

SRI FUNCTIONALITY LEVELS

HEATING

code	service		
Heating-1a	Heat emission control	Service group:	Heat control - demand side

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No automatic control	0	0	0	0
1	Central automatic control (e.g. central thermostat)	+	0	+	+
2	Individual room control (e.g. thermostatic valves, or electronic controller)	++	0	++	++
3	Individual room control with communication between controllers and to BACS (e.g. scheduler, room temperature setpoint)	++	0	++	+++
4	Individual room control with communication and presence control	+++	0	++	+++

code	service		
Heating-1b	Emission control for TABS (heating mode)	Service group:	Heat control - demand side

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No automatic control	0	0	0	0
1	Central automatic control	+	0	+	+
2	Advanced central automatic control	+	0	+	++

3	Advanced central automatic control with intermittent operation and/or room temperature feedback control	++	0	++	+++
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code	service				
Heating-1c	Control of distribution fluid temperature	Service group:		Heat control - demand side	

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No automatic control	0	0	0	0
1	Outside temperature compensated control	+	0	+	+
2	Demand based control	++	0	+	++

code	service				
Heating-1d	Control of distribution pumps in networks	Service group:		Heat control - demand side	

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No automatic control	0	0	0	0
1	On off control	+	0	+	0
2	Multi-Stage control	++	0	++	0
3	Variable speed pump control (pump unit (internal) estimations)	+++	0	+++	0
4	Variable speed pump control (external demand signal)	+++	0	+++	0

code	service				
Heating-1e	Intermittent control of emission and/or distribution - One controller can control	Service group:		Heat control - demand side	

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No automatic control	0	0	0	0
1	Automatic control with fixed time program	+	0	+	+
2	Automatic control with optimum start/stop	++	0	++	++
3	Automatic control with demand evaluation	+++	0	+++	+++

code	service	Service group:	
Heating-1f	Thermal Energy Storage (TES) for building heating (excluding TABS)		Heat control - demand side

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Continuous storage operation	0	0	0	0
1	Time-scheduled storage operation	+	0	+	0
2	Load prediction based storage operation	++	0	+	0

code	service	Service group:	
Heating-1g	Building preheating control		Heat control - demand side

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No automatic control	0	0	0	0
1	Program heating schedule in advance	+	0	+	+
2	Thermostat self-learning user behavior (presence, setpoint)	++	0	++	++

code	service

Heating-2a Heat generator control (all except heat pumps) Service group: Control heat production fac

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Constant temperature control	0	0	0	0
1	Variable temperature control depending on outdoor temperature	+	0	+	0
2	Variable temperature control depending on the load (e.g. depending on supply water temperature set point)	++	0	++	0

code service
 Heating-2b Heat generator control (for heat pumps) Service group: Control heat production fac

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	On/Off-control of heat generator	0	0	0	0
1	Multi-stage control of heat generator capacity depending on the load or demand	+	0	+	0
2	Variable control of heat generator capacity depending on the load or demand (e.g. hot gas bypass, inverter frequency control)	++	0	++	0

code service
 Heating-2c Heat system control according to external signal (e.g. electricity tariff, gas price) Service group: Control heat production fac

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No automatic control based on external signals	0	0	0	0
1	Heat system control according to external signals (tariff, availability of renewable energy)	+	++	0	0

2	Heat system control according to external signals combined with internal signals (predicted demand, temperature etc.)	++	++	+	+
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code	service				
Heating-2d	Sequencing of different heat generators	Service group:	Control heat production fac		

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Priorities only based on running time	0	0	0	0
1	Control according to fixed priority list: e.g. heat pump prior to hot water boiler	+	0	0	0
2	Control according to dynamic priority list (based on current efficiency and capacity of generators, e.g. solar, geothermal heat, cogeneration plant, fossil fuels)	++	0	0	0
3	Control according to dynamic priority list (based on current AND predicted load, efficiency and capacity of generators)	+++	0	0	0
4	Control according to dynamic priority list (based on current AND predicted load, efficiency, capacity of generators AND external signals from grid)	+++	++	0	0

code	service				
Heating-3	Report information regarding HEATING system performance	Service group:	Information to occupants a		

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	None	0	0	0	0
1	Indication of actual values (e.g. temperatures, submetering energy usage)	+	0	+	0
2	Actual values and historical data	++	0	++	0
3	Performance evaluation including forecasting and/or benchmarking	+++	0	+++	0

4	Performance evaluation including forecasting and/or benchmarking; also including predictive management and fault detection	+++	0	+++	0
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COOLING

code	service		
Cooling-1a	Cooling emission control	Service group:	Cooling control - demand si

