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*Fillable chapter 9 (Questions)  
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on the Systematic Review (SR)  
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**Prepared by:**

ISO/TC 205/AG1, JAG of ISO/TC 205 and ISO/TC 163 on the coordination of the ISO 52000 family

CEN/TC 371 Task Group on Systematic Review and Energy Performance of Buildings Directive revision

**Contacts:**

* Dick van Dijk and Stephanie Reiniche (leadership of ISO/TC 205 & TC 163 JAG on coordination of ISO 52000 family).   
  Email: [EPB-research@dickvandijk.nl](mailto:EPB-research@dickvandijk.nl); [sreiniche@ashrae.org](mailto:sreiniche@ashrae.org)
* Jaap Hogeling and Annet van der Horn (leadership of CEN/TC 371 on the energy performance of buildings).   
  Email: [j.hogeling@isso.nl](mailto:j.hogeling@isso.nl); [annet.vanderhorn@nen.nl](mailto:annet.vanderhorn@nen.nl)

# Questions to NSBs regarding the quality, consistency and usability of the (set of) EPB standards

***The NSBs are invited to prepare answers (as part of the SR ballot).   
Also national regulators are invited to prepare answers.***

We are highly interested in obtaining feedback from the NSBs how the quality, consistency and usability of the EPB standards can be improved.

For the convenience of preparing feedback, these questions are **also available as (separate) editable MS Word file**, to be downloaded as N document from the relevant ISO and CEN committees or from the EPB Center website (<https://epb.center/epb-standards/>).

This file

If the feedback from the NSB is general for the set of EPB standards, the response may be sent to the contact persons at coordination level (see chapter 12).

If the feedback is on a specific EPB standard it makes sense to send the response as comment with the national voting on the SR.

**Question 1 (global coverage):**

**Consideration:** Specifically in ISO, several modules (standards) in the set of EPB standards are missing, while they are available in CEN.   
But, since energy shortage and carbon emissions are a universal concern, it is also in the European interest to ensure that the set of EPB standards has a global coverage.

**Question**: do you agree that it is important for the whole set of EPB standards to become also available at global (ISO) level?

**Answer:**

|  |  |
| --- | --- |
| **Organization & contact person:** | …. |
| **Yes / No agree?** | **Explanation** |
| … | …  … |

**Question 2 (missing or conflicting parts of an EPB standard):**

**Consideration:** The main application of the set of EPB standards is the assessment of the overall energy performance of a building in the context of building regulations, to check compliance with minimum energy performance (EP) requirements and to provide information for the EP label and the EP Certificate. Specific details of the EPB assessment procedures in the set of EPB standards may be missing or conflicting with national needs for the overall EPB assessment. This could hinder adoption and referencing to that standard in national or regional building regulations.

Specifically in ISO: several modules (standards) in the set of EPB standards are missing, while they are available in CEN. But also in the CEN set of EPB standards specific procedures may be missing or procedures may be conflicting with national needs.

**Question**: are, in individual EPB standards, specific details of the EPB assessment procedures missing or conflicting with national needs for the overall EPB assessment that prevented adoption and referencing to that standard in your building regulations? If so, can you indicate how this problem might be resolved? Is it resolved by standards in other regions of the world? .

**Answer:**

|  |  |  |
| --- | --- | --- |
| **Organization & contact person:** | …. | |
| **EPB standard** | **Which missing or conflicting part of the EPB standard?** | **Suggested solution** |
| … | … | … |
| … | … | … |

**Question 3 (availability of product/input data):**

**Consideration:** Product, component or other information is needed as input for the overall EPB assessment.

**Question**: are there, in individual EPB standards, problems with the availability of the product or component or other data needed as input?

**Answer:**

|  |  |  |
| --- | --- | --- |
| **Organization & contact person:** | …. | |
| **EPB standard** | **Which input data not (easily) available?** | **Suggested solution** |
| … | … | … |
| … | … | … |

**Question 4 (operational rating):**

**Consideration:** The set of EPB standards contains only 1 standard on EPB assessment based on measurements (operational rating). This is [EN 15387-3](https://epb.center/support/documents/en-15378-3/), that deals only with heating and domestic hot water systems.

**Question**: is there a need for a more comprehensive EPB standard on overall EPB assessment based on measurements (operational rating) for use in the context of the national or regional building regulations?

**And if so**: is it needed for the prime EP indicator (to check compliance with minimum EP requirements) or only as information for the EP certificate (as information tailored to the actual conditions and use of the building)

**Answer:**

|  |  |  |
| --- | --- | --- |
| **Organization & contact person:** | …. | |
| **Yes/No for the prime EP indicator (min. EP requirements)?** | **Yes/No for the EP certificate (informative)?** | **Explanation** |
| … | … | … |
| … | … | … |

**Question 5 (Structure and comprehensiveness of the set):**

**Consideration:** at the EPB Center website you can find a complete overview of all published EPB standards (and accompanying technical reports; [link](https://epb.center/support/documents/?title=&group=2)), grouped per topic (=module).   
In 7.1 the EPB standards have been categorized further. The total number of EPB standards is high, but as explained in chapter 7, they can be categorized for different applications and different user types.

Combining all EPB standards into a single document would have the advantage of having all EPB assessment procedures together, but such a document would be too voluminous and too wide in scope to handle and to evaluate, involving several different teams of experts. Also, acceptance of the document by the NSBs and reference to the document in building codes or product declarations would depend on acceptance of the whole document.

