GUIDANCE NOTE

CONSTRUCTION PRODUCTS REGULATION

Nexans

BRINGS ENERGY TO LIFE

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PART 1

CONSTRUCTION PRODUCTS REGULATION

CONSTRUCTION PRODUCTS REGULATION
A. SCOPE

The Construction Products Regulation n° 305/2011 (CPR) is intended to ensure the free circulation of Construction Products in the EU removing trade barriers created by technical specification. This is achieved by providing a **«common technical language»**, offering uniform assessment methods for the performance of construction products throughout the European Economic Area.

These assessment methods are compiled in harmonised technical specifications. This common technical language is to be applied by all stakeholders in the construction industry:

1. the **regulatory authorities of Member States** and **incumbent Operators** (as per Article 8(5) of CPR) when specifying requirements for construction works,
2. the **manufacturers** when declaring the performance of their products,
3. **the distributors when making the products available to their customers**,
4. the **users** (architects, engineers, contractors, etc.) when choosing the products that are best suited for their intended use in construction works.

Cables concerned by the regulation are **power, control and communication cables** intended to be **permanently installed in buildings** and other civil engineering works subject to **reaction to fire requirements.**

The cable characteristics included under the CPR are:

- **reaction to fire:** this refers to cables of all types used in construction works with requirements for reaction to fire - meaning flame spread/propagation, heat release, smoke production and emission of acid/corrosive gases, and restriction on flaming droplets
- **release of dangerous substances:** both European (see EU Regulation n° 1907/2006 REACH) and National Regulations on substances will apply

Note that at this point the harmonised standard for fire resistant cables is still under development. This means that they are not yet subject to the CPR requirements and that their entire fire behaviour (fire reaction and fire resistance) is still to be assessed against the current national standards.

Once the cable performances are assessed, the manufacturer draws up a **«Declaration of Performance (DoP)»** and can affix the **CE mark** to the product.

CONSTRUCTION PRODUCTS REGULATION
B. CABLE PERFORMANCES: REACTION TO FIRE

For the reaction to fire performance of cables, Decision 2006/751/EC sets forth 7 different performance classes called "Reaction-to-fire performance classes for electric cables" (Euroclasses). As these classes are specific for cables, they are specified with the «ca» subscript and are not to be confused with the classification for other construction products.

The Euroclass Table defines seven classes (A_{ca}, $B1_{ca}$, $B2_{ca}$, C_{ca}, D_{ca}, E_{ca} and F_{ca}) based on their fire reaction, such as heat release and flame spread/propagation.

In this classification, heat release and flame spread/propagation are the main classification criteria, but a series of additional criteria is also defined. Those additional criteria apply only to classes $B1_{ca}$, $B2_{ca}$, C_{ca} and D_{ca} and they regard:

- s : smoke production from s1a (visibility better than 80%) to s3 (very low visibility)
- d : flaming droplets from d0 (no flaming droplets) to d2 (no requirements)
- a : acidity of emissions from a1 (very low corrosivity) to a3 (no requirements)

The additional criteria «smoke» and «acidity» focus on the quality of emissions during fire which are critical for a safe escape.

The smoke classes s1a and s1b reflect requirements that have been in use for a long time in Europe. The acidity classes do also have a background in long traditions.

Performance: + A B C D E F −

CABLE TYPES	EURO-CLASS	CRITERIA	ADDITIONAL CRITERIA
No contribution to fire	**A_{ca}**	Non combustible	
For future developments	**$B1_{ca}$**	Very low propagation	Smoke production (s1, s1a, s1b, s2, s3) Acidity (a1, a2, a3) Flaming droplets (d0, d1, d2)
Low Fire Hazard cables	**$B2_{ca}$**	Very low fire propagation Very low heat release Low flame propagation	
	C_{ca}	Low fire propagation Low heat release Low flame propagation	
Standard cables	**D_{ca}**	Moderate heat release Low flame propagation	
	E_{ca}	Low flame propagation (only)	
	F_{ca}	Don't even meet the requirement of Class E_{ca}	

CONSTRUCTION PRODUCTS REGULATION
C. ASSESSMENT OF PERFORMANCES: AVCP SYSTEMS

The CPR imposes a continuous control of the declared performances. The better the cable has to perform under fire conditions, the more critical it is to be sure of the conformity of the product. The control system will be thus more rigorous and more extensive, with the mandatory involvement of a third party, the so-called Notified Body. For cables, three systems can apply: System1+, System 3 and System 4 (see table) - the System 1+ being the most severe :

- System 1+ includes initial type testing and continuous surveillance including audit testing of samples by third party certification body, and factory production control by the notified body.
- System 3 includes initial type testing by third party laboratory and factory production by the manufacturer.
- System 4 includes initial type testing and factory production control by the manufacturer.

