

Consultation on the establishment of a smart readiness indicator for buildings

Fields marked with * are mandatory.

PART 1: General information about the respondent

Questionnaire supporting the development of the Smart Readiness Indicator in accordance with the provisions of the Energy Performance in Buildings Directive.

For more information on the use and collection of personal data, please read through the [privacy statement](#).

- * 1. Please provide your name and surname (Note that submissions that are sent anonymously will not be taken into consideration):

Giorgia Concas

- * 2. Please provide your email address in case we need to follow up with you about your reply:

giorgia.concas@aie.eu

3. Please provide your telephone number in case we need to follow up with you about your reply:

0032490113690

- * 4. Please select your country of residence:

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czechia
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece

- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovak Republic
- Slovenia
- Spain
- Sweden
- United Kingdom
- Non EU

* 5. Please indicate whether you are replying as/on behalf of:

- A citizen/consumer
- A local public authority
- A regional public authority
- A national public authority
- An international public authority
- A standardisation organisation
- A non-governmental organisation representing societal interests (for example, environmental or consumer interests)
- A company or a business organisation
- Other

* Please briefly describe the authority/company/organisation and main field of activity:

AIE – European Electrical Contractors Association. Electrical contractors are companies carrying out a great variety of electrical works in buildings and infrastructure. They take care of the design, installation, operation and maintenance of electrical, and increasingly IT, facilities and equipment. AIE represents more than 100,000 companies, worth more than 100 billion EUR annual turnover, employing more than 1 million people. The SRI is relevant to our sector, as electro-technical service companies are involved with most of the smart technologies this scheme covers and they may, alongside other professionals, provide SRI in the future.

* Please provide the name of your authority/company/organisation:

AIE - European Electrical Contractors Association

* Please indicate the size of your authority/company/organisation

- self-employed
- micro (1-9 employees)

- small (10-49 employees)
- medium-sized (50-249 employees)
- large (250 employees or more)
- Not applicable

* Which of the following activities are performed or represented by your authority/company/organisation:

at least 1 choice(s)

- Property owner
- Facility management
- Property development
- Architecture
- Engineering
- Construction
- Manufacturer / supplier of construction products
- Manufacturer / supplier of technical building systems
- Energy supplier
- Energy service company and aggregators
- Grid operator
- Supplier of energy management solutions
- Supplier of ICT solutions
- Other
- Not applicable

* In which country is your authority/company/organisation most active?

at least 1 choice(s)

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czechia
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands

- Poland
- Portugal
- Romania
- Slovak Republic
- Slovenia
- Spain
- Sweden
- United Kingdom
- Other
- Not applicable

* Is your authority/company/organisation registered with the EU Transparency Register? If not, you may do so [here](#). However, please note that registration is not compulsory to complete this questionnaire.

- Yes
- No
- Not applicable

If you answered yes, please provide the registration number:

9089874181-55

* 6. Do you consent to the Commission publishing your replies?

Note that, whatever the option chosen, your answers may be subject to a request for public access to documents under Regulation [\(EC\) N°1049/2001](#).

Note: respondents who select the option "only anonymously" should not include personal data in documents submitted in the context of the consultation.

- Yes** *(I consent to the publication of all information in my contribution in whole or in part, including my name or my organisation's name, and I declare that nothing within my response is unlawful or would infringe the rights of any third party in a manner that would prevent publication)*
- Only anonymously** *(I consent to the publication of any information in my contribution in whole or in part (which may include quotes or opinions I express) provided that I remain anonymous. I declare that nothing within my response is unlawful or would infringe the rights of any third party in a manner that would prevent publication)*

PART 2: Questions about the audience and scope of the SRI

7. Who should be the audience(s) for the SRI? (If more than one, list them in order of priority)

Please enter your response below against the options provided. For each row, you can select a number from 1 to 11, with 1 being the most important and 11 the least important. Please note that you can rank as many options as you want, but each number can be selected only once. If you select "Other", please state your preference in the follow-up question.

at most 11 answered row(s)

	1	2	3	4	5	6	7	8	9	10	11
Building occupants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Building visitors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Property owners	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facility managers	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Property developers	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Architecture, construction and engineering companies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Energy service companies and aggregators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Energy utilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grid operators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Authorities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. To which categories of buildings should the SRI be applicable? (multiple answers are permitted)

- All categories of buildings
- Non-residential buildings
- Collective residential buildings
- Individual houses
- Large buildings (e.g. above 1000 m2 surface area)
- Other

9. Should the SRI be applicable to new buildings, existing buildings, or both?

- New buildings
- Existing buildings
- Both new and existing buildings

Please explain if you wish your answer in the box below:

500 character(s) maximum

All buildings should be covered but, if authorities had to prioritise, non-residential buildings should be the first ones the SRI should be applied to, as energy consumption is higher and building technologies are more sophisticated, so the SRI would have a higher impact.

