Final countdown for CPR cable classification - View from a notified body

Christian CORNELISSEN

1 VDE Testing and Certification Institute, Offenbach, Germany, christian.cornelissen@vde.com

In July 2013, the new European Construction Products Regulation 305/2011 (CPR) came finally into force. But for cables, the application of CPR rules is still not possible, because there are still no harmonized standards based on mandate M443 of the European Commission (situation in 11/2014).

Cenelec worked on the appropriate standard and finally issued 2014 the EN 50575, which describes the process of conformity assessment and the demands on internal production assessment, but also a lot of other aspects like the assignment of each fire class with the appropriate test standards. Furthermore, in 2014, CEN issued the EN 13501-6 standard, describing threshold values to be reached in the different tests for obtaining a certain fire class.

Nevertheless, at the end of 2014, the publication (and therefore harmonization) of these standards in the Official Journal of the European Union has not taken place, but is expected to happen in 2015. Before this publication, the CPR cannot be applied for cables, meaning that the different obligations on cable manufacturers like providing a Declaration of Performance (DoP) and therefor applying a *System of Assessment/Verification of Constancy of Performance* (assessment systems) are not active.

The different existing assessment systems are described in Annex V of the CPR. Figure 1 shows a simplified overview of obligations on manufacturers and so-called Notified Bodies for the systems "1+" and "3", which are relevant for cables.

System 1+ For fire classes A, B1, B2, C	
Manufacturer	Notified Body
	Type Testing
Sample Testing	Sample Testing
Factory production control	Initial inspection of manufacturing plant and of factory production control
	Continuous inspection of factory production control

System 3	For fire classes D, E
Manufacturer	Notified Body
	Type Testing
Factory production control	

Fig. 1: Systems of Assessment/Verification of Constancy of Performance

The obligations on the Notified Bodies shown in Figure 1 call for a close cooperation between Notified Bodies and manufacturers, since in practice, a lot of detail aspects have to be considered for testing, inspection and certification. On the other hand, Notified Bodies have to be impartial, neutral and independent from the manufacturer. These and also all other requirements for Notified Bodies are given in article 43 and following of the CPR.

After an overview of the actual status of CPR for cables, the paper will give a short introduction into the demands on a Notified Body and their realization in practice. The main part will relate to the above mentioned detail aspects during testing, inspection and certification, including some input from the SH02-WG10, the relevant working group for cables within the *Group of Notified Bodies*. It will cover for example information concerning

- EXAP rules for power and communication cables
- Use of manufacturer's test facilities
- Process of conformity assessment
- Rules for continuous surveillance / factory inspection