

# A HOLISTIC APPROACH FOR hENs

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#### A HOLISTIC APPROACH FOR hENS



- Standardization Requests
- Sustainability of natural resources (Basic Work Requirement number 7)
- Release of dangerous substances (Basic Work Requirement 3)

# Oscar NIETO Technical Director Construction Products Europe



### A holistic approach for hENs

Oscar Nieto 04/12/2019





# Standardisation requests EC objectives

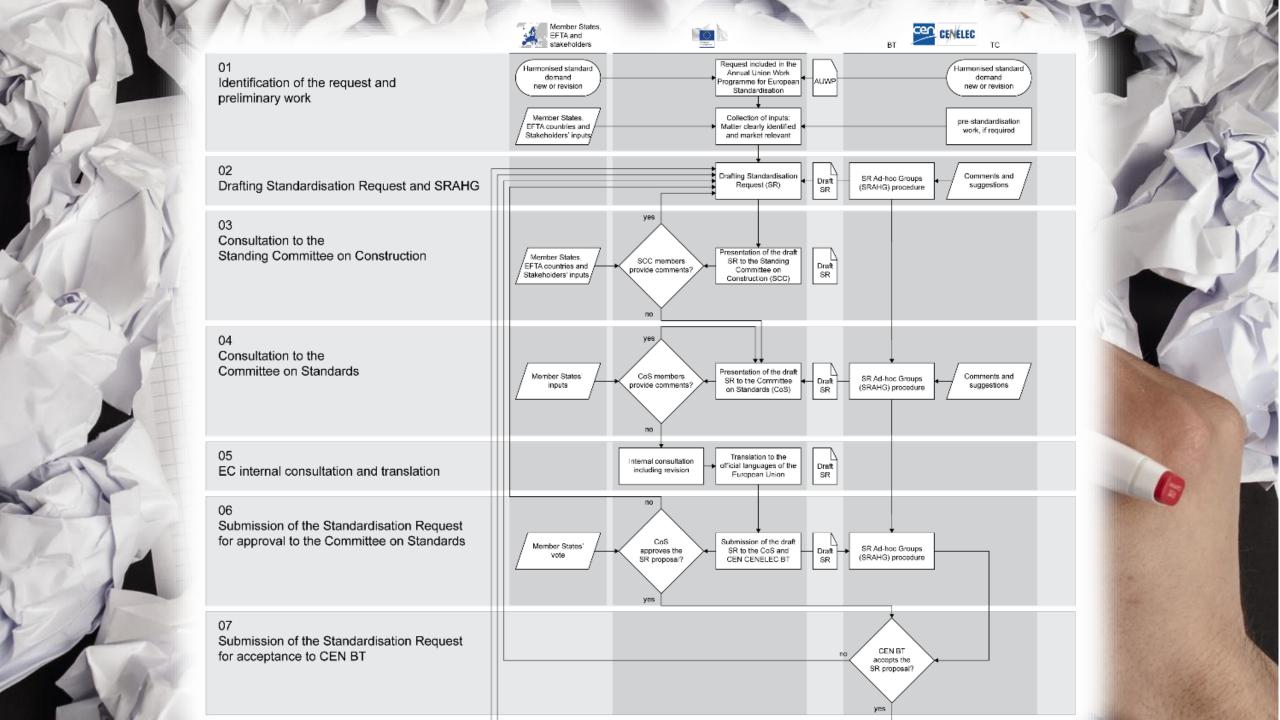
- → move from CPD to CPR
- integrate European Court of Justice legal interpretation (ECJ aquis)
- → revise the technical content of mandates
- cover the declaration of essential characteristics (all needs identified)
- → implement BRCW7
- pre-empt the need for delegated acts for classes and thresholds