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No automatic control	0	0	0	0
1	Central automatic control	+	0	+	+
2	Individual room control REF	+	0	+	+
3	Individual room control with communication between controllers and to BACS	++	0	++	+++
4	Individual room control with communication and presence control	+++	0	++	+++

code	service		
Cooling-1b	Emission control for TABS (cooling mode)	Service group:	Cooling control - demand si

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No automatic control	0	0	0	0
1	Central automatic control	+	0	+	+
2	Advanced central automatic control	+	0	+	+
3	Advanced central automatic control with intermittent operation and/or room temperature feedback control	++	0	++	++

code	service				
Cooling-1c	Control of distribution network chilled water temperature (supply or return)			Service group:	Cooling control - demand si
Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Constant temperature control			0	0
1	Outside temperature compensated control			+	+
2	Demand based control			++	++

code	service				
Cooling-1d	Control of distribution pumps in networks			Service group:	Cooling control - demand si
Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No automatic control			0	0
1	On off control			+	0
2	Multi-Stage control			++	0
3	Variable speed pump control (pump unit (internal) estimations)			+++	0
4	Variable speed pump control (external demand signal)			+++	0

code	service				
Cooling-1e	Intermittent control of emission and/or distribution			Service group:	Cooling control - demand si
Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience

0	No automatic control	0	0	0	0
1	Automatic control with fixed time program	+	0	+	+
2	Automatic control with optimum start/stop	++	0	+	+
3	Automatic control with demand evaluation	+++	0	+	+

code		service			
Cooling-1f		Interlock between heating and cooling control of emission and/or distribution		Service group: Cooling control - demand si	
Functionality levels			IMPACTS		
			Energy saving on site	Flexibility for the grid and storage	Comfort
0	No interlock	0	0	0	0
1	Partial interlock (dependant of the HVAC system)	++	0	0	0
2	Total interlock	+++	0	0	0

code		service			
Cooling-1g		Control of Thermal Energy Storage (TES) operation		Service group: Cooling control - demand si	
Functionality levels			IMPACTS		
			Energy saving on site	Flexibility for the grid and storage	Comfort
0	Continuous storage operation	0	0	0	0
1	Time-scheduled storage operation	+	0	+	0
2	Load prediction based storage operation	++	0	+	0

code		service			
Cooling-2a		Generator control for cooling		Service group: Control cooling production f	
			IMPACTS		

Functionality levels		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Constant temperature control	0	0	0	0
1	Variable temperature control depending on outdoor temperature	+	0	+	0
2	Variable temperature control depending on the load	++	0	++	0

code	service	Service group:		Control cooling production f	
Cooling-2b	Sequencing of different cooling generators				

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Priorities only based on running times	0	0	0	0
1	Fixed sequencing based on loads only: e.g. depending on the generators chara	+	+	0	0
2	Priorities based on generator efficiency and characteristics: the generator operational control is set individually to available generators so that they operate with an overall high degree efficiency	+	+	0	0
3	Load prediction based sequencing: the sequence is based on e.g. COP and available power of a device and the predicted required power	+	+	0	0

code	service	Service group:		Information to occupants a	
Cooling-3	Report information regarding cooling system performance				

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	None	0	0	0	0
1	Indication of actual values (e.g. temperatures, submetering energy usage)	+	0	0	0
2	Actual values and historical data	+	0	0	0
3	Performance evaluation including forecasting and/or benchmarking	+	0	0	0

4	Performance evaluation including forecasting and/or benchmarking; also including predictive management and fault detection	+	0	0	+
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DOMESTIC HOT WATER

code		service			
DHW-1a		Control of DHW storage charging (with direct electric heating or integrated ele		Service group:	Control DHW production fa
Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Automatic control on / off	0	0	0	0
1	Automatic control on / off and scheduled charging enable	+	+	0	+
2	Automatic control on / off and scheduled charging enable and multi-sensor storage management	++	+	0	++
3	Automatic charging control based on local availability of renewables or information from electricity grid (DR, DSM)	++	++	0	++

code		service			
DHW-1b		Control of DHW storage charging (using hot water generation)		Service group:	Control DHW production fa
Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Automatic control on / off	0	0	0	0
1	Automatic control on / off and scheduled charging enable	+	0	0	+
2	Automatic on/off control, scheduled charging enable and demand-based supply temperature control or multi-sensor storage management	++	+	0	++

3	Automatic charging control based on signals from district heating grid (DR, DSM)	++	++	0	++
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code	service
DHW-1d	Control of DHW storage charging (with solar collector and supplementary heat Service group: Control DHW production fa

