ENSREG SMR Task Force Dashboard – November 2025

The first version of the ENSREG SMRs Task Force Dashboard was published on the ENSREG website on 23 April 2025. The Task Force agreed in spring 2025 to regularly update the ENSREG Plenary and external parties on the status of regulatory engagement on SMRs, with the aim to capture the relative changes in progress over time. While initially focusing exclusively on the Project Working Groups (PWGs) identified by the European SMRs Industrial Alliance, this fall 2025 edition of the dashboard has been extended to all active SMR projects as submitted by the Task Force members.

Each EU Member State has their own approach to licensing, and the phases preceding licensing (pre-licensing), which may be formal or informal. Exact descriptions of licensing procedures in each country should be consulted in the respective regulators' publications. The dashboard tries to capture the varying phases of pre-licensing within the ENSREG SMR Task Force members, with information provided by the regulators represented in the SMR Task Force. Occasional contacts with regulators without near-term prospects to engage in a serious dialogue are not included in the dashboard.

Typical phases

For the purpose of comparison in this dashboard, the SMR projects are categorized into typical phases as described below. By coupling the projects to these phases, the aim is to come to a common understanding of the relative progress in engagement with the regulator(s) of the respective projects. The duration of the two first phases may vary depending on the design phase progress of the project. Over time, projects may progress towards the licensing phase or take a step back as designs and plans are reconsidered. The resources dedicated by the regulator will increase proportionally with each licensing phase.

1. **Early dialogue**
   - Preliminary contact between regulator and either vendor, utility and startup to discuss, depending on the country, project maturity, national framework, safety requirements, and licensing procedures.
   - Observer status on a more advanced review (such as the General Design Assessment (GDA) by ONR in the UK) may be considered a form of early dialogue.

Industrial Alliance PWGs	ENSREG members involved
BWRX-300	FI, NL, SE
Rolls Royce SMR	FI, PL, SE, NL (GDA Observers)
Other SMR Projects	ENSREG members involved
Allseas	NL
Blykalla SEALER	SE
Copenhagen Atomics	SE
HTGR-POLA	PL

2. **Preparatory Review**
   - Needs to have an established conceptual design and an organisation with enough technical and financial capacity to substantiate engagement.
   - Preliminary technical discussions, with limited scope and/or degree of detail.
   - In some countries, in this phase a general statement could be given by the regulator regarding the eligibility of the design for a license in the context of a feasibility study or "decision in principle"; in other countries, no opinion or decision by the regulator is issued at this stage.
   - Joint reviews are a form of early engagement involving two or more countries working together in an agreed format.

Industrial Alliance PWG	ENSREG members involved
CityHeat	FI (CALOGENA) Joint early review about to start (LDR-50): CZ, FI, PL, SE
Thorizon	Joint Preparatory review FR, NL
European LFR AS (newcleo)	FR (completed in 2024)
Quantum	RO
Nuward	Joint Early Review on Nuward Phase 2: FR, CZ, SE, FI, PL, and NL - completed
Other SMR Projects	ENSREG members involved
ALVIN (STELLARIA)	FR
BLUE CAPSULE	FR
HEXANA	FR
OTRERA	FR
XAMR (NAAREA)	FR (completed in 2024)

3. Review and Assessment (pre-licensing)

- Discussions, review and assessment work to be done at a high level of technical detail. It may be limited in scope.
- May be part of pre-licensing procedure.
- In some countries, location for deployment may be already chosen at this stage or there is a firm commitment to deploy at that country.
- Applicant/designer needs to have and commit resources in the country. Resources need to be suitable to discuss, deliver answers and adjust safety documentation during the review and assessment by the regulator in a structured and reliable way.

Industrial Alliance PWG	ENSREG members involved
CityHeat	FR (CALOGENA)
EAGLES (ex: EU-SMR-LFR)	RO, BE, IT (observer)
Rolls Royce SMR	CZ
NUWARD	FR (halted)
BWRX-300	CZ, PL

4. **Licensing**

- Goal of a site-specific final license decision to construct.
- Full review and assessment may be finished in this phase.
- Formal procedures, or last stages of informal procedures with a clear road map to decision making.

