

POSITION PAPER

CAPIEL/CECAPI position on Smart Readiness Indicator (SRI) for Buildings

20th December 2017

Background:

- The Directorate-General for Energy of the European Commission has initiated a technical study in order to inform the negotiations and decision process regarding potentially setting up a 'Smart Readiness Indicator for Buildings'
- Such a 'Smart Readiness Indicator' (SRI) would give recognition for smarter building technologies and functionalities which enhance the energy efficiency and other pertinent performance characteristics of the building stock.
- The service and impacts to be considered on smart readiness are:
 - Capability for interaction with occupants
 - Capability of optimized operation and maintenance
 - Capability of demand response
- <https://smartreadinessindicator.eu/>

CAPIEL & CECAPI inputs

CAPIEL and CECAPI believe in order to value smart buildings, the SRI must pull the market in the direction of smarter buildings, whilst also providing meaningful information on the potential of the building to prospective new tenants, buyers and occupants.

- **The SRI should cover:**
 - Residential buildings and non-residential buildings (Single family dwellings, multi-family dwellings and commercial buildings)
 - New and existing buildings
 - Readiness to adapt in response to the needs of the occupant and to empower occupants to take direct control of their energy consumption and/or generation
 - Readiness to facilitate maintenance and efficient operation of the building in a more automated, controlled and safe manner
 - Readiness to adapt in response to the situation of the energy grid including eMobility
- **To be effective the SRI needs to convey information which is relevant to end-users:**

The SRI should encompass at least the following domains:

 - Heating, Cooling
 - Mechanical ventilation
 - Domestic hot water
 - Lighting
 - Blind control
 - Alarm system (DAF and intrusion alarm)
 - Dynamic building envelope
 - Energy generation

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- Energy storage
 - Demand Side Management
 - Monitoring and Control
 - Communication network (wifi and lan)
 - Self-consumption
 - Electric Vehicle charging
- **For clarity and effectiveness on the market, the SRI should be clearly independent from current Energy Performance Certificate of Buildings (EPC):**
 - SRI provides information to owners and consumers, on smart building technologies, functionalities and capabilities which enhance the energy efficiency and other pertinent performance characteristics of the building stock.
 - EPC provides information to consumers on buildings they plan to purchase or rent. They include an energy performance rating based on passive and active measures, and recommendations for cost-effective improvements.
 - **The SRI should be issued when a building is put on sale/rental market or at the time of a sales/rental transaction.**
 - **The SRI should be included in the legislation and the methodology to assess it should be standardized and based on recognised European Standards:**

The work in the following CEN/CENELEC Technical Committees should be taken into account:

 - CEN TC247/ EN15232
 - CENELEC TC205/ EN50491-12
 - CENELEC TC64/ HD60364-8-X

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Legislative context:

People spend most of their lives in buildings. We expect comfort, shelter and safety, as well as high energy efficiency. The last few years have been characterised by regulation and measures on energy efficiency, for example, the Energy Efficiency Directive (EED), the Eco-design Directive and the Energy Performance of Buildings Directive (EPBD). This is for a good reason: The buildings sector accounts for 40% of the EU's energy consumption and 36% of the EU's CO₂ emissions. Two thirds of our buildings have been constructed before energy performance standards even existed. However, the renovation rate of the building stock does not exceed 1% per annum in many cases, which would mean that it would take a century to upgrade the building stock to modern, near-zero energy levels. Therefore, implementing more energy efficiency measures in existing buildings is a cornerstone to achieving the EU climate and energy goals.

In addition to energy efficiency, digitalisation is another key issue for the transition to clean and smart buildings. Already, the impacts of digitalisation in buildings bring many benefits to the residents; increasing living comfort and quality of life, integrating renewables, smart appliances, enabling energy management systems and services, storage, digital technologies and grid connectivity. In a few years, the "Internet of Things" will connect more than 50 billion appliances with the grid and the needs of the consumer, such as electronic devices, heating control systems, alarm system, household appliances. The concept of smart buildings - connected, functional buildings - are right on our doorstep, promising even more comfort, security and energy efficiency to their residents and users.

The proposed changes by the European Commission on the EPBD provide incentives and give impulses to better accelerate the synergies of energy efficiency and digitalisation. The revision's element focusing on technical buildings systems and digitalisation encourage innovations, including by the introduction of a "smartness indicator" for the capability of connectedness of buildings.

CAPIEL is the Coordinating Committee for the Associations of Manufacturers of Switchgear and Controlgear equipments for industrial, commercial and similar use in the European Union, that work in the range of voltages until 1 kV a.c. of 1,5 kV d.c..

CAPIEL members are national associations representing small, medium and large-sized companies that in total employ more than 100.000 people directly in Europe. Their scope covers all the equipment, products fittings, systems installed and services required for operations of low voltage switchgear and control gear (products, systems and assemblies).

<http://www.capiel.eu>

Cecapi is the European Coordinating Committee representing the Associations of Manufacturers of Electrical Installation Equipment within the member states of the European Union and the EFTA region and was established in 1967.

The scope of CECAPI covers all the equipment and components for electrical installations for residential and commercial use. It includes but is not limited to components for electrical installations and appliances (such as plugs, sockets, boxes, switches, fuses), cable management systems, home and building electronic systems products, intercom and video-intercom, circuit breakers and residual current devices.

<http://cecapi.org/>