



SMR REGULATORS' FORUM

Newsletter

Issue 6, March 2026

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SMR RF Secretariat Team Member from 2023 to 2025

To our readers

Welcome to the sixth issue of the SMR Regulators' Forum Newsletter!

Over the past years, the Forum has built a strong foundation by addressing key conceptual and regulatory questions associated with SMRs. As projects move closer to deployment, the focus is now clearly shifting towards practical, implementation-driven challenges. This also requires us to adapt how we work, with greater emphasis on efficiency and on delivering outputs that can be directly applied in ongoing projects. For the Manufacturing, Construction, Commissioning and Operation (MCCO) Working Group, recent developments mean moving beyond manufacturing topics and increasingly addressing construction-related issues, such as oversight of factory-built modules, assembly on site, and the evolving role of regulatory bodies in a more modular and supply chain-driven environment.

In this context I am honoured to take on the role of Chair of the MCCO Working Group (WG). I would like to acknowledge the excellent work of my predecessor, Ms Kerri Kavanagh (U.S. NRC), who led the MCCO WG efforts from 2018 until the end of 2025, and significantly contributed to the development of the Forum's outputs in this area.

In this issue of the Newsletter, as in all the previous ones, we provide a comprehensive overview of the Forum's recent activities, milestones, and upcoming initiatives to advance the safe and effective deployment of SMRs. We present the outcomes of the most recent SMR RF meetings and examine the growing impact of the SMR RF on the IAEA Safety Standards and national regulatory frameworks, and international cooperation initiatives. Additional sections provide insights into ongoing national developments and highlight forthcoming opportunities to engage with the Forum and its work.



I look forward to working with all the Forum's members and stakeholders to ensure that our work remains relevant, practical and supportive of the safe and effective development of SMRs worldwide. I hope the SMR RF Newsletter keeps you informed and connected with the evolving landscape of SMR regulation.

Mr Daniel Vlček

MCCO WG Chairperson
Nuclear Engineer and Inspector
Czech State Office for Nuclear Safety (SÚJB)

Latest SMR Regulators' Forum (SMR RF) Meeting

The Combined SMR RF Steering Committee and Working Groups Meeting, including the NHI Regulatory Track WG on Regulatory Cooperation Toolkit (hybrid, Vienna, Austria, 1-5 December 2025)

The latest SMR RF meeting was held from 1 to 5 December 2025 at the IAEA Headquarters in Vienna, Austria. The meeting brought together representatives from regulatory bodies, industry, and the three permanent SMR RF Observers – the European Commission (EC), the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development (OECD NEA), and the World Nuclear Association's Cooperation in Reactor Design Evaluation and Licensing Working Group (WNA-CORDEL).



SMR RF Opening Plenary – 1 December 2025 (Photo: IAEA)

Ms Anna Bradford, IAEA Director of the Nuclear Installation Safety Division, in her remarks emphasized the importance of international collaboration on SMR issues. She noted the SMR RF/Nuclear Harmonization and Standardization Initiative (NSHI) Regulatory Cooperation Toolkit (RCT) WG progress on tools to support regulatory equivalency and effective leveraging, aligned with recent IAEA publications. She highlighted that Phase 4 has been very important for informing and updating IAEA Safety Standards for SMRs, particularly in addressing novel issues, and acknowledged successful capacity-building activities in South Africa and Poland. She noted that preparations for Phase 5 would ensure the Forum's relevance and leadership in SMR regulatory cooperation.

The Forum Members, Observers, and the IAEA shared relevant updates on SMR activities.

The EC presented an update on the activities of the European Industrial Alliance on SMRs, focused on the [Strategic Action Plan for 2025–2029](#); the WNA presentation highlighted its new flagship publication, [World Nuclear Outlook Report 2025](#), promoted the World Nuclear Supply Chain 2026 conference to be held in Manila on 20–21 May, and covered CORDEL Working Group activities. The OECD NEA presented frameworks supporting SMR safety assessment, promoted the publication [Strategic Roadmap for Nuclear Reactor Safety Research](#) and the international workshop [Bridging Law and Technology: International Workshop for the Deployment of Small Modular Reactors](#), held Stockholm on 8–10 December 2025.