Industrial Alliance PWG	ENSREG members involved
NuScale	RO
Other SMR Projects	ENSREG members involved
JIMMY	FR

Dashboard November 2025

Industrial Alliance PWG	Designer	Reactor technology	Core thermal Power (1 module)	Status of the project company	Objective / first target market (end-use)	Involved regulatory bodies	Regulatory engagement phase
BWRX-300 SMR	GE-Hitachi	BWR	900 MWth	Existing utility	Electricity production	Czech Republic	Review and Assessment (pre-licensing)
						Finland	Early dialogue
				Start up utility		Netherlands	Early dialogue
				Existing utility	Cogeneration	Poland	Review and Assessment (pre-licensing)
					Electricity production	Sweden	Early dialogue (with two different licensees)
CityHeat	CALOGENA	Pool reactor	30 MWth	Start up designer	District heating	France	Review and Assessment (pre-licensing)
						Finland	Preparatory review
	LDR-50		50 MWth			Czech Republic	Preparatory review (JER about to start)
						Finland	Preparatory review (JER about to start)
						Poland	Early dialogue (JER about to start)
						Sweden	Early dialogue (JER about to start)
European LFR AS	Newcleo	LFR	80 MWth	Start up designer	Experimental prototype	France	Preparatory review closed
EAGLES (ex: EU-SMR-LFR)			30 MWth	Start up designer	Experimental prototype	Belgium	Review and Assessment (pre-licensing)
Consortium			300 MWth	Start up designer	Demonstration prototype	Romania	Review and Assessment (pre-licensing)
LFR			30/300 MWth	Start up designer	Experimental and Demonstation prototype	ISIN	Observer to the Joint Review process from Belgium and Romania
NuScale VOYGR™ SMR	NuScale	PWR	250 MWth	Existing utility	Electricity production	Poland	Early dialogue halted
				Start up utility		Romania	Licensing
Nuward*	NUWARD	PWR	540 MWth	Existing utility	Electricity production	Czech Republic	Joint Early Review phase 2 completed
						Finland	Joint Early Review phase 2 completed
						France	Joint Early Review phase 2 completed National Review and assessment halted
						Netherlands	Joint Early Review phase 2 completed
						Poland	Joint Early Review phase 2 completed
						Sweden	Joint Early Review phase 2 completed
Quantum	Last Energy	PWR	60 MWth	Existing utility	Electricity production	Netherlands	Early dialogue halted
				Start up designer		Poland	Early dialogue halted
				Start up designer		Romania	Preperatory review
Rolls Royce SMR	Rolls Royce SMR	PWR	1500 MWth	Existing utility	Electricity production	Czech Republic	Review and Assessment (pre-licensing)
				Existing utility		Finland	Early dialogue - GDA observer
				Start up utility		Netherlands	Early dialogue
				Existing utility		Poland	Early dialogue GDA observer
						Sweden	Early dialogue GDA observer
Thorizon	Thorizon	MSR	250 MWth	Start up designer	Cogeneration	France	Joint Preparatory review
						Netherlands	Joint Preparatory review

*Currently in redesign from version 1 (V1) to version 2 (V2)

SMR project	Designer	Reactor technology	Core thermal Power (1 module)	Status of the project company	Objective / first target market (end-use)	Involved regulatory bodies	Regulatory engagement phase
Allseas	Allseas HTGR	HTGR pebble bed	70 MWth	Maritime industry	Industrial heat, electricity and nuclear propulsion	Netherlands	Early dialogue
ALVIN	STELLARIA	MSR	250 MWth	Start up designer	Electricity production	France	Preparatory review
BLUE CAPSULE	Blue Capsule Technology	HTR	150 MWth	Start up designer	Industrial heat	France	Preparatory review
FERMI	Jimmy	HTGR	20 MWth	Start up designer	Industrial heat	France	Licensing
HEXANA	HEXANA	SFR	400 MWth	Start up designer	Cogeneration	France	Preparatory review
OTRERA 300	OTRERA	SFR	300 MWth	Start up designer	Cogeneration	France	Preparatory review
XAMR	NAAREA	MSR	80 MWth	Start up designer	Experimental prototype	France	Preparatory review closed
Blykalla SEALER	Blykalla	LFR	55 MWth	Start up designer	1) electrical prototype, 2) demonstration reactor and pyrolysis, 3) commercial power production	Sweden	Early dialogue
Copenhagen Atomics	Copenhagen Atomics	Thorium MSR	100 MWth	Start up designer	The target customers are large plants producing commodities such as aluminium, ammonia or hydrogen.	Sweden	Early dialogue
HTGR-POLA	NCBJ	HTGR	30 MWth	Existing utility	1) Demonstration reactor, 2) Cogeneration	Poland	Early dialogue