10. Should it be possible to adapt the scope and calculation methodology of the SRI depending on specific conditions, e.g. the type of building or climatic conditions?

Please note that SRI calculation framework is not yet developed: the aim of this question is to assess what update period would in principle be most adequate.

- Yes
- No

If you answered “Yes”, please state your preference on specific conditions that should be considered in the box below. In addition, if you wish to explain your answer please add an explanation in the box below.

500 character(s) maximum

Weighting factors should differ to consider different climatic conditions. Ideally, variations should be agreed upon upfront, at EU level, so as to guarantee consistency to the greatest possible extent across the EU during the implementation phase.

11. What should be the update period of the SRI calculation framework (in particular in relation to technological progress)?

Please note that SRI calculation framework is not yet developed: the aim of this question is to assess what update period would in principle be most adequate.

Please select one of the choices indicated below:

- 1 to 3 years
- 3 years
- 5 years
- More than 5 years
- Other

Part 3: Questions on communication of the SRI

12. Do you think that other aspects of buildings (e.g. energy performance or broader life cycle aspects) should be expressed conjointly with the SRI?

Please select one of the choices indicated below:

- Yes
- No

If you answered “Yes”, please state your preference on which other aspects should be expressed in the box below. In addition, if you wish to explain your answer please add an explanation in the box below.

The SRI should complement and go hand-in-hand with the EPC, helping trigger investments in decentralized clean, efficient and smart technologies. Ideally, the SRI and the EPC should provide clear recommendations on investments to be made to improve building performance and flexibility, or should be linked with Building Renovation Passports, which are supposed to do so. The SRI should soon be fine-tuned to not only consider potential flexibility, but to also measure real-time performance.

13. Do you think that, where relevant, smart ready accessibility* services should be communicated jointly with the SRI? Please select one of the choices indicated below:

- Yes
- No

*For persons with disabilities

Please elaborate on your answer in the box below, if you wish.

500 character(s) maximum

Maybe not at this initial stage. Could be integrated at a later stage.

14. Should the SRI of a building be presented as an overall smartness score, or sub-scores for each of the three key SRI functionalities highlighted in the EPBD*, or sub-scores by specific technical domains **, or sub-scores by specific impacts ***, or all of these?

- An overall smartness score for the whole building
- Smartness scores along the three key SRI functionalities
- Smartness scores per technical building system or technical domain
- Smartness scores per impact criterion
- Other smartness scores

**(a) the ability to maintain energy performance and operation of the building through the adaptation of energy consumption for example through use of energy from renewable sources; (b) the ability to adapt its operation mode in response to the needs of the occupant while paying due attention to the availability of user-friendliness, maintaining healthy indoor climate conditions and the ability to report on energy use; and (c) the flexibility of a building's overall electricity demand, including its ability to enable participation in active and passive as well as implicit and explicit demand response, in relation to the grid, for example through flexibility and load shifting capacities."

** The following domains were identified for SRI assessment in the first technical study: heating, cooling, domestic hot water, controlled ventilation, lighting, dynamic building envelope, on site renewable energy generation, demand side management, electric vehicle charging, monitoring and control. Note – there could be changes to these in the course of the development of the SRI.

*** The following impact criteria were considered for the SRI assessment in the first technical study: energy consumption, flexibility for the grid, self-generation, comfort, convenience, well-being & health, maintenance & fault prediction, information to occupants. Note – there could be changes to these in the course of the development of the SRI.

If you answered "Other smartness scores", please state your preference in the box below. In addition, if you wish to explain your answer please add an explanation in the box below.

For end users of the buildings: An overall smartness score for the whole building & Smartness scores along the three key SRI functionalities
For professionals: An overall smartness score for the whole building + Smartness scores along the three key SRI functionalities+ Smartness scores per technical building system or technical domain+ Smartness scores per impact criterion.

15. When the SRI is reported to the users should it include recommendations on the options to improve a building's smart readiness?

- Yes
- No

If you wish to explain your answer, e.g. to elaborate on the type of recommendations that could be provided, please add an explanation in the box below.

500 character(s) maximum

Ideally, the SRI and the EPC should provide clear recommendations on investments to be made to improve building performance and flexibility, or should be linked with Building Renovation Passports, which are supposed to do so.