The Topical Session was dedicated to Floating Nuclear Power Plants (FNPPs) and nuclear-powered ships. WNA-CORDEL outlined key challenges and opportunities for FNPPs deployment, while speakers from the Utrecht University School of Law and the IAEA examined gaps in international legal frameworks – covering nuclear safety, nuclear security, and maritime law – affecting both FNPPs and nuclear-powered ships.

The Special Session on Technical Topics featured presentations by the Radiation and Nuclear Safety Authority of Finland (STUK) on new findings from the Steady Energy LDR-50 review, and by the United States Nuclear Regulatory Commission (U.S. NRC) on the NuScale application review. The discussions highlighted the practical regulatory

challenges in the SMR context and reaffirmed the Forum's essential role in sharing experience and learning from one another.

Over the course of the meeting, the Design and Safety Analysis (DSA) and MCCO WGs focused on discussing and addressing comments on their Phase 4 reports, which have just been published and available here: [Our Publications / Phase 4 \(2024-2026\)](#). The DSA WG concentrated on its *Mechanistic Source Term* report, while the MCCO WG focused on its *Fleet-Wide Deployment and Manufacturing without an Owner/Licensee* reports.

The SMR RF/NHSI RCT WG completed its Phase II activities, having successfully produced the *Approaches for Addressing Areas of Regulatory Difference and Resources for Leveraging Regulatory Reviews*. Industry representatives also attended RCT WG sessions and made valuable contributions to the discussions.



SMR RF Closing Plenary – 5 December 2025 (Photo: IAEA)

On the final day, the Closing Plenary featured wrap-up presentations by the WG Chairs. Ms Kirsi Alm-Lytz, Head of the IAEA Regulatory Activities Section, thanked all participants for their valuable contributions to the meeting and throughout 2025.

“Stay informed about the Forum's activities by visiting our [website](#) and subscribing to this [Newsletter](#).”

In Focus: How Regional Workshops Help Address Regulatory Challenges in SMRs

Advancing Capacity Building for SMR Regulation

The SMR RF has continued its capacity building programme for embarking countries that supports national regulatory bodies in preparing for the safe and effective oversight of SMR technologies.

Since 2021, eight regional workshops have been held across all major geographic regions, engaging regulatory bodies from more than 40 IAEA Member States. The regional workshops cover key regulatory and technical topics, including the legal and regulatory framework for safety, strengthening safety infrastructure, SMR technologies, defence in depth (DiD) and graded approaches, licensing challenges, safety analysis, emergency planning zones, and issues related to manufacturing, construction, commissioning and operation. They also highlight the collaborative work between the SMR RF and the IAEA's NHSI.

In 2025, a key milestone was achieved with the first Pilot School for Regulating SMRs, held in Warsaw, Poland. Organized jointly with the Regulatory Cooperation Forum and the National Atomic Energy Agency of Poland (PAA), the Pilot School offered two weeks of focused training on SMR regulatory approaches, case studies, and international experience, complemented by a visit to the National Centre for Nuclear Research.

Building on the success of these courses, the SMR RF is now preparing for a new phase of training events. A consultancy meeting in March 2026 reviewed materials and incorporated feedback from the Pilot School to ensure the future training delivers even greater value. The upcoming Interregional Training Course on Safety and Regulatory Aspects of SMR and Other Advanced Reactor Technologies will benefit from a strengthened structure

and improved learning tools, reflecting lessons learned and the evolving needs of Member States. It will take place in Vienna, Austria, from 20 April to 8 May 2026.