EUROCLASS	AVCP (assessment and verification of constancy of performance) Tasks of 3rd party
A_{ca}	
$B1_{ca}$	SYSTEM 1+ PRODUCT CERTIFICATION BODY
$B2_{ca}$	
C_{ca}	
D_{ca}	SYSTEM 3
E_{ca}	
F_{ca}	SYSTEM 4

1 — 3 — 4 — more rigorous control +

AVCP systems remove any ambiguity in product performances declared in DoPs (see further) so that end users can be certain that their products meet set standards.

PART 2

LEGAL REQUIREMENTS

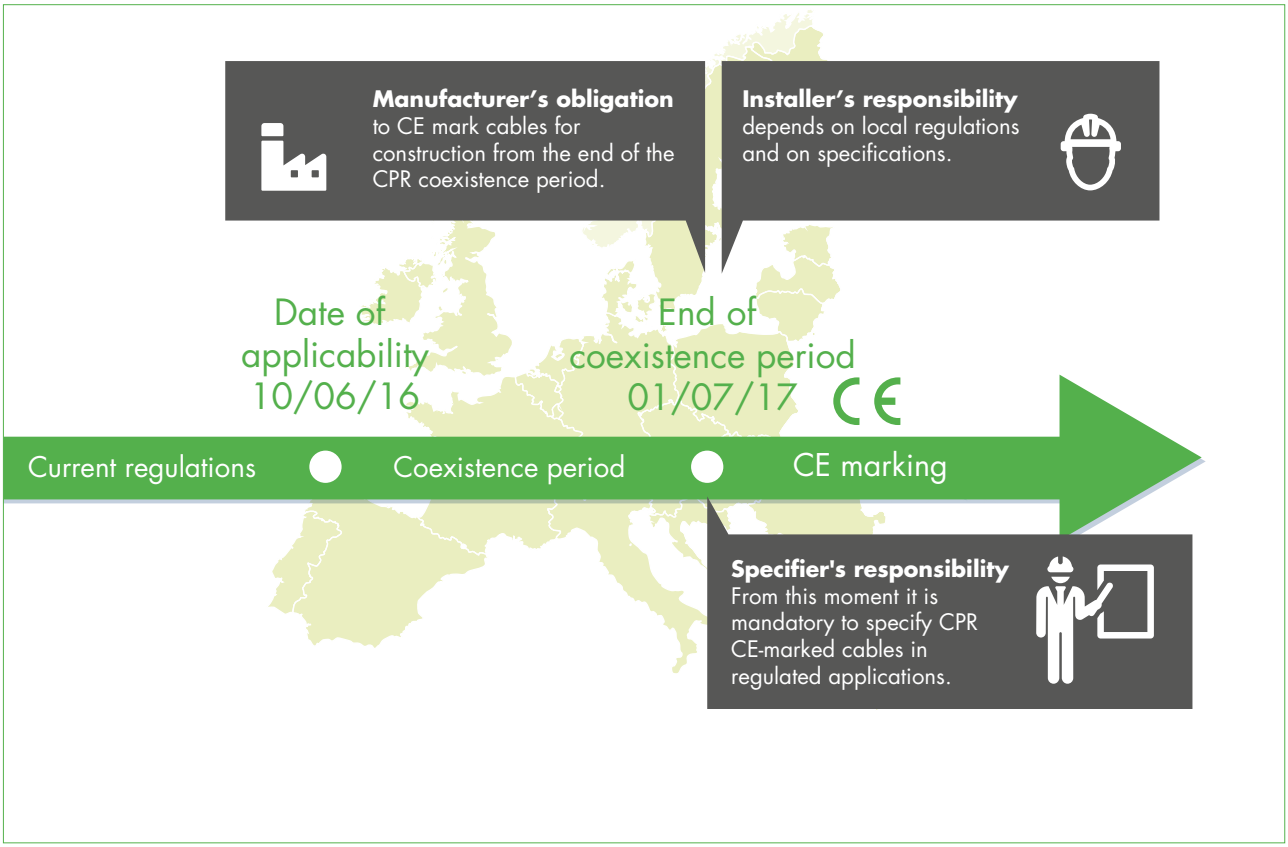
LEGAL REQUIREMENTS

All cables put onto the market in the European Union for the construction market will require the manufacturer to draw up and make available a Declaration of Performance (DoP).