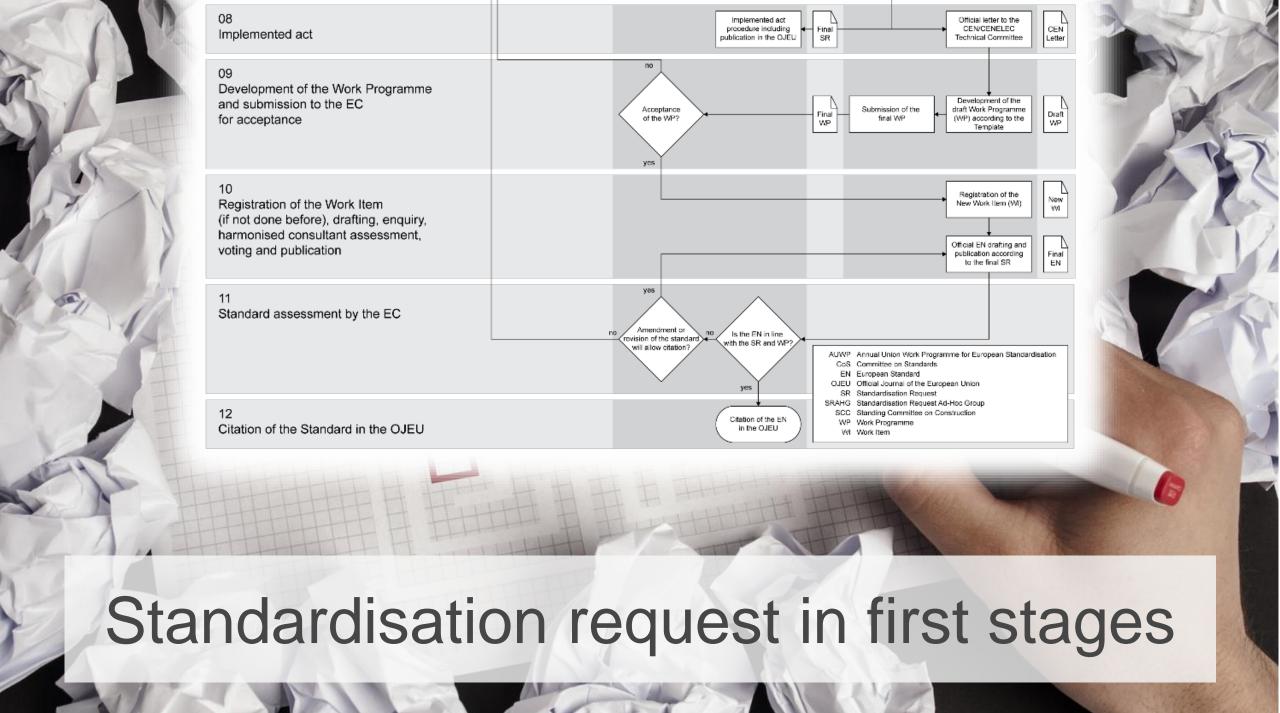


### Replies to questions from MS

#### Industry involvement required

- Standardisation requests can only be modified following the full procedure
- → European coverage (e.g. exclude national annexes in Eurocodes)
- → Timeframe is flexible
- → JIS action 5 document (flowchart) describes the process





#### CPR 15/03

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating official position of the Commission.



Brussels, XXX [...](2018) XXX draft

#### COMMISSION IMPLEMENTING DECISION

of XXX

on a standardisation request to the European Committee for Standardisation as regards space heating appliances in support of Regulation (EU) No 305/2011 of the European Parliament and of the Council

(Text with EEA relevance)

#### Space heating appliances

BRCW3 includes pollutants and threshold values

BRCW6 includes thresholds for energy efficiency and a table for the energy efficiency classification based on the energy index (EEI)

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Brussels, XXX [...](2018) XXX draft

#### COMMISSION IMPLEMENTING DECISION

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(Text with EEA relevance)

#### Space heating appliances

BRCW7 implemented according to EN 15804

New clause called descriptive features e.g. mass, cleanability

Supposed to be pieces of information to be delivered not being essential characteristics

CPR 15/02

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Brussels, XXX [...](2018) XXX draft

COMMISSION IMPLEMENTING DECISION (EU) .../...

of XXX

on a standardisation request to the European Committee for Standardisation as regards reinforcing and pre-stressing steel in support of Regulation (EU) No 305/2011 of the European Parliament and of the Council

(Text with EEA relevance)

#### Reinforcing steel

BRCW3 not implemented due to the lack of requirements

BRCW7 implemented according to EN 15804

Additional environmental indicators

EN EN



#### Dangerous substances



Regulations in place

VOC classification blocked

REACH restriction for formaldehyde release

Dangerous substances clauses under discussion

#### Construction Products Directive

#### 5.2.13 Dangerous substances

National regulations on dangerous substances in a require verification and declaration on release, and sometimes content, when construction produce cover by this standard are placed on those markets.

In the absence of European harmonized test methods, very ation and declaration on release/content should be done taking into account national provisions in the last of use.