The evolution from previous events to this new format will introduce several improvements, including:

- broader scope: the programme will include detailed presentations on safety aspects of different SMR technologies.
- improved structure: the programme will group topics into thematic blocks, integrate comparative exercises across regulatory frameworks, and attach subject matter experts to working groups.
- greater interactivity: more dynamic tools, animations, and case-based learning to foster collaboration and practical application will be offered.

In the run-up to the event in April, the programme continues to mature, deepening international cooperation and reinforcing global alignment on SMR regulatory practices.

In Focus: How the SMR Regulators' Forum is Shaping Nuclear Regulation

Impact of the SMR RF on IAEA Publications

The SMR RF Insights to Shape the Revision of SSR-2/1 (Rev.1)



Mr Jorge Luis Hernandez
Senior Nuclear Safety Officer
IAEA

As Member States (MSs) plan to deploy a larger representation of SMRs comprising different reactor technologies, such as water-cooled, non-water-cooled, and transportable designs, taking advantage of modularity and modularization concepts, the IAEA is undertaking a comprehensive revision of its key design safety standard, [SSR-2/1 \(Rev.1\)](#), to ensure that the requirements remain applicable to all nuclear power plants equipped with different reactor technologies and used for different applications. The extensive work of the SMR RF, which has spent nearly a decade analysing how emerging reactor designs challenge traditional regulatory assumptions, is considered as an important input source into the revision process. The IAEA will draw directly on this work to ensure that the next edition, SSR-2/1 (Rev. 2), provides technology-inclusive and technology specific requirements to cover all reactor technologies and the vast majority of their applications.

The SMR RF has examined, as summarized in the [SMR RF Phase 2 Summary Report](#), how both water-cooled and non-water-cooled SMRs introduce design features that differ from large, conventional plants. For instance, multimodule SMRs often rely on support systems that serve more than one module, which raises questions about reliability and capability of shared infrastructure, their protection from common cause failures, and how safety functions are distributed across modules. Similarly, as highlighted in the [SMR RF Phase 2 Report of the MCCO WG](#), the compactness that characterizes many SMR designs can complicate service inspections and maintenance activities, leading to specific considerations for the design for radiation protection.

The Forum's work has acknowledged that non-water-cooled reactors use different materials from those traditionally used in water-cooled plants. These materials are used in coolants and fuel forms and induce different chemical reactions, and thermophysical behaviour and challenges, leading to alternative confinement strategies, including pressure management design solutions and specific radionuclide retention mechanisms. These specifics influence how established safety requirements are demonstrated during both normal operation and accident conditions. The IAEA is taking these considerations into account in the revision of the SSR-2/1 (Rev.1) to ensure the collection of safety standards for the design of nuclear power plants remains technology-neutral, technology-inclusive and technology-specific, while still setting clear expectations for robust, multilayered protection across all reactor types, as also discussed in the [SMR RF Phase 3 Report, Containment Systems](#).

Another area where SMR RF work may inform the SSR-2/1 (Rev.1) revision relates to the application of long-established safety concepts, such as defence in depth, design extension conditions, and the single failure criterion, to innovative reactor technologies. Many SMRs rely heavily on passive safety features or propose alternative approaches to preventing severe accident, including claims of the application of practical elimination for some accident sequences. The Forum's analyses, including those presented in the [SMR RF Phase 2 Report of the DSA WG](#), help identify where these approaches are consistent with established principles and where further clarification

in the safety requirements may be warranted to ensure support for consistent, technology-inclusive application across different reactor technologies.

The IAEA's revision process also recognizes the importance of considering the interfaces among safety, security, and safeguards from the early design stage. This perspective is consistent with the Forum's findings, which underscore the importance of an integrated consideration of these interfaces, particularly for transportable reactors where deployment options may introduce additional interface challenges. The [SMR RF Phase 3 Report, Safety, Security and Safeguards from a Regulatory Perspective: An Integrated Approach](#), therefore provide insights into specific topics where further clarification in SSR-2/1 (Rev. 2) may be useful, such as the implications of cybersecurity for safety, considerations related to safeguarding of sealed or remotely operated units, and boundary conditions relevant for transportable or remote-site applications.