This will also apply to products made outside of the European Union. However, in this case, the importer placing the product on the EU market must ensure that the manufacturer has correctly fulfilled its obligations.

The Construction Products Regulation is in effect for cables as of the 10th June 2016. From 10th June 2016, it is possible to specify and install voluntarily CPR cables.

From that moment starts a coexistence period of one year, up to 1st July 2017. During the coexistence period current cables can be sold and installed legally, as well as CPR cables. **After the 1st July 2017 all cables for construction have to be CPR CE-marked.** Please note that most of – but not all – cables are already CE-marked according with the Low Voltage Directive. The CE-marking will represent the compliance of the cable to both directives where applicable.



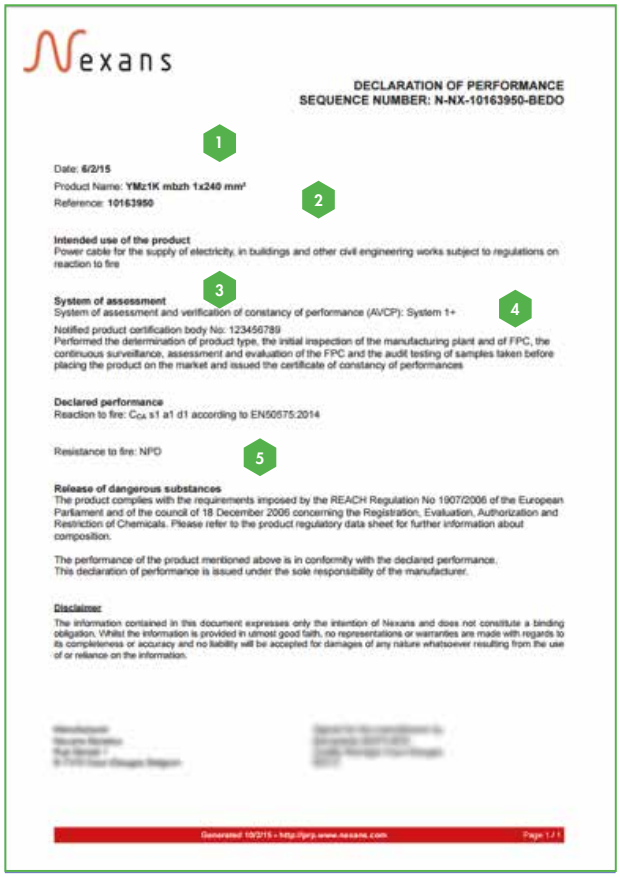
LEGAL REQUIREMENTS
A. DECLARATION OF PERFORMANCE AND LABELLING

The Declaration of Performance (DoP) is a prerequisite to affix the CE mark to the product. The CE mark must be moreover accompanied by mandatory elements.

The DoP is drawn by the manufacturer on the basis of a laboratory report or a certificate issued by a third party Notified Body. By issuing the DoP, the manufacturer states its full responsibility on the performance of its entire production. The manufacturer also affixes the CE mark as a visible sign of compliance to the CPR and to any other applicable Regulation. For low voltage cables the CE mark also states compliance with the Low Voltage Directive (LVD).
The Declaration of Performance shall be supplied in paper or electronically via its website in the language(s) required by the country of the end user.

KEY INFORMATION:

1. the reference number and date of issue of the Declaration of Performance;
2. the reference of the product-type for which the Declaration of Performance has been drawn up;
3. the intended use or uses for the cable, in accordance with the applicable harmonised technical specification, i.e. EN 50575:2014+A1:2016;
4. the system or systems of assessment and verification of constancy of performance of the construction product, as set out in Annex V, i.e. System 1+, 3 or 4;
5. the performance class of the product : Euroclass + additional criteria if applicable.



Nexans

DECLARATION OF PERFORMANCE
SEQUENCE NUMBER: N-NX-10163950-BEDO

1

Date: 6/2/15
Product Name: YMz1K mbzh 1x240 mm²
Reference: 10163950

2

Intended use of the product
Power cable for the supply of electricity, in buildings and other civil engineering works subject to regulations on reaction to fire

3

System of assessment
System of assessment and verification of constancy of performance (AVCP): System 1+

4

Notified product certification body No: 123456789
Performed the determination of product type, the initial inspection of the manufacturing plant and of FPC, the continuous surveillance, assessment and evaluation of the FPC and the audit testing of samples taken before placing the product on the market and issued the certificate of constancy of performances

Declared performance
Reaction to fire: C_{CA} s1 a1 d1 according to EN50575:2014

Resistance to fire: NPD

5

Release of dangerous substances
The product complies with the requirements imposed by the REACH Regulation No 1907/2006 of the European Parliament and of the council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals. Please refer to the product regulatory data sheet for further information about composition.