However, this does not mean that restructuring of the set of EPB standards is not an option.

**Question**: In addition to your response to Question 2 (missing or conflicting parts of an EPB standard) : do you see a need for restructuring the set or a specific subset of the EPB standards? Different structure? Should it be less comprehensive? More comprehensive?

**Answer:**

|  |  |
| --- | --- |
| **Organization & contact person:** | …. |
| … <Free text> … | |

**Question 6 (Annex A / Annex B approach):**

**Consideration:** See chapter 8: each EPB standard has a normative Annex A containing a template for specific national choices that are allowed in the standard, plus an informative Annex B with informative default choices.

Each specific Annex A may be critically reviewed with respect to the need for the provided options. This is one of the items for consideration for each EPB standard under SR in ***chapter 10***.

*This* question *here* is about ***the set up in general***: the common layout of Annex A / Annex B has been designed to be clear and unambiguous on the options that are provided, e.g. by shading the cells in the tables of which the content is part of the template that shall not be changed. But other and better possibilities may be explored (see chapter 8).

**Question**: Do you have suggestions for improving the set up of the Annex A / Annex B approach?

**Answer:**

|  |  |
| --- | --- |
| **Organization & contact person:** | …. |
| … <Free text> … | |

**Question 7 (Overall consistency of Annexes B):**

**Consideration:** See chapter 8: each EPB standard has an Annex B that provides informative default choices based on the normative template of Annex A.

Most of these Annexes B have been prepared from the perspective to provide a practical example for the specific EPB standard. This implies that if for all EPB standards the Annexes B are chosen as the national or regional choice, this may lead to (perhaps unforeseen) inconsistencies in the choices.

**Question**: How important is it for your country that the Annexes B of all EPB standards are mutually and overall consistent?

**Answer:**

|  |  |
| --- | --- |
| **Organization & contact person:** | …. |
| … <Free text> … | |

**Question 8 (digitization, pro-active role):**

**Consideration:** in chapter 6 a preliminary outlook is given on the plans for digitization of ISO and CEN standards and how this could become important for the usability and use of the set of EPB standards.

**Question**: Do you consider it important for the set of EPB standards that the responsible committees are pro-active in this field (e.g. by participating in pilot projects)?

**Answer:**

|  |  |
| --- | --- |
| **Organization & contact person:** | …. |
| … <Free text> | |

**Question 9 (digitization, machine readable standards):**

**Consideration:** in chapter 6 a preliminary outlook is given on the plans for digitization of ISO and CEN standards and how this could become important for the usability and use of the set of EPB standards.

**Question**: Do you consider it important for the set of EPB calculation standards to become (more) machine readable (with a stronger role for the accompanying technical reports to provide explanation)?

**Answer:**

|  |  |
| --- | --- |
| **Organization & contact person:** | …. |
| … <Free text> | |

**Question 10 (digitization, digitized description of objects):**

**Consideration:** in chapter 6 a preliminary outlook is given on the plans for digitization of ISO and CEN standards and how this could become important for the usability and use of the set of EPB standards.

**Question**: Do you consider it important for the validation of the set of EPB calculation standards and the conversion into software, that in the future all objects and their (also time varying) properties are described according to data templates and dictionaries that have been developed in the BIM committees ISO/TC 59/SC 13 and CEN/TC 442)?

**Answer:**

|  |  |
| --- | --- |
| **Organization & contact person:** | …. |
| … <Free text> | |

**Question 11 (digitization, software engine):**

**Consideration:** in chapter 6 a preliminary outlook is given on the plans for digitization of ISO and CEN standards and how this could become important for the usability and use of the set of EPB standards.

**Question**: Do you consider it important for the wide roll-out and implementation of the set of EPB calculation standards, that a common software engine or ‘framework’ is made available?

**Answer:**

|  |  |
| --- | --- |
| **Organization & contact person:** | …. |
| … <Free text> | |

NOTE Concerning the issues mentioned in chapter 6, there is no question formulated on the business model, because that deserves a discussion at another level.

**Question 12 (Overall quality):**

**Consideration:** The general objective of the set of EPB standards is to strive for the highest possible quality, trying to present the state-of-the-art overall EPB assessment methodology in the context of EPB regulations.

A unique feature of all ISO and CEN standards is the model of collaboration and consensus, quality and trust.A more specific unique feature of the EPB standards (compared to e.g. building simulation programmes that also enable to assess the EPB) is that it has been specifically designed for use in public regulations. This implies:

1. full documentation and transparency
2. performance oriented and technological neutrality
3. adequate, unambiguous and realistic calculation methods
4. balanced with respect to required input of (reliable and available) component and product data
5. covering all possible technologies (as much as possible), certainly all the cost effective ones
6. providing information on the integration in EPB regulations (notably post processing, such as requirement setting, EP certificate development, etc.
7. ...?

**Question**: What other distinctive features are to be pursued? And to which extent is each of these objectives important, but not fully achieved?

**Answer:**

|  |  |
| --- | --- |
| **Organization & contact person:** | …. |
| **Feature** | **Comment** |
| … | … |
| … | … |

**Question 13 (Other):**

**Consideration:** are there other issues on the set of EPB standards as a whole? Note that some specific issues are listed on specific EPB standards (e.g. on EN ISO 52000-1, the overarching EPB standard), see chapter 11.

**Question**: Do you see other important issues ?

**Answer:**

|  |  |
| --- | --- |
| **Organization & contact person:** | …. |
| … <Free text> … | |