The IAEA's use of the SMR RF outputs is part of a broader evidence base that includes applicability studies, such as the Safety Report on non-water-cooled reactors and SMRs ([SRS-123](#)), feedback from recent technical safety reviews (TSR) of SMR designs, and formal requests from MS, reflected in successive General Conference resolutions, to ensure that the IAEA Safety Standards remain applicable to advanced reactor technologies and deployment options. Together, these inputs support the revision to maintain the strong foundation of SSR-2/1 (Rev.1), while enhancing its relevance and technology-inclusive applicability to different reactor technologies and designs that MS are planning or considering for deployment.

While retaining its objective-oriented foundation and by incorporating the lessons learned and regulatory insights captured by the SMR RF, the revised version of SSR-2/1 (Rev.1) will be better positioned to support MS in conducting design safety assessment of both long-established and emerging reactor technologies. The result will be a more coherent and forward-looking safety standard that strengthens global safety, promotes regulatory consistency, and provides a clearer framework for the design of nuclear power plants that MS are preparing to deploy.

Impact of the SMR RF on Regulatory Bodies and National Frameworks

Strengthening Flexibility and Early Engagement in Czech Legislation



Mr Karel Künzel

SMR RF Steering Committee Member from Czech Republic
State Office for Nuclear Safety Adviser
Permanent Mission of the Czech Republic in Vienna

The Czech Republic has regulated nuclear installations under the Atomic Act, and its implementing legislation for almost a decade. Experience gained from nearly ten years of its application, peer review findings, and recent technological developments culminated in a recent amendment of the Act.¹

Discussions within the SMR RF have long highlighted two recurring themes relevant to such developments: the need for a pre-licensing engagement and sufficient regulatory flexibility while maintaining safety. As early as its Phase 2 work, the Forum emphasized that regulators must retain enough flexibility as initial deployments evolve and mature, and that effective pre-licensing interactions benefit both regulators and future licensees, particularly where safety claims are still developing and uncertainties remain significant.

The recent Czech amendment reflects these considerations and, among other adjustments such as more technologically neutral requirements on the nuclear installation design, introduces two instruments responding directly to these challenges: formal provision of preliminary information and possibility of an exemption.

Preliminary Information: A Different Pre-Licensing Engagement

Section 228a states that, upon request, the State Office for Nuclear Safety (SÚJB) shall provide preliminary information on the grounds on which it will assess an application or on the conditions under which such an application may be granted. The information must be provided within 180 days and is valid for up to two years unless specified otherwise. The level of detail in the response naturally corresponds to the level of detail of the technical information submitted. Fees are defined by secondary legislation.

This establishes more formalized early engagement, increasing transparency and predictability of regulatory expectations. Unlike the exemption mechanism, it is not limited to licensees; any interested party may request such information.

¹ The amendment of the Atomic Act is accompanied by revisions of key implementing regulations. Atomic Act as amended will be available on the English website of the SÚJB: <https://sujb.gov.cz/en/>

In practice, it clarifies how SÚJB intends to interpret and apply statutory requirements to a specific technical solution. This may be particularly relevant for innovative designs, where regulatory expectations need to be understood before significant technical or investment decisions are taken. The instrument cannot substitute for a full licensing review, and applicants remain responsible for presenting a complete safety case.

Although preliminary information does not constitute a licence or design approval, it represents a formal output of the regulatory authority. Given its formalized nature, the requester receives an official regulatory position that may be relied upon for its own purposes. In line with principles of good administration, SÚJB is expected to act consistently with the conclusions expressed therein, provided that the relevant factual and legal circumstances remain unchanged or further detailed assessment justifies a different outcome.

Exemption from Statutory Requirements: Controlled Flexibility

Section 228b introduces the possibility for a person subject to obligations under the Atomic Act to request an exemption from a specific statutory requirement. In substance, the instrument allows alternative fulfilment of a requirement, provided strict cumulative conditions are met.