The performance of the product mentioned above is in conformity with the declared performance.
This declaration of performance is issued under the sole responsibility of the manufacturer.

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LEGAL REQUIREMENTS
A. DECLARATION OF PERFORMANCE AND LABELLING

HOW CAN YOU RECOGNIZE A GENUINE CE-MARKED CABLE ?

In case of doubts on the authenticity of the CE mark, professionals and end users can turn to:

- their national Contact Point for Construction
- the Notified Body which is declared on the DoP and on the label.

The list of national Product Contact for Construction and all Notified Bodies is available on the EU website:

Contact points: http://ec.europa.eu/DocsRoom/documents/16301/attachments/1/translations/

Notified Bodies: http://ec.europa.eu/growth/tools-databases/nando/

NANDO: please select Product Family: Power, control and communication cables.

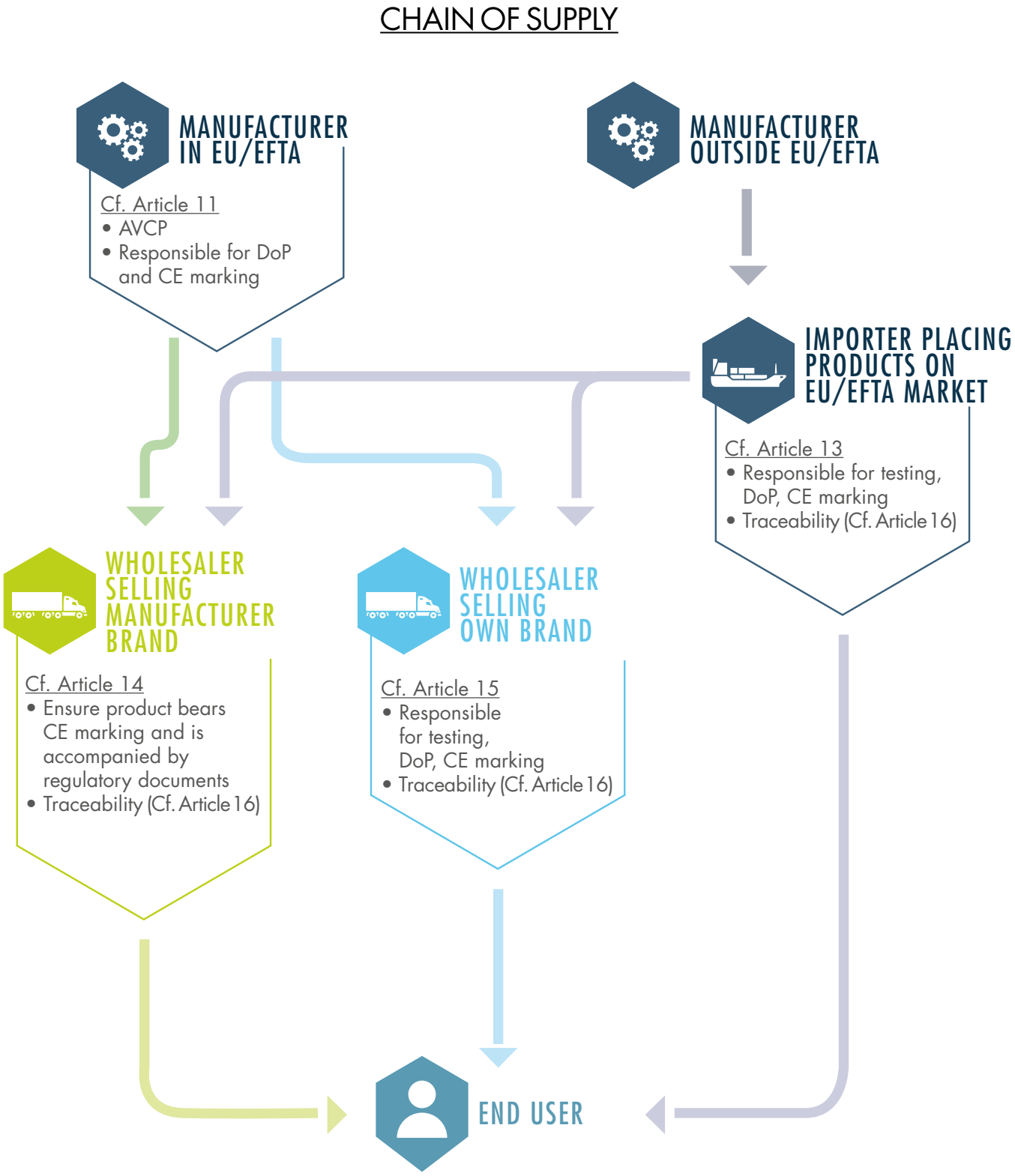
LABELLING IS ALSO REGULATED AND MUST CONTAIN THE RELEVANT INFORMATION. 10 MANDATORY ITEMS WILL HAVE TO BE VISIBLE ON THE LABEL ITSELF

