or trade have to finish all necessary preparations in order to be ready on the mentioned date.

There are no producers in Serbia who use CE mark on their products. Additional problem is insufficient equipment and thus the impossibility of accreditation for issuing attestations and certificates by the existing control organizations (laboratories).