## To be able to deliver we need the list of substances in the applicable standardisation request

Substances not to be declared to be removed from the list

- → No content or generation of the substance
- → Release/emission below detection limit
- → Release/emission not relevant for the intended use



#### To be able to deliver we need assessment methods

#### Scope

- → European approach
- → Horizontal, if possible

Based on the less onerous approach

- → Release
- → Content as a proxy of release if less onerous



#### To be able to deliver we need a declaration approach

#### Classification

- → Requires agreement EC and Member States
- → Requires a delegated act
- → Member States obliged to adapt their regulations



#### To be able to deliver we need a declaration approach

#### Declared values

- → Long list to be included in CE marking and DoP
- → CPR allows this approach as it is being implemented in coordination with BIM developments Smart CE®





#### Assessment



Dangerous substances clauses to address three main issues to be properly implemented by manufacturers



#### Assessment clause

#### Definition of product type – key issue

"means the set of representative performance levels or classes of a construction product, in relation to its essential characteristics, produced using a given combination of raw materials or other elements in a specific production process".





#### Assessment clause

#### Less onerous way - FPC

Standard to define the options, if any, to assess the performance:

- → Testing according to the relevant method?
- → Content assessment?
- → Other proxy characteristics?
- → Alternative method?

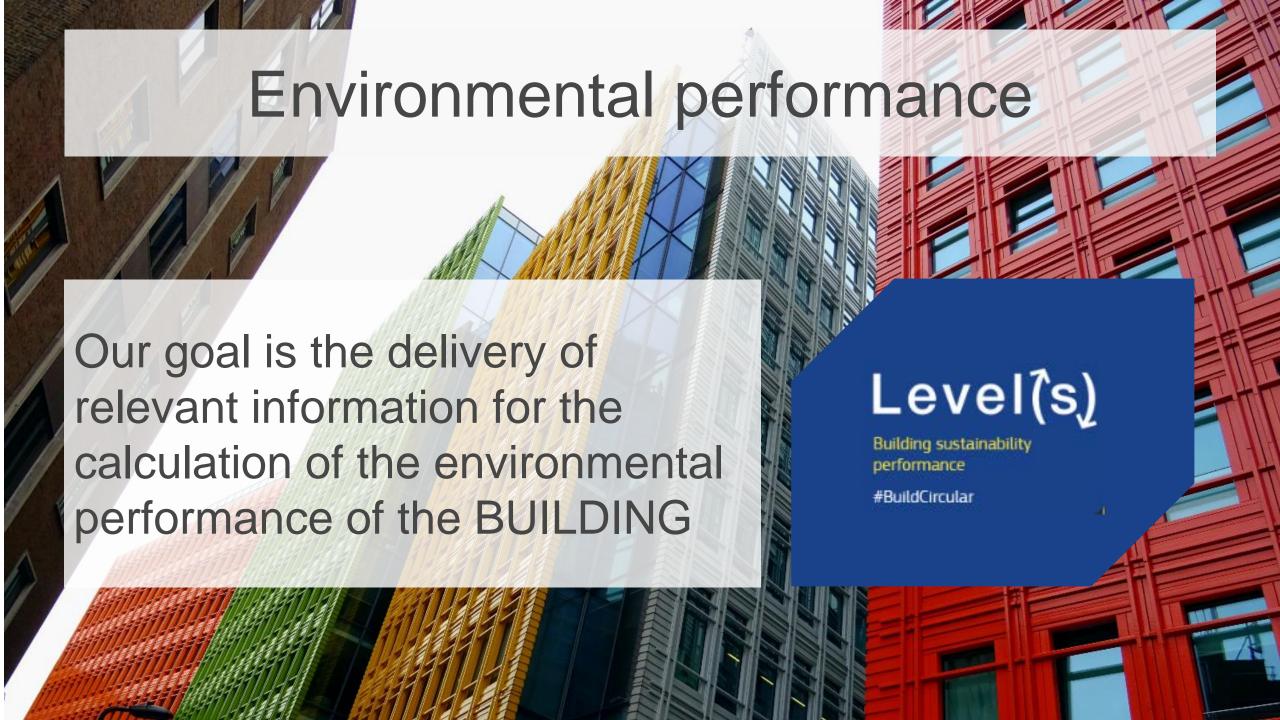


#### Assessment clause

#### Assessment of the performance

Standard to define how to assess the performance including the statistical value to be declared e.g:

- → Average (50% percentile) with 90% confidence level?
- → Greater value of 5 samples?
- → Single value?