1. the producers mark,
2. the producers postal address,
3. the product reference,
4. CE mark,
5. the year of initial certification,
6. the classification,
7. the reference to the harmonised standard,
8. the ID of the certification body,
9. the ID of the Declaration of Performances
10. intended use of the cable.

Some of them already existed as they were already used.

LEGAL REQUIREMENTS

B. LEGAL OBLIGATIONS OF ECONOMIC OPERATORS



LEGAL REQUIREMENTS
B. LEGAL OBLIGATIONS OF ECONOMIC OPERATORS

All stakeholders along the value chain are concerned by this new regulation and have therefore legal obligations – that can vary depending on their situation and their role in the flow.
All economic operators in the supply chain have their responsibilities in order not to deteriorate the performances of products. Obligations of manufacturer are listed in Article 11 of the CPR. Obligations of Importers and Distributors in Articles 13 and 14.
Incumbent operators are considered as Authorities as per article 8 (5) of the CPR.

1 OBLIGATIONS OF MANUFACTURERS

MAIN OBLIGATIONS OF MANUFACTURERS (AS PER ARTICLE 11)

- Implement the appropriate system of Assessment and Verification of Constancy of Performance (AVCP)
- Draw up a Declaration of Performance and affix a CE mark
- When placing a construction product on the market, ensure that the product is accompanied by instructions and safety information in a language determined by the Member State concerned which can be easily understood by users
- Keep the technical documentation and the declaration of performance for a period of 10 years after the construction product has been last placed on the market.
- Inform the competent national authorities of the Member States in case a product presents a risk
- Provide information to national authorities where requested.

2 DISTRIBUTORS

MAIN OBLIGATIONS OF DISTRIBUTORS (AS PER ARTICLE 14)

- Act with due care in relation to applicable requirements
- Control the conformity of the product with the formal requirements (identification product, CE marking, required documents…)
- Make sure corrective measures are taken by manufacturer or importer when they suspect a non-compliance
- Be able to identify their suppliers and their customers for a period of 10 years after they have sold the product
- Provide information to national authorities where requested.

3

DISTRIBUTORS ACTING AS MANUFACTURER (AS PER ARTICLE 15)

Distributors are considered as a manufacturer when they place a product on the market under their name or trademark or modify a construction product already placed on the market in such a way that conformity with the declaration of performance may be affected.

MAIN OBLIGATIONS

- Good knowledge about the intended use and the Euroclasses
- Responsibility for all necessary tests and documents
- Responsibility for CE marking and Declaration of Performance
- Keep the technical documentation and the Declaration of Performance for a period of 10 years after the construction product has been last placed on the market.

NOTE: *any economic actor importing a product from outside the European Economic Area bears the same responsibilities as a manufacturer. In this respect, they shall place on the market only construction products which are compliant with the applicable requirements of the CPR and shall check that the manufacturer fulfills these requirements.*

PART 3

HOW NEXANS SUPPORTS YOU

HOW NEXANS SUPPORTS YOU

Working with Nexans, you can be sure everything has been taken care of.

Nexans' experts have always actively participated in the development of new standards and regulations on fire safety for their products. Thus they have been involved in developing the CPR cable classification for Reaction and Resistance to Fire since its early days.

As we have put in place all appropriate systems of Assessment and Verification of Constancy of Performance (AVCP), we are confident we provide you with products that are manufactured with due care, thoroughly tested and thus comply with the declared Euroclasses.

We have the paper trail to prove it, the CE mark and the Declaration of Performance. And to make your life easier, we make these Declarations of Performance easily accessible through the NEXANS TRACKER™ on our website. In this way, Nexans helps you meet your customers' requirements

NEXANS SUPPORTS YOU

- by providing the full range of products required for all construction works certified in the appropriate class (power, control and communication cables)
- by providing the necessary support and services to facilitate your work (consistent CPR labeling, cable applications and cable performances, FAQ,NEXANS TRACKER™)

LABELLING

CLEAR AND STRUCTURED LABELLING

Nexans adopted a standard layout of this information, which is consistent for every product.
It shows all mandatory information and makes it easier to explain.