SÚJB may grant such an exemption only if: the requirement cannot demonstrably be fulfilled in the specific case; the proposed alternative solution is justified; and the exemption will not reduce the achieved and required level of safety and remains consistent with good practice. The exemption may be revoked under specific conditions.

This is not a general waiver. The wording makes clear that it does not apply to procedural rules, sanctions or regulatory competences. Its scope is limited to substantive technical requirements. Most importantly, it cannot result in a reduction of safety.

It does not represent deregulation, rather it provides a controlled, case-by-case mechanism allowing the regulator to respond to technological evolution. Advanced reactor designs, including SMRs, may incorporate features that do not fully align with requirements originally developed with large LWRs in mind. A rigid framework could impose unnecessary burden without additional safety benefit or fail to accommodate a different, but demonstrably safe, technical solution.

Final Reflections

Taken together, Sections 228a and 228b address two structural issues repeatedly discussed within the SMR Regulators' Forum: the importance of early engagement and flexibility that does not weaken safety.

The Czech amendment illustrates how long-term regulatory dialogue within the SMR Regulators' Forum can inform concrete legislative development. It strengthens preparedness for new technologies while reaffirming that the priority of safety.

Novelty alone does not imply reduced safety; however, higher uncertainty and limited operational experience require careful scrutiny, while regulatory frameworks must remain sufficiently clear and adaptable to assess innovation rigorously and consistently.

Impact of the Pilot School for Regulating SMRs on Belgian Readiness for SMRs



Ms Silvia Fiore

Nuclear Inspector-Expert
Federal Agency for Nuclear Control

Last year, I participated in the Pilot School for Regulating Small Modular Reactors, hosted in Warsaw from 25 August to 5 September 2025, representing the Federal Agency for Nuclear Control (FANC), the Belgian regulatory body. The School was organized jointly by the IAEA and the PAA and brought together experts from regulatory bodies across the world for an intensive two-week programme. The well-structured programme created an ideal environment for learning, collaboration, and substantive regulatory discussions.

Participation in this Pilot School meaningfully supported Belgian regulatory activities by strengthening FANC's internal knowledge on innovative reactor technologies and by enhancing its preparedness for future SMR projects. The training offered a unique opportunity to exchange knowledge with regulators who already have experience in addressing challenges of licensing advanced reactor designs, as they are already involved in pre-licensing engagements with SMR vendors. These discussions provided valuable insights into international regulatory practices, challenges, and expectations and were directly relevant for Belgium as it is currently developing its own framework for emerging nuclear technologies.

The programme highlighted several regulatory aspects essential for future regulation of SMRs: the importance of proactive preparation by building expertise early within the regulatory body; the need for flexibility, using tools, such as maturity assessments and progressive engagement, to adapt regulatory processes to the evolving stage of each project; the evolution toward risk-informed, goal-oriented approaches and the use of graded approach to regulatory frameworks to suit the diverse SMR designs; the value of regulatory transparency and predictability through early guidance and clear expectations; and the relevance of early siting considerations, including the use of bounding approaches that could streamline the process for additional modules deployment.

Some of the themes explored during the SMR Pilot School are directly aligned with ongoing work within the FANC as part of its New Build Programme. This programme includes proactive reflection on regulatory processes, development of guidance documents, internal capacity building, and the exploration of regulatory approaches suitable for innovative reactor technologies. Participation in the school has provided concrete input to these efforts and strengthened Belgium's preparedness for the evolving landscape of SMR development.

SMR RF at Other Events

International Symposium on Artificial Intelligence and Nuclear Energy (in-person, Vienna, Austria, 3-4 December 2025)



Side Event in International Symposium on AI and Nuclear Energy – 4 December 2025 (Photo: IAEA)

The IAEA hosted its first *International Symposium on Artificial Intelligence (AI) and Nuclear Energy* from 3 to 4 December 2025 in Vienna, bringing together global experts to explore the rapidly growing intersection between AI technologies and the nuclear sector.