#### Common technical language

European Commission requested the update of EN 15804 to their requirements – Single European approach



Harmonised standards to follow amended EN 15804 for the assessment and declaration

Unique declaration of performance (DoP) at European level (no National approaches) including required third party tasks

Aligned to PEF methodology



#### Third party tasks

CPR determines required third party tasks for the assessment in this case AVCP system 3 (ongoing discussion)

Bodies notified by Member States to perform third party tasks
Single market for Notified Bodies (manufacturer's choice)

AVCP system 3: Notified body to assess the performance

Program operators current activities not aligned to the regulatory approach



### Single European declaration

#### Problem – Single declaration at EU level to fit National needs

National declaration is not possible within the CPR framework Harmonised common rules (PCR) per product family:

- → Scenarios "parametric" declaration
- → Reference service life and functional/declared unit
- → Modelling details to be implemented

Alignment to Member States' requirements in an early stage



# Single European declaration to fit National needs

"Parametric" approach example for module C3:

- → C3 full reuse scenario
- → C3 full recovery scenario
- → C3 full recycling scenario

During the assessment of the building the most relevant scenario, or the combination of them, is selected

Reuse 2% Recovery 8% Recycling 80% Reuse 3% Recovery 10% Recycling 70% Reuse 1% Recovery 15% Recycling 68%



#### Other pending issues

#### CPR provides options to the declaration

Declaration of NPD (no performance determined) for the full table unless

- → there is a National requirement
- → the information is declared in other document

Sharing and cascading allowed – applicable for "sectoral" EPD under a contractual agreement and for products manufactured from components



### Other pending issues

#### Some problems need to be solved

Declaration requires a unique valid background dataset

DoP to be revised when performance changes (e.g. energy mix)

Performance to be declared in CE marking (label in product, packaging or accompanying document)

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#### Information delivery and use

#### EPD information is too complex and long for PDF documents

Data to be provided in a computer readable way to be used for building assessment

CPR allows this approach as it is being implemented in coordination with BIM developments – Smart CE®



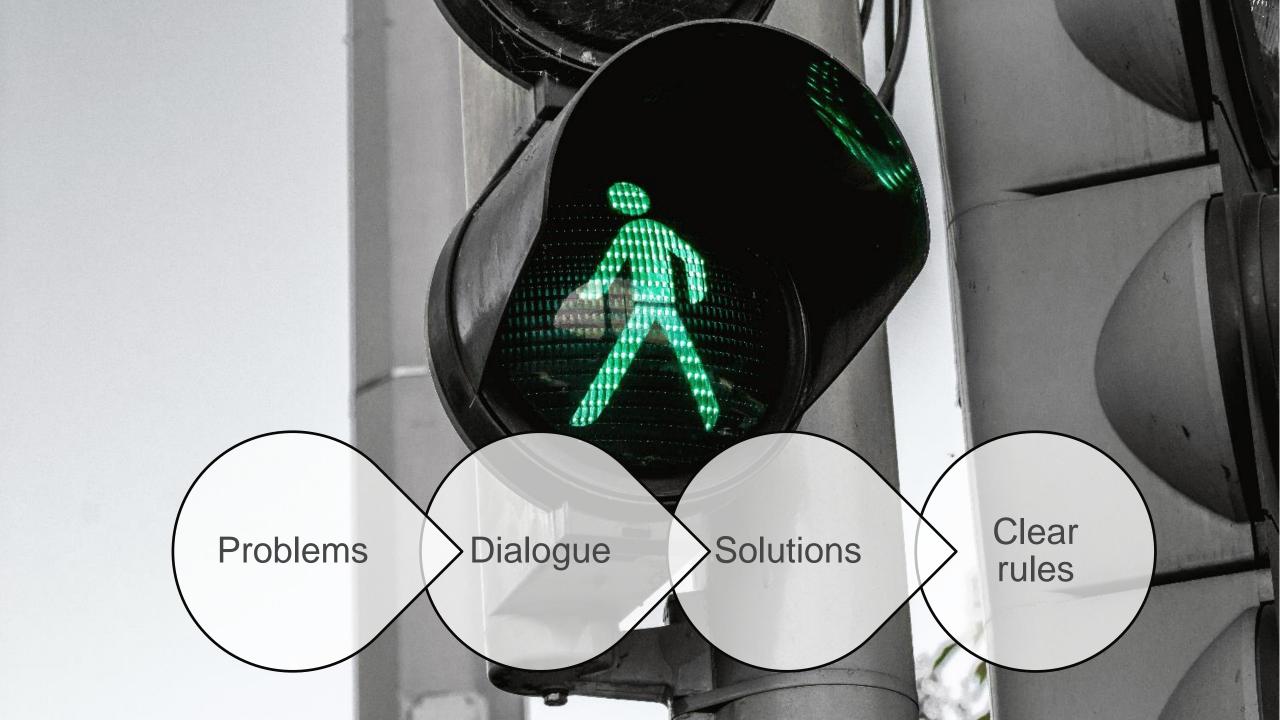


Industry needs solutions in the short term

Collaboration is granted by the industry

Commitment of EC – MS – CEN/CENELEC required









**Technical Director** 

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