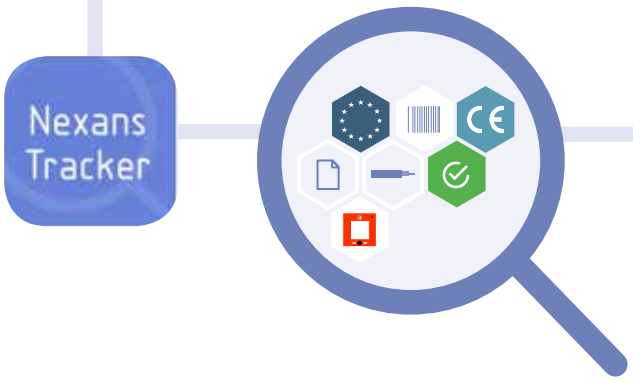
HOW NEXANS SUPPORTS YOU

NEXANS WEBSITE

1. DECLARATION OF PERFORMANCES THROUGH NEXANS TRACKER™

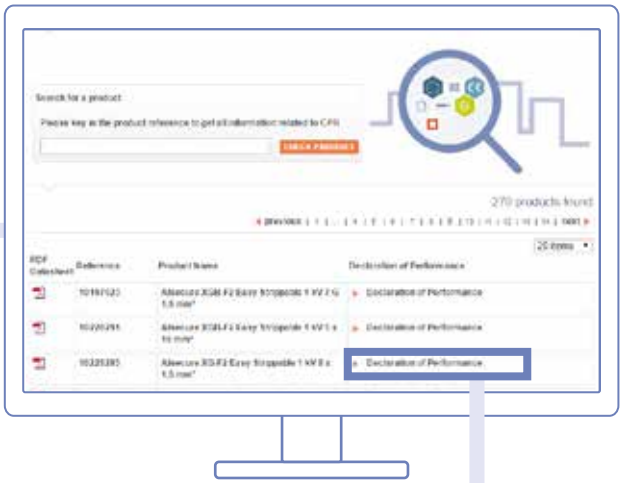
As paper documents may get lost during logistics operations, we have put in place an online database with all our Declarations of Performance: the NEXANS TRACKER™. NEXANS TRACKER™ allows direct consultation and download of the regulatory information related to the Construction Products Regulation.
As a customer you can directly check online the compliance of our products with the regulation and their performance classes defined within the regulation.

- **Access the NEXANS TRACKER™**
- **Search by product reference or by product name**



MAIN BENEFITS OF NEXANS TRACKER™:

- Save time
- Access and download the information wherever you are and whenever you need, in a much quicker and easier way than through the traditional sales channels
- Complete traceability and transparency of the provided information
- Ensure full compliance to the regulation as you can use this info in your own supply chain
- Reliable: as soon as a Declaration of Performance has been drawn up, it will be made available on the NEXANS TRACKER™. Moreover, the provided documents will always be up to date and remain available on our website



2. DECLARATION OF PERFORMANCES THROUGH THE E-CATALOGUE

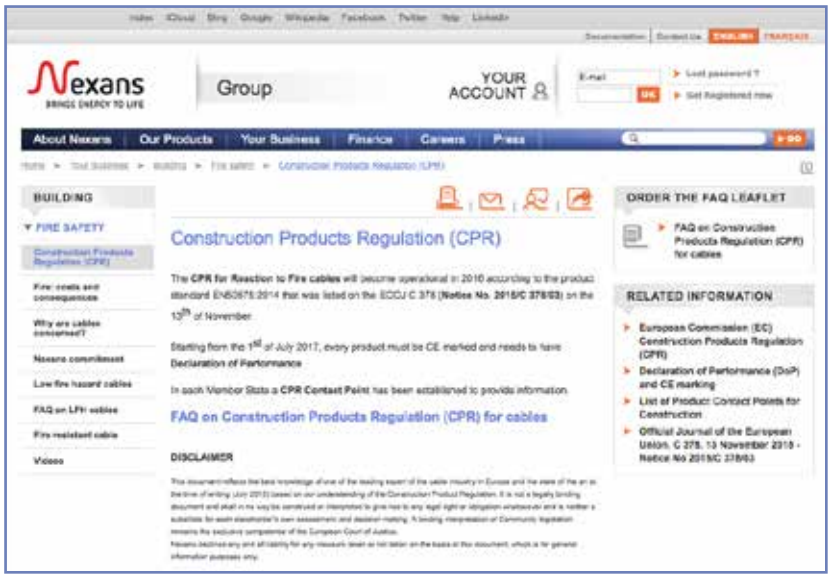
You can also access the documents associated with the products from our e-catalogue and check the performance of our cables straight on the datasheet.