A side event organized by the SMR RF Scientific Secretariat was held during the Symposium, highlighting regulatory collaboration on emerging nuclear technologies. Mr Paul Stenhoff, UK Office for Nuclear Regulation, Vice-Chairperson of the SMR RF, opened the session with an overview of the Forum's mission, achievements, and ongoing work.

The first panel focused on **New-to-Nuclear Organizational Capability**, emphasizing early regulatory engagement, sharing good practices – particularly for FOAK projects – aligning people, technologies and processes, and the importance of public engagement when addressing diverse SMR licensing scenarios. The panel brought together leading experts, including Mr Paul Stenhoff; Mr Sean Belyea, Chair of the SMR RF Licensing Issues (LI) WG, Canadian Nuclear Safety Commission (Canada); Ms Wilma Tolud, Member of the SMR RF MCCO WG, Dutch Authority for Nuclear Safety and Radiation Protection (Kingdom of the Netherlands); and Mr Eetu Ahonen, SMR RF SC Member, STUK (Finland).

The second panel explored **How Regulatory Bodies Use AI**, noting that while AI applications in nuclear power plants are being addressed, its use by regulatory bodies remains a new area. Panellists highlighted AI's potential to strengthen regulatory safety missions, the need for transparency and governance, responsible and explainable AI use, experimentation supported by clear guidelines, and the value of international collaboration to ensure consistent and trustworthy practices. The discussion featured insights from Mr Kevin Lee, Senior Innovation Officer, Canadian Nuclear Safety Commission (Canada); Mr Victor Hall, Acting Director of the Division of Systems Analysis, NRC (United States of America); and Mr Eetu Ahonen.

An interactive Q&A session engaged participants on topics ranging from SMR regulatory challenges and AI benefits to early engagement for new-to-nuclear entities, regulatory agility, and sustained collaboration between AI solution providers and regulatory bodies.

Find more here: [Home: International Symposium on Artificial Intelligence and Nuclear Energy | IAEA](#)

SMR RF Phase 4 Reports Webinars

Webinar on the work on Mechanistic Source Term by the DSA WG of the SMR RF

The SMR RF Phase 4 webinar series started on 24 February 2026 with a session dedicated to the work of the DSA WG on the Mechanistic Source Term (MST). The event attracted significant interest, with more than 180 registrations and consistently high attendance of around 100 participants throughout the session.



The webinar explored how MST methodologies are being incorporated into the safety analysis of new SMR designs, particularly non-light water reactor (non-LWR) technologies. The discussion reflected SMR RF Members' efforts to develop consensus on key positions to support consistent and robust regulatory approaches for innovative reactors worldwide.

The speakers were:

- Ms Sanja Simic (Canadian Nuclear Safety Commission (CNSC)), who presented the main outcomes of the DSA WG's work and highlighted the growing relevance of MST in regulatory reviews. She outlined 11 common positions on MST applicability, methodology, and process, offering concrete examples of how MST can better capture design-specific features such as passive systems or modular containment concept;
- Mr Vincenzo Tiberi (IAEA), who provided an overview of ongoing IAEA activities supporting the safe deployment of SMRs and discussed how the Agency's safety standards and technical initiatives relate to emerging regulatory challenges associated with advanced reactor technologies.

The session concluded with a dynamic Q&A session. The strong participation and engagement highlighted the continued interest in SMR regulatory topics and reinforced the SMR RF's role in knowledge and experience sharing.

If you missed the session, the webinar presentation and recording are available [here](#).

