

eu.bac suggestions for the SRI – 2nd technical study

eu.bac, the European Building Automation and Controls Association, strongly supports the introduction of a Smart Readiness Indicator (SRI) for buildings and believes that the work that has been carried out so far by the European Commission and the Consortium is going in the right direction.

In light of the exchange of views held during the first Stakeholder meeting of the Second Technical Support Study and with a view to the upcoming Draft Interim Report, eu.bac would like to provide the European Commission and the Consortium with some suggestions of the BACS Industry on how to further improve the European Scheme for rating the Smart Readiness of Buildings:

1. ASSESSMENT: DIFFERENTIATE APPROACH

- *Well-respected method, but with reasonable time and cost requirements*

As we mentioned in our previous contribution, we believe that a precondition of the success of such an indicator is to make sure that time and cost requirements are reasonable, but without compromising on the need to have a credible, well-respected assessment.

As acknowledged in the presentation displayed during the Stakeholder meeting, there's a great diversity in the building stock that justifies a different approach between the assessment performed in residential buildings vs. non-residential buildings.

- *Non-residential buildings: Expert SRI assessment (Method B)*

Taking into account their complexities and specificities, the "Expert SRI assessment" is, in our opinion, the best method for the assessment with regard to non-residential buildings. An on-site inspections covering the most impacting and actionable services streamlined smart services included in the catalogue, with an estimation of maximum 2 days, is the best compromise that can ensure the level of details that are needed to provide the Indicator with an accurate score and the amount of additional information that might be needed in the SRI for making it valuable and profitable.

- *Residential buildings: Simplified assessment (Method A) with adaptations*

In residential buildings having a detailed inspection (as described in Method B) might result in an excessive burden for the occupants/owners of a building (either in terms of time and/or costs). Nevertheless, eu.bac has some concerns on the possibility to have an online assessment, as it could undermine the credibility and value of the SRI for residential buildings. eu.bac is also not in favor of the idea of using a product data catalogue, for several reasons: a) it will be time consuming and costly for the manufacturers to build a reliable data basis; b) this approach will be used for existing buildings of different ages: some products are already phased out and even when they are not, some of these products may be so old that there will be a need to update the product with a new version.

eu.bac suggests having a simplified (but solid) assessment, a lighter version of the Method B used for non-residential buildings, still relying on an Expert/Energy Advisor, but less time-consuming (1-2 hours) and with limited costs.

- *The future of SRI: In-use smart building performance (Method C)*

A large-scale deployment of state-of-the-art Building Automation and Control Systems will create the conditions, in the future, for having a detailed, in-use assessment performed automatically. The actual performance will be calculated and benchmarking of savings, flexibility, comfort improvements, etc. will be delivered. We agree with the presentation displayed during the Stakeholder meeting: this is not applicable as of today, but it should be the goal of a future evolution of the SRI. The deployment of the BACS functionalities in Art. 14/15 of the revised EPBD by 2025 will be key to ensure that this method could become reality in the future.

2. WEIGHTING MECHANISM: BALANCING FLEXIBILITY AND CONSISTENCY

Whatever method will be used, it is key to ensure that method that is flexible (e.g. in order to allow more differentiation in impact scores) but ensuring consistency between the SRI scores at EU level. The weighting mechanism (which should take into account context, climate, building type) must be set by the methodology and should give no discretion to the individual assessor.

3. STRONGER FOCUS ON CONTINUOUS COMMISSIONING

As acknowledged both in the revised EPBD and in the 1st SRI Technical Study, ensuring an adequate operation of technical building systems over the lifecycle of the building is of paramount importance. Building occupants, usage and building technologies change over time: continuous commissioning is key to predict, detect, and address optimal functioning or malfunctioning (avoiding negative consequences in terms of comfort, health and additional costs). For all these reasons, the Second Technical Study should better take into account solutions contributing to the impact criteria “maintenance and fault prediction”.