HOW NEXANS SUPPORTS YOU

NEXANS APP

On the move from your smart phone through our Nexans APP.

SUPPORT AND SERVICES

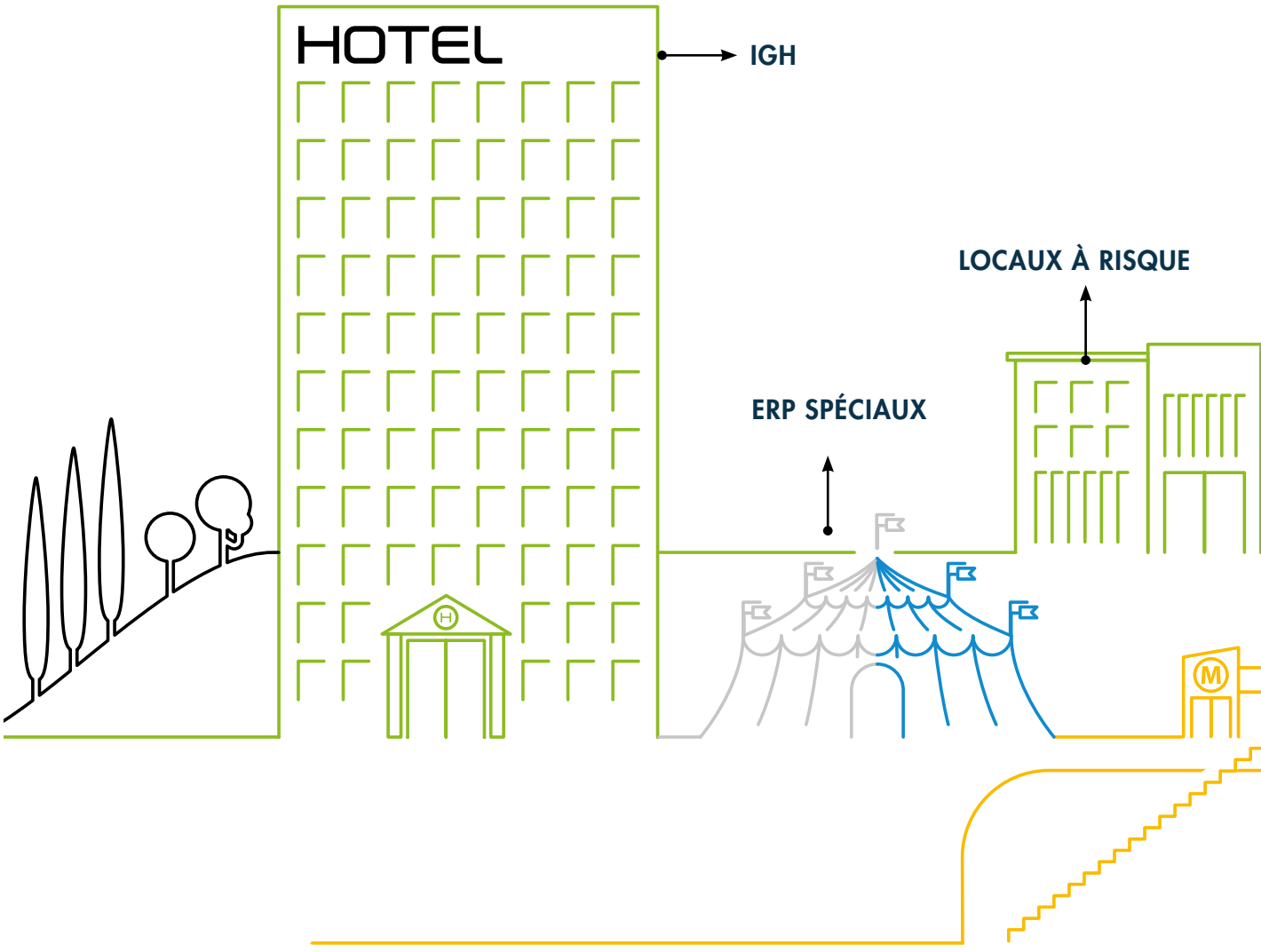


SUPPORT AND SERVICES

Nexans will keep you informed about the CPR on its website.
Go to www.nexans.com/cpr and check out our dedicated CPR section where you will find FAQs, Tutorials,… register now on our website to receive the latest information on the regulation and its application.

