SMART READINESS INDICATOR (SRI)

A FOCUS ON LIGHTING SYSTEMS

SRI is a common EU scheme for rating the smart readiness of buildings.

Lighting is one of the **nine technical domains** addressed by the SRI.

Lighting products include light sources, such as light bulbs (halogen, compact fluorescent, etc.) or LED modules/lamps, as well as control gears, which are the devices needed to connect light sources to the electrical mains.

In 2020, approximately 1500 million light sources were sold in the EU, as lightbulbs become more efficient this figure is likely to fall to 600 million by 2030. Switching to more energy-efficient lighting products will save consumers an average of €30 per year. Additionally, this swap will enable electricity savings of up to 34 TWh per year, thus preventing roughly 7 million tonnes of CO_2 emissions in Europe per year.

In 2021, the Commission adopted new labels to scale the energy efficiency class and energy consumption of lighting products, which allows for greater energy savings and reduction in greenhouse gas emissions. Check out the European Product Registry for Energy Labelling (EPREL) database for more detailed information on models placed on the EU market, regarding the luminous flux, colour temperature and cap type, among other characteristics.
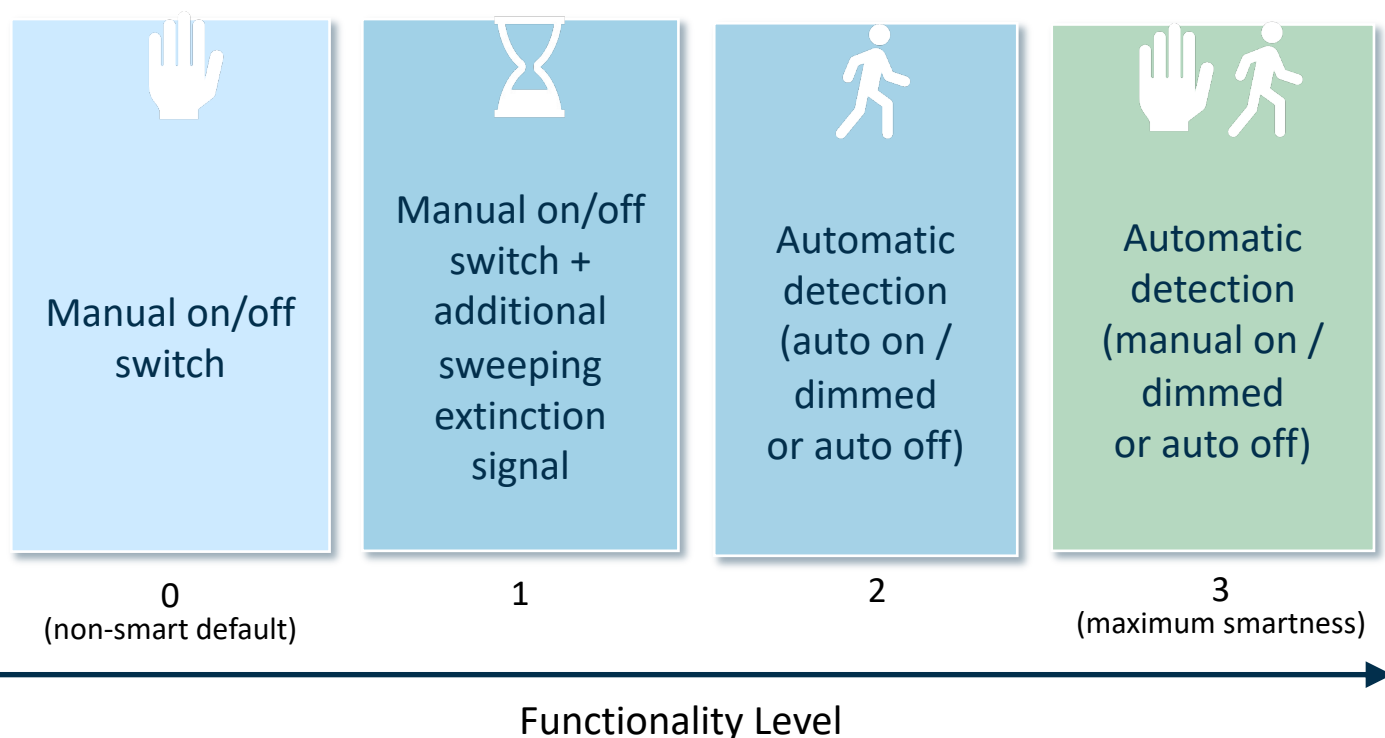
AN EXAMPLE OF SMART-READY SERVICE

The SRI implements a catalogue of smart-ready services. The next page provides one example of smart-ready service categorised under the Lighting technical domain. An example of a full Smart-ready-services catalogue can be obtained by requesting the SRI assessment package at at https://ec.europa.eu/eusurvey/runner/SRI-assessment-package

Service group: **Artificial Lighting Control**
Smart-ready-service: **Occupancy control for indoor lighting**

Standard : EN 15232

Manual on/off switch	Manual on/off switch + additional sweeping extinction signal	Automatic detection (auto on / dimmed or auto off)	Automatic detection (manual on / dimmed or auto off)
0 (non-smart default)	1	2	3 (maximum smartness)

Functionality Level

FUNCTIONALITY LEVELS CORRELATION WITH SRI IMPACT CRITERIA

Each functionality level of a given smart-ready service has corresponding individual scores for each of the **seven impact criteria** addressed by the SRI, as illustrated below.

	Energy efficiency	Maintenance and fault prediction	Comfort	Convenience	Health, well-being and accessibility	Information to occupants	Energy flexibility and storage
Level 0	0	0	0	0	0	0	0
Level 1	1	0	1	1	0	0	0
Level 2	2	0	2	2	0	0	0
Level 3	3	0	2	2	0	0	0

- **Level 1** | Manual on/off switch + additional sweeping extinction signal: this level offers mild increased energy efficiency, improved comfort, and convenience for building occupants.
- **Level 2** | Automatic detection (auto on / dimmed or auto off): the control system switches on, dimmed, or off the lights automatically whenever there is presence in the illuminated area. This offers higher energy savings, increased comfort and convenience for building occupants.
- **Level 3** | Automatic detection (manual on / dimmed or auto off): light is switched on by means of a manual switch, and, if not switched off manually, lights are automatically dimmed or entirely switched off by the automatic control system. This level offers the highest energy efficiency.

According to the SRI delegated regulation, Member States shall make available at least one smart-ready catalogue to be used by experts as the basis for identifying and assessing smart-ready services. Smart-ready service catalogue includes the list of smart-ready services to be considered for calculating the smart readiness score, related functionality levels, and corresponding individual scores for the impact criteria. Member States may decide to make available several smart-ready catalogues, for instance for different building types.

FURTHER READING

Examples of European and International Associations to learn further about lighting automation include: LightingEurope, EUROPE-ON, IALD

FOLLOW US AND CONTACT US

- SRI website, newsletter, FAQ and resources: https://ec.europa.eu/smart-readiness-indicator
- European Commission Contact: Brigitte Jacquemont: ENER-BUILDINGS@ec.europa.eu
- Twitter: @Energy4Europe #SmartReadinessIndicator

Several projects are developing Research & Innovation activities around the SRI.
Stay updated by joining the European Smart Buildings Innovation Community at:
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