Proposal on how to incorporate functionality levels for the maintenance of systems and assets, under consideration of the lifecycle:

- Level 1 - no maintenance – reactive services
- Level 2 - full Planned Preventative Maintenance (PPM) schedule with audit trail
- Level 3 - Conditioned based maintenance with proof of performance
- Level 4 – Predictive maintenance (also via smart connected devices)

4. A LABEL TO CREATE ADDED VALUE, IN A SIMPLE AND TANGIBLE WAY

The goal of the Smart Readiness Indicator is to “raise awareness amongst building owners and occupants of the value behind building automation and electronic monitoring of technical building systems and should give confidence to occupants about the actual savings of those enhanced functionalities” (Project summary 2nd technical support study). In terms of design, in order to create this added value we believe that the SRI should be simple enough to provide all the interested persons with all the basic information, but also allowing easy access to more details, if needed. The SRI could be used as a paper certificate but it is fundamental to have a dedicated virtual page (accessible via a QR code?). In such a way, the indicator

could be integrated with additional information and could be updated/upgraded in a simple way. Where applied on a voluntary basis, in order to create real value, the Member States should provide tax incentives based on the SRI score.

5. AN ESSENTIAL COMPLEMENT TO THE SRI: EXPERT ADVICE TO USERS

In all the cases in which the assessment will be carried out under the Method B “Expert SRI assessment”, (and under explicit request of the owner in the residential sector) it is absolutely key that the issuing of SRI could be complemented with the release of a report laying down recommendations on how to improve the building’s smartness. The recommendations should be specific to the inspected building. An example of a helpful advice would be the mandatory check of the set points for all physical variables controlled, as well as programming (time switch) the real use of the building or building part. This process could be documented in the design phase, in the commissioning phase and in the in-use phase.

6. A FUTURE-PROOF EVOLUTION PROCESS

As proposed by the 1st technical study, the methodology should rely as much as possible on standardized solutions also in the future. Nevertheless, a regular update of the SRI should also be able to take into due account the possibility to include new domains/services even if not standardized yet. In order to ensure that the SRI is constantly updated, a dedicated committee must be created. The Committee should meet regularly (at least once a year), ensure the representation of Industry Experts, Member States and Standardisation bodies.

7. SRI SCHEME: COMPLEMENTARY TO EPCs AND BUILDING RENOVATION PASSPORTS

An SRI is not an EPC. The purpose is different, the nature of the results is different, the assessment and the qualified assessors are different. Nevertheless, synergies at National level of the two tools can be possible, in some circumstances (and keeping in mind that they are different) , provided that this helps the SRI to achieve in a more efficient way the targeted objectives (e.g. avoiding further rad tape costs, where possible). SRI expert advice should be part of the EPC recommendations as well as the renovation roadmap in the BRPs.

8. VOLUNTARY SCHEME, BUT MINIMUM MANDATORY REQUIREMENTS WILL CREATE A WIN-WIN SITUATION

eu.bac supports the idea of making the SRI mandatory and hopes that many Member States will go beyond the voluntary scheme that will be set by the delegated acts currently under discussion, making it mandatory at National Level for all buildings. Nevertheless, even for those Member States that do not want to opt for having a mandatory SRI for all the buildings from the very beginning, eu.bac believes that in the first years of application it could be applied a system that ensure that at all the buildings that are: a) newly built or b) deeply renovated shall have an SRI when they are being sold. This system will not

create any burden on the Member States but, on the contrary, will ensure that the SRI will have a higher value and credibility in the market.

9. APPLYING DEMAND-SIDE FUNCTIONALITIES FOR DISTRICT HEATING

In order to reduce GHG emissions, increase efficient operation of the energy system as well as facilitate integration of renewable energy sources into the energy system, it is essential to consider not only the flexibility potential of the electricity grid but also of the thermal grid, notably district heating networks. As noted by the consortium, services such as Smart Grid Integration (DSM-18), Reporting Information regarding DSM (DSM-21) and Override of DSM control (DSM-22) – currently included in the SRS catalogue – are also applicable to district heating grids. eu.bac suggest considering broadening the scope of the SRI and applying the demand-side functionalities for the district heating system as well.