THE CPR IN MY COUNTRY

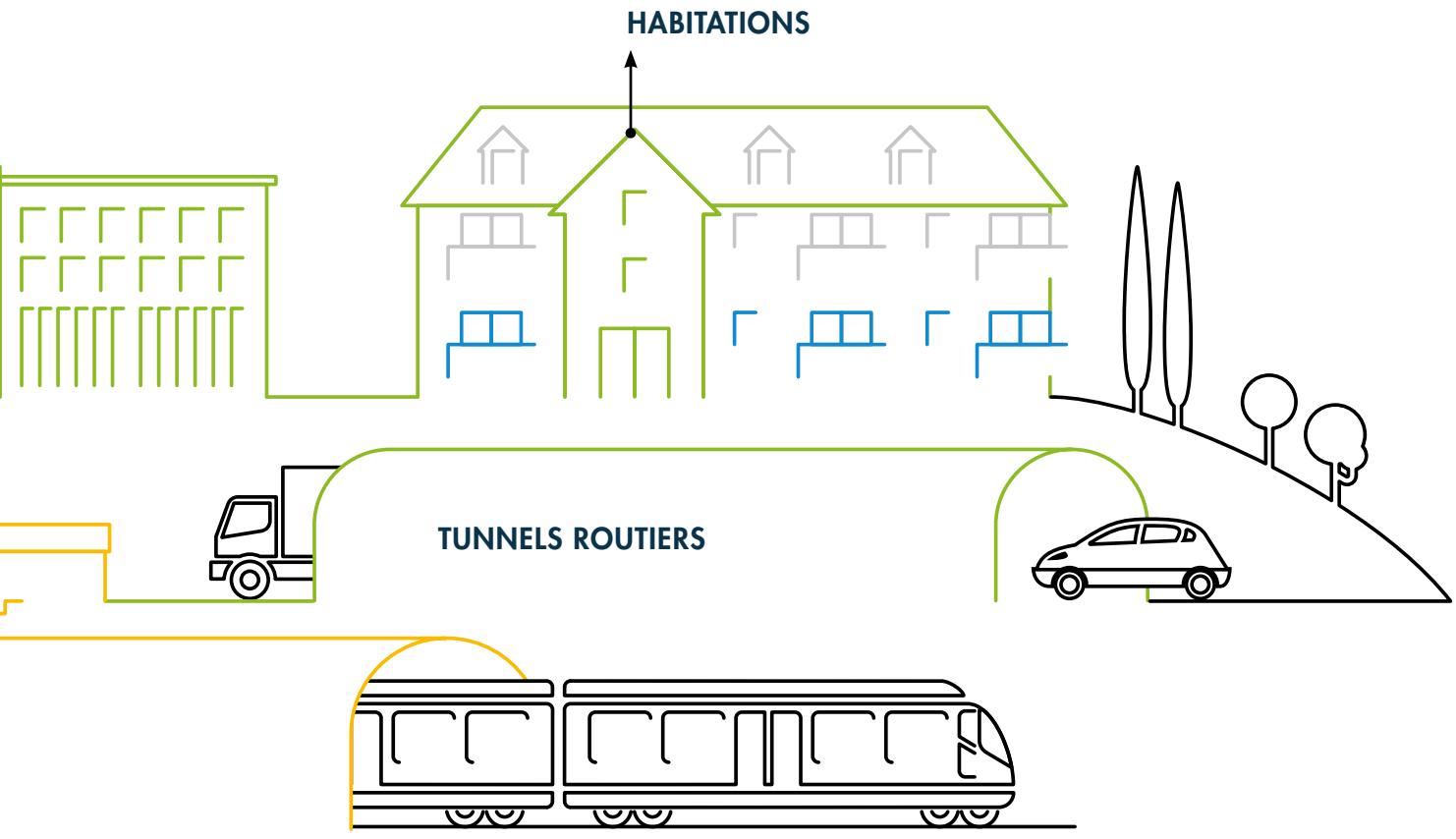
PERFORMANCES PER TYPE OF CONSTRUCTIONS FOR ENERGY AND DATA CABLES



PERFORMANCE AU FEU

- **OPTIMALE** ($B2_{ca}$ -s1, d1, a1)
- **AMÉLIORÉE** (C_{ca} - s1, d1, a1)
- **BASIQUE** (D_{ca} - s2, d2, a2)
- **BASIQUE** (E_{ca})

ERP *(Établissement Recevant du Public)*
IGH *(Immeuble de Grande Hauteur)*



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