The SRI – from an experimental to a regulatory instrument

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The Smart Readiness Indicator (SRI), introduced by the Energy Performance of Buildings Directive (EPBD) in 2018, is still an experimental instrument. Currently being tested in several EU countries, it is expected to become formally adopted as a regulatory instrument from 2027.

Keywords: EPBD, SRI, Smartness, Smart Building, Flexibility, Performance, EPC, Monitoring, Energy efficiency, Return on investment

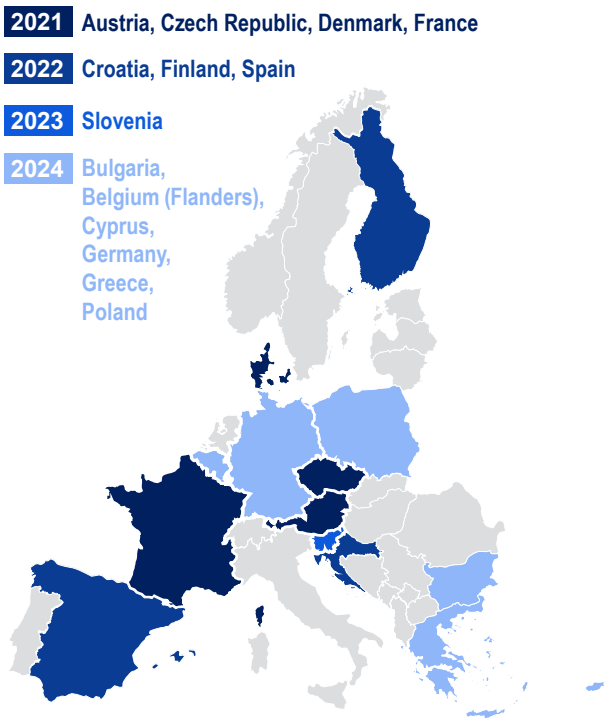
Experimentation of the SRI in EU countries

Launch of test phases at national level

The SRI is currently being tested in half of the EU countries. The *European Commission's webpage on the SRI* [1] provides the most up-to-date information about the national test phases and training materials available in national languages. Relevant information can also be found on the SRI Observatory [2].

These test phases allow for the examination of concrete aspects of the instrument:

- **Evaluators:** How should they be recruited and trained to conduct SRI assessments? What feedback do they provide regarding the practical implementation of the SRI methodology? What are the main obstacles they encounter during SRI assessments?
- **Building owners:** What value do they perceive in the SRI compared to EPCs? Does the result of the SRI evaluation of their building meet their expectations?
- **Smart Building professionals**: How will the SRI interact with existing regulatory frameworks, scores, and labels?



Countries where an official SRI test phase has been launched, with launch year.

Early test phases with different and complementary approaches

National authorities have implemented various and complementary approaches for their test phases.

In 2021, the initial test phases conducted by Member State authorities were supported by technical partners, such as universities, research centres, or consultancies). For instance: In *Austria*, the research centre AEE - Institute for Sustainable Technologies (AEE INTEC) [3] and the University of Natural Resources and Life Sciences Vienna (BOKU) [4] supported the test phase. In the *Czech Republic*, the Department of Environmental and Building Services Engineering of the Czech Technical University in Prague [5] was involved. In *Denmark*, the Danish Technological Institute (DTI) [6] provided support. In these three countries, the SRI evaluations were carried out directly by the technical partners, facilitating the rapid delivery of preliminary results.

Main issues reported:

- **For evaluators:**
  - **Data availability**: There can be challenges due to the high number of smart services that need to be assessed.
  - **Service availability**: Some services may be '*not applicable*' (e.g., services related to heat pumps when the building uses a boiler) and thus not assessed. Conversely, some services may be '*not available*' (e.g., lack of performance reporting), which can affect the score. Distinguishing between 'not applicable' and 'not available' can be challenging.
  - **Service relevance**: Certain services, such as *cloud-based apps*, may be more relevant to building owners or occupants rather than the building itself, which requires clarification.
- **For building owners:**
  - **Expectations vs. results**: Owners of buildings expected to be highly smart were sometimes surprised by their *relatively low SRI scores*.
  - **Recommendations**: Most building owners desire *recommendations on how to improve their SRI score* cost-effectively, though this feature is not yet integrated into the current SRI assessment tools.