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Manual selected control of solar energy or heat generation	0	0	0	0
1	Automatic control of solar storage charge (Prio. 1) and supplementary storage	+	0	0	+
2	Automatic control of solar storage charge (Prio. 1) and supplementary storage charge and demand-oriented supply or multi-sensor storage management	++	0	0	++
3	Automatic control of solar storage charge (Prio. 1) and supplementary storage charge, demand-oriented supply and return temperature control and multi-sensor storage management	+++	0	0	++

code	service
DHW-3	Report information regarding domestic hot water performance Service group: Information to occupants a

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	None	0	0	0	0
1	Indication of actual values (e.g. temperatures, submetering energy usage)	+	0	0	0
2	Actual values and historical data	+	0	0	0
3	Performance evaluation including forecasting and/or benchmarking	+	0	0	0

4	Performance evaluation including forecasting and/or benchmarking; also including predictive management and fault detection	+	0	0	+
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Ventilation

code	service			
Ventilation-1a	Supply air flow control at the room level	Service group:	Air flow control	

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No ventilation system or manual control	0	0	0	0
1	Clock control	+	0	+	+
2	Occupancy detection control	+	0	++	++
3	Central Demand Control based on air quality sensors (CO ₂ , VOC,...)	++	0	+++	+++
4	Local Demand Control based on air quality sensors (CO₂, VOC,...) with local flow from/to the zone regulated by dampers	+++	0	+++	+++

code	service			
Ventilation-1b	Adjust the outdoor air flow or exhaust air rate	Service group:	Air flow control	

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Fixed OA ratio / OA flow	0	0	0	0
1	Staged (low/high) OA ratio / OA flow (time schedule)	+	0	+	+
2	Staged (low/high) OA ratio / OA flow (presence)	+	0	++	++
3	Variable control	++	0	++	++

code	service		
Ventilation-1c	Air flow or pressure control at the air handler level	Service group:	Air flow control

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No automatic control	0	0	0	0
1	On off time control	+	0	0	0
2	Multi-stage control	++	0	0	0
3	Automatic flow or pressure control (without reset)	+++	0	0	0
4	Automatic flow or pressure control (with reset)	+++	0	0	0

code	service		
Ventilation-2a	Room air temp. control (all-air systems)	Service group:	Air temperature control

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	on-off capacity control	0	0	0	0
1	variable capacity control	+	0	+	+
2	Demand control	++	0	+	++

code	service		
Ventilation-2c	Heat recovery control: prevention of overheating	Service group:	Air temperature control

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Without overheating control	0	0	0	0
1	Modulate or bypass heat recovery based on sensors in air exhaust	+	0	+	+

2	Modulate or bypass heat recovery based on multiple room temperature sensors or predictive control	++	0	++	++
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code	service				
Ventilation-2d	Supply air temperature control	Service group:		Air temperature control	

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No automatic control	0	0	0	0
1	Constant set point	+	0	+	+
2	Variable set point with outdoor temperature compensation	++	0	++	+
3	Variable set point with load dependant compensation	+++	0	++	+

code	service				
Ventilation-3	Free cooling with mechanical ventilation system	Service group:		Free cooling	

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No automatic control	0	0	0	0
1	Night cooling	++	0	++	++
2	Free cooling	++	0	++	++
3	H,x- directed control	+++	0	++	++

code	service				
Ventilation-6	Reporting information regarding IAQ	Service group:		Feedback - Reporting inform	

					IMPACTS

Functionality levels		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	None	0	0	0	0
1	Air quality sensors (e.g. CO2) and real time autonomous monitoring	0	0	0	0
2	Real time monitoring & historical information of IAQ available to occupants	0	0	0	0
3	Real time monitoring & historical information of IAQ available to occupants + fault/maintenance detection based on internal sensors	0	0	0	0
4	Real time monitoring, historical & predictive information of IAQ (incl. external data e.g. outside temperature, ambient air...) available to occupants + fault/maintenance detection based on internal sensors and historical data	0	0	0	+

LIGHTING

code	service	Service group:	
Lighting-1a	Occupancy control for indoor lighting	Artificial lighting control	

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Manual on/off switch	0	0	0	0
1	Manual on/off switch + additional sweeping extinction signal	+	0	+	+
2	Automatic detection (auto on / dimmed or auto off)	++	0	++	++
3	Automatic detection (manual on / dimmed or auto off)	++	0	++	++

code	service	Service group:	
Lighting-2	Control artificial lighting power based on daylight levels	Artificial lighting control	