Recent SMR RF Publications

SMR RF Phase 4 Reports

The SMR RF has published three new reports developed as part of its Phase 4 (2024-2026) work:

Mechanistic Source Term

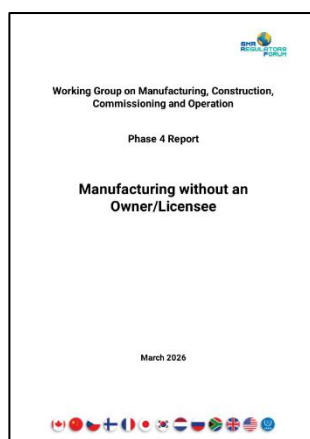


This report, produced by the Forum's DSA WG, explores the application of mechanistic source term (MST) methodologies in the safety analysis of SMRs, particularly non-light water reactor (non-LWR) designs. Unlike traditional conservative approaches, MST uses realistic, scenario-specific modelling to assess the release and transport of radionuclides during nuclear accidents.

This MST approach enables more accurate assessments tailored to novel reactor designs, some of which do not rely on traditional containment structures or assume core melt scenarios. The report presents considerations, challenges and regulatory perspectives related to the use of mechanistic source term approaches for small modular reactors.

Click [here](#) to download the report.

Manufacturing without an Owner/Licensee

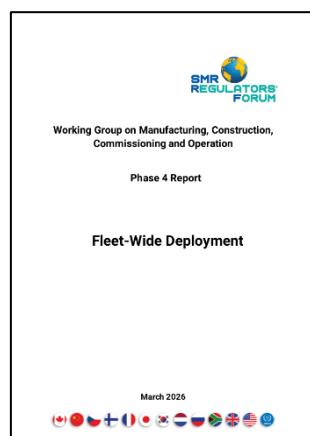


This report, produced by the Forum's MCCO WG, explores the innovative concept of off-the-shelf manufacturing for SMR components and modules in scenarios without a designated owner or licensee.

This approach is recognized for its potential to streamline deployment and reduce costs, and this report aims to unravel the complex challenges and opportunities that it presents.

Click [here](#) to download the report.

Fleet-Wide Deployment



This report, produced by the Forum's MCCO WG, explores the conditions, strategies, and regulatory practices needed to enable fleet-wide deployment of SMRs across multiple countries and sites.

It focuses on how standardized designs, harmonized regulatory approaches, and coordinated manufacturing practices can reduce deployment barriers and support safe, efficient expansion of SMR fleets worldwide.

Click [here](#) to download the report.

Forthcoming SMR RF Events

Interregional Training Course on Safety and Regulatory Aspects of SMR and Other Advanced Reactor Technologies

This Course will be held in Vienna from 20 April to 8 May 2026, and will extend to three weeks, allowing for deeper engagement, more interactive exercises, and expanded coverage of critical topics such as waste management, decommissioning, and emergency planning zones.

Biannual SMR RF SC and WG Meeting

At this Meeting, the WGs will progress their Phase 4 work, while the Steering Committee will focus on reviewing the status of the remaining Phase 4 reports and engaging in discussions on Phase 5, confirming the direction for the Forum's next phase of work. The meeting will take place in Vienna, Austria from 4 to 8 May 2026.

Webinar on the Fleet-Wide Deployment of Small Modular Reactors (SMRs) and Manufacturing Without Owner/Licensee by the SMR RF

This webinar will be the second in the new series of the SMR RF webinars showcasing Forum's Phase 4 (2024-2026) outputs. The objective of the webinar is to present the key regulatory challenges identified and the main common positions developed by the MCCO Working Group. It is largely based on the SMR RF Phase 4 reports: "Fleet-Wide Deployment", which explores regulatory approaches for standardized SMR designs deployed across multiple sites and jurisdictions; and "Manufacturing without an Owner/Licensee", which examines the innovative concept of off-the-shelf manufacturing of SMR components and modules in the absence of a designated Owner or Licensee.

The event will be held virtually via Webex on 11 June 2026 13:00-14:30 CET (UTC+01:00).