Some countries, like *France*, recruited and trained external assessors from among accredited EPC experts, HVAC system inspectors, and energy auditors, with support from the research centre CEREMA [7]. This approach provided insights into various aspects of the process:

- **Competence and contractual issues**: Some assessors faced difficulties with the contractual aspects of SRI evaluations due to the instrument's novelty.
- **Facility manager support**: Evaluations often required input from facility managers to address operational questions and finalise assessments during site visits.
- **Service catalogue adaptation**: The Monitoring & Control domain services need simplification for better understanding by French evaluators. Explanations and illustrations are also necessary to facilitate accurate assessments.

Towards larger-scale test phases

The early test phases mentioned above assessed a limited number of buildings. To validate and expand on the initial findings, further testing is required. The European Commission, through the LIFE programme, is co-funding several projects to support the successful implementation and market uptake of the SRI in EU countries [8].

One of the 56 fiches prepared by SRI2MARKET, available in 7 languages.

One such project, SRI2MARKET, has enabled *Croatia* and *Spain* to launch official test phases, and allowed *Austria* and *France* to expand their initial test phases with a target of several hundred buildings. The project provides tailored training materials in national languages [9] to address issues encountered in earlier phases. These materials include detailed fiches on each smart-ready service, with illustrations of different functionality levels, examples, and pictures.

In *Bulgaria*, the SRI-ENACT project [10] supports the national adaptation of the SRI methodology, including the SRI assessment toolkit, auditor training courses, and pilot buildings. The SmartSquare project [11] is evaluating the payback of SRI improvement measures, capacity building, and information dissemination.

In *Cyprus* and *Greece*, several projects have collaborated to support the launch of test phases. In countries without a LIFE project, test phases have been initiated directly by national or regional authorities with support from national stakeholders (e.g., *Belgium-Flanders*, *Finland*, *Germany*, *Poland*, *Slovenia*).

A future regulatory instrument

According to the latest revision of the EPBD (adopted in April 2024), the use of the SRI is expected to become *mandatory for tertiary buildings with an effective rated output for HVAC systems of over 290 kW* by June 2027. Until then, it will remain optional for other buildings.

In the coming years, the test phases and projects will contribute to a report that the European Commission will submit to the European Parliament and the Council in 2026. This report will compile key findings and recommendations from the SRI's experimental phase and is anticipated to support the large-scale implementation of the instrument.

The SRI is therefore expected to become a new regulatory instrument alongside *EPCs*. While distinct in scope, both instruments are likely to be implemented by the same stakeholders (assessors, training organisations, quality control bodies). To prepare for *coordinated implementation of EPCs and the SRI*, three LIFE projects (SmarterEPC, tunES and iEPB) [12] are working together.

Another important area of research is developing *recommendations and prioritising actions to improve SRI scores post-assessment*. Building owners are interested in enhancing their building's smartness and understanding the *return on investment* for such improvements. This is complex, and monetising benefits like comfort, convenience, and health, is less straightforward compared to energy efficiency. Projects like EVELIXIA [13], co-funded by Horizon Europe, are addressing these issues.

Illustration of the need for recommendations following an SRI assessment. (By R2M Solution, from Carle van Loo - Spanisches Konzert)

All these projects conclude between 2026 and 2027, the timing will be ideal for the large-scale deployment of the SRI in EU countries in 2027!

References

[1] https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/smart-readiness-indicator/sri-eu-countries_en
[2] https://sriobservatory.eu/
[3] https://www.aee-intec.at
[4] https://boku.ac.at
[5] http://tzb.fsv.cvut.cz
[6] https://www.dti.dk
[7] https://www.cerema.fr/en
[8] https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/life-2021-cet-smartready
[9] https://learning.sri2market.eu/
[10] https://srienact.eu/
[11] https://www.smartsquare-project.eu/
[12] https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/life-2022-cet-buildperform
[13] https://www.evelixia-project.eu/ ■