		IMPACTS

Functionality levels		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Manual (central)	0	0	0	0
1	Manual (per room / zone)	+	0	+	+
2	Automatic switching	++	0	+	+
3	Automatic dimming	+++	0	++	++
4	Scene-based light control (during time intervals, dynamic and adapted lighting scenes are set, for example, in terms of illuminance level, different correlated colour temperature (CCT) and the possibility to change the light distribution within the space according to e. g. design, human needs, visual tasks)	+++	0	+++	+++

DYNAMIC BUILDING ANVELOPE

code	service	Service group:	
DE-1	Window solar shading control	Window control	

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No sun shading or only manual operation	0	0	0	0
1	Motorized operation with manual control	+	0	+	+
2	Motorized operation with automatic control based on sensor data	++	0	+	++
3	Combined light/blind/HVAC control	+++	0	++	+++
4	Predictive blind control (e.g. based on weather forecast)	+++	0	+++	+++

code	service	Service group:	
DE-2	Window open/closed control, combined with HVAC system	Window control	

		IMPACTS			

Functionality levels		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Manual operation or only fixed windows	0	0	0	0
1	Open/closed detection to shut down heating or cooling systems	++	0	+	+
2	Level 1 + Automised mechanical window opening based on room sensor data	++	0	++	+
3	Level 2 + Centralized coordination of operable windows, e.g. to control free natural night cooling	++	0	++	++

code	service	Service group:	Feedback - Reporting infor
DE-4	Reporting information regarding performance		

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No reporting	0	0	0	0
1	Position of each product & fault detection	+	0	0	0
2	Position of each product, fault detection & predictive maintenance	+	0	0	0
3	Position of each product, fault detection, predictive maintenance, real-time sensor data (wind, lux, temperature...)	+	0	0	0
4	Position of each product, fault detection, predictive maintenance, real-time & historical sensor data (wind, lux, temperature...)	+	0	0	+

ELEKTROMOS ÁRAM TERMELÉS

code	service	Service group:	Feedback - Reporting infor
electricity-2	Local energy generation information		

		IMPACTS

Functionality levels		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	None	0	0	0	0
1	Current generation data available	+	0	0	0
2	Actual values and historical data	+	0	0	0
3	Performance evaluation including forecasting and/or benchmarking	+	0	0	0
4	Performance evaluation including forecasting and/or benchmarking; also including predictive management and fault detection	+	0	0	+

code	service	Service group:	
electricity-3	Storage of locally generated energy	DER - Storage	

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	None	0	0	0	0
1	Limited: small scale storage (batteries, TES,...)	0	+	0	+
2	Storage which can supply self-consumption for > 3 hours	0	++	0	+
3	Dynamically operated storage which can also feed back into the grid.	0	+++	0	++

code	service	Service group:	
electricity-4	Optimizing self-consumption of locally generated energy	DER- Optimization	

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	None	0	0	0	0
1	short term optimization	0	+	0	0
2	long term optimization including predicted generation and/or demand	0	+++	0	0

code	service		
electricity-5	CHP control	Service group:	DER - Generation Control

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Uncontrolled generation depending on the fluctuating availability of RES and or	0	0	0	0
1	Coordination of local RES and CHP with regard to local energy demand profile	0	++	0	0

code	service		
electricity-11	Reporting information regarding energy storage	Service group:	Feedback - Reporting inform

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	None	0	0	0	0
1	Current state of charge (SOC) data available	+	0	0	0
2	Actual values and historical data	+	0	0	0
3	Performance evaluation including forecasting and/or benchmarking	+	0	0	0
4	Performance evaluation including forecasting and/or benchmarking; also including predictive management and fault detection	+	0	0	+

ELEKTROMOS AUTÓ TÖLTÉS

code	service		
EV-15	EV Charging Capacity	Service group:	EV Charging

		IMPACTS			
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Functionality levels		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	not present	0	0	0	0
1	ducting (or simple power plug) available	0	0	0	+
2	0-9% of parking spaces has recharging points	0	0	0	+
3	10-50% of parking spaces has recharging point	0	0	0	++
4	>50% of parking spaces has recharging point	0	0	0	+++

code	service	Service group:	
EV-16	EV Charging Grid balancing		EV Charging - Grid

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Not present	0	--	0	0
1	1 way (controlled charging)	0	+	0	+
2	2 way (also EV to grid)	0	+++	0	+

code	service	Service group:	
EV-17	EV charging information and connectivity		EV Charging - connectivity

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No information available	0	0	0	0
1	Reporting information on EV charging status to occupant	0	0	0	+
2	Communication with a back-office compliant to ISO 15118	0	+	0	+