16. What presentational format should the SRI have?

Please select one of the choices indicated below:

- Reporting the SRI score(s) as percentages from 0% (no smart readiness) to 100% (maximum currently achievable smart readiness)
- Reporting the SRI score(s) on a mnemonic scale (such as A to G, or 1 to 10 stars, etc.)
- Reporting the SRI score(s) as both percentages (from 0% (no smart readiness) to 100% (maximum currently achievable smart readiness)) and on a mnemonic scale (such as A to G etc.)
- Other

17. What form should the SRI have?

Please select one of the choices indicated below:

- A printed certificate
- Presented electronically (i.e. in an on-line database and/or sent via an email)
- Other

18. Should the SRI be presented in accessible formats for persons with disabilities and older persons?

Please select one of the choices indicated below:

- Yes
- No

If you answered “no”, then please clarify the reasons for your choice below. If you answered "yes", please indicate possible accessible formats below.

500 character(s) maximum

PART 4: Questions on the implementation of the SRI

19. Should the SRI operate independently, or should it be combined with existing schemes (e.g. energy performance certificates) or future schemes (e.g. life cycle performance of buildings, with the Level(s) tool)?

- Independently
- In combination

Please elaborate on your answer in the box below, if you wish.

500 character(s) maximum

While the SRI scope should remain clear and different from the scope of the EPC, these two certificates should be connected to each other and be mutually reinforcing. The SRI should support the EPC in triggering investments in decentralized clean, efficient and smart technologies. Ideally, the SRI and the EPC should provide clear recommendations on investments to be made to improve building performance and flexibility, or should be linked with Building Renovation Passports.

20. Who should be responsible for the implementation of the SRI (multiple answers are permitted)

- Member states
- European Commission
- Private sector

Other

If you answered "Other", please state your preference in the box below. In addition, if you wish to explain your answer please add an explanation in the box below.

500 character(s) maximum

The EU Commission should oversee the implementation and provide support to Member States and the private sector. Member States should cooperate with the private sector to guarantee the implementation in their territories. Governments should coordinate the SRI introduction into their markets, with the support of the EU Commission. There should be, to the extent possible, cross-border alignment on SRI scope (buildings to which this scheme applies) and timing (phase-in period, full regime).

21. How should the SRI be assessed?

Please select one of the choices indicated below:

- Independent inspection process
- Self-assessment
- Both self-assessment and independent inspection process
- Other

22. If in the future it becomes possible to assess the smart readiness of a building through remote measurement of the technical building systems, should this option be permitted?

Please select one of the choices indicated below:

- Yes
- No

Please explain if you wish your answer in the box below.

500 character(s) maximum

23. Who should pay the costs of the SRI assessment? (Please note that these costs are not yet known; however, the Impact Assessment accompanying the proposal for amending the Energy Performance of Buildings estimated these at a fraction of the costs of an energy performance certificate).

Please indicate which of the options below are appropriate, noting that they are not mutually exclusive, so more than one or all options may be selected:

- Building owners and occupants
- Member States
- Utilities
- Smart services and technology industry
- Other

24. Should other measures be used to support the implementation of the SRI? If so, which?

- Yes
- No

If you answered “Yes” then please indicate which of the measures mentioned below the SRI’s operation should be combined with (you may choose as many of the measures mentioned, including the other option, as you wish):

- Incentives
- Mandatory regulation at Member State level
- Integration with existing schemes (e.g. EPC)
- Supporting policies targeting the uptake of specific smart technologies
- Awareness raising and promotional campaigns
- Other

25. How else should the SRI be implemented to overcome barriers to the uptake of beneficial smart technologies?

Please enter your answer in the box below or leave it empty if all your implementation preferences have previously been expressed. Note, you may include an explanation of your answer too.

500 character(s) maximum

Public authorities and market actors or their associations should cooperate to guarantee the smooth SRI introduction. Member states should motivate and support market actors and property owners.

26. What measures, and standards, if appropriate, should be developed and used to support the implementation of the SRI in line with the GDPR, having regard in particular to data protection by design and by default?

Please enter your answer in the box below.

500 character(s) maximum

PART 5: Additional opportunity to provide comment

27. Are there further comments you would like to make on anything that is not covered above? If so, please use the box below.

2000 character(s) maximum

- It will be important for the SRI to also assess the ability of separate building systems to interact with each other even if they perform different functions.
- the development of the SRI should go hand in hand with the development of standardised open platforms guaranteeing the secure transfer of data from different building devices.
- The SRI should evolve quickly into a tool to measure real-time building smartness, rather than potential smartness.
- Policy makers should consider the link the SRI has with the revised EPBD articles which exempt buildings with a minimum size from inspection requirements when such buildings have BACS installed.

Contact

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