MONITORING AND CONTROL

code	service		
MC-3	Run time management of HVAC systems	Service group:	HVAC interaction control

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	Manual setting (plant enabling)	0	0	0	0
1	Individual setting following a predefined time schedule including fixed preconditioning	+	+	++	++
2	Individual setting following a predefined time schedule; adaptation from a central room; variable preconditioning phases	++	+	++	++
3	Control of run time management by artificial intelligence	+++	+	++	+++

code	service		
MC-4	Detecting faults of technical building systems and providing support to the diagnosis	Service group:	Fault detection

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No central indication of detected faults and alarms	0	0	0	0
1	With central indication of detected faults and alarms	0	0	0	++
2	With central indication of detected faults and alarms / diagnosing functions	0	0	0	++

code	service		
MC-9	Occupancy detection: connected services	Service group:	TBS interaction control

		IMPACTS			
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Functionality levels		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	None	0	0	0	0
1	For individual functions, e.g. lighting	+	0	+	+
2	Centralised detection which feeds in to several TBS such as lighting and heating	+	0	+	+

code	service	Service group:	Feedback - Reporting inform
MC-13	Central reporting of TBS performance and energy use		

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	None	0	0	0	0
1	Real time indication of energy use per energy carrier	+	0	0	+
2	Real time indication of sub-metered energy use or other performance metrics for at least 2 domains	+	0	0	+
3	Real time indication of sub-metered energy use or other performance metrics for all main TBS	+	0	0	++

code	service	Service group:	Smart Grid Integration
MC-25	Smart Grid Integration		

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	None - No harmonization between grid and building energy systems; building is operated independently from the grid load	0	0	0	0
1	Building energy systems are managed and operated depending on grid load; de	0	+++	0	0

code	service		
MC-28	Reporting information regarding DSM	Service group:	Feedback - Reporting inform

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	None	0	0	0	0
1	Reporting information on current DSM flows and controls	0	+	0	0
2	Reporting information on current, historical and predicted DSM flows and controls	0	+	0	0

code	service		
MC-29	Override of DSM control	Service group:	Override control

Functionality levels		IMPACTS			
		Energy saving on site	Flexibility for the grid and storage	Comfort	Convenience
0	No DSM control	0	0	0	0
1	DSM control without the possibility to override this control by the occupant	0	++	--	0
2	Manual override and reactivation	0	-	0	+
3	Scheduled override of DSM control and reactivation	0	+	0	++
4	Scheduled override of DSM control and reactivation with artificial intelligence	0	++	0	+++

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	+	0
0	+	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0

0	+	+
---	---	---

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	+	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	0	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	+
0	0	+

--

ilities

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0

ilities

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0

ilities

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0

0	0	0
---	---	---

ilities

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

nd facility managers

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	0	0

0	0	0
---	---	---

ide

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	+	0
0	+	0

ide

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	+	+

ide

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0

ide

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

ide

Wellbeing and health	Maintenance and fault prediction	Information to occupants
----------------------	----------------------------------	--------------------------

0	0	0
0	0	0
0	0	0
0	0	0

ide		
Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0

ide		
Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0

ilities		

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0

facilities

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	0	0

nd facility managers

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	+	+
0	+	++
0	+	+++

0	++	+++
---	----	-----

cilities		
----------	--	--

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	0	0

cilities		
----------	--	--

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0

0	0	0
---	---	---

ilities

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	0	0

nd facility managers

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	+	+
0	+	++
0	+	+++

0	++	+++
---	----	-----

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
+	0	0
++	0	0
+++	0	0
+++	0	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
+	0	0
++	0	0
++	0	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
+	0	0
++	0	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
+	0	0

++	0	0
----	---	---

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	0	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
+	0	0
+	0	0
+	0	0

nation

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	+	+
0	+	++
0	+	+++
0	++	+++

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	0	0

--

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
+	0	0
++	0	0
+++	0	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
+	0	0
+	0	0
+	0	0

--

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
+	0	0
+	0	0

ation

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	+	+
0	+	++
0	+	+++
0	++	+++

ation

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	+	+
0	+	++
0	+	+++
0	++	+++

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	0	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	++	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0

nation

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	+	+
0	+	++
0	+	+++
0	++	+++

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0
0	0	0

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	++
0	0	+++

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
+	0	0
+	0	0
+	0	+

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
++	++	++
++	+++	++

--

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	+	0
0	++	0

ation

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	+	+
0	+	++
0	+	+++

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	0

ation

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	++
0	+	+++

Wellbeing and health	Maintenance and fault prediction	Information to occupants
0	0	0
0	0	--
0	0	0
0	+	+
0	++	++