Please register here: <https://iaea.webex.com/weblink/register/ra1da5c01dfe3209eff31cc1585211986>

Recent and Forthcoming IAEA Events and Publications of Relevance

The NHSI Annual Plenary Meeting (Vienna, Austria, 5 December 2025)

The [fourth NHSI Annual Plenary Meeting](#) highlighted major progress across both the Regulatory and Industry Tracks (RT and IT) and outlined priorities for 2026.

The RT reported a year of significant milestones, underscoring the growing maturity of its Phase II activities. These included the launch of the first multinational pre-licensing joint review (EAGLES 300), demonstrating coordinated regulatory approaches. It also completed the Regulatory Cooperation Toolkit (RCT), developed under the leadership of the SMR RF LI WG, which offers practical tools to address regulatory differences and support leveraging of reviews. In addition, the SMR Regulation and Cooperation Hub is under development, featuring AI-enabled search, comparison, and analysis capabilities. The Global Framework for Advanced Reactor Reviews (GFARR) Blueprint was finalized, a document that is expected to pave the way for a harmonized global framework for advanced reactor reviews by 2028. Furthermore, the Nuclear Security Working Group completed both a Nuclear Security Regulatory Checklist and a Security by Design Working Paper. Notably, the SMR RF provided substantial support across RT activities, especially in completing the RCT and contributing to coordinated regulatory methodologies, reflecting its central role in shaping practical cooperation mechanisms for SMR oversight.

The Industry Track (IT) also advanced key activities over the past year. It progressed work on high-level user requirements, particularly for high temperature gas cooled reactor (HTGR), and continued joint RT-IT engagement on codes, standards, and long-lead items. The NEXSHARE network expanded further, a TECDOC on accelerating SMR deployment was published, and an SMR roadmap for newcomer countries is under development.

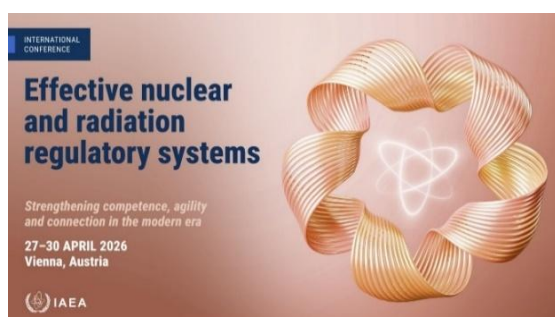
The NHSI continues to serve as a key international platform aimed at harmonizing regulatory and industrial approaches for SMRs and other advanced reactors. Through close collaboration between the RT and the IT, as well

as contributions from initiatives such as the SMR RF, the plenary meeting highlighted the continued commitment of the international community to enabling the safe, secure, and timely deployment of SMR technologies worldwide.

For more information please visit: [The Platform on SMR and their Applications/NHSI](#)

Other relevant IAEA Events

International Conference on Effective Nuclear and Radiation Regulatory Systems: Strengthening Competence, Agility and Connection in the Modern Era (in-person, Vienna, Austria, 27-30 April 2026)



The IAEA is organizing the International Conference on Effective Nuclear and Radiation Regulatory Systems: Strengthening Competence, Agility and Connection in the Modern Era from 27 to 30 April 2026 at the Agency's headquarters.

This will be the seventh conference in the series launched in 2006, which provides a global platform for regulators from different countries to exchange experiences, strengthen cooperation, and enhance their effectiveness. Building on the outcomes of earlier conferences, the 2026 event aims to advance global nuclear and radiation safety and security by

reviewing progress, identifying emerging issues, and proposing future directions for the international regulatory community.

For more information please visit: [International Conference on Effective Nuclear and Radiation Regulatory Systems: Strengthening Competence, Agility, and Connection in the Modern Era | IAEA](#)

International Conference on Computer Security in the Nuclear World: Securing the Future (in-person, Vienna, Austria, 11– 15 May 2026)



The IAEA will host the third International Conference on Computer Security in the Nuclear World: Securing the Future at its headquarters in Vienna, Austria, from 11 to 15 May 2026.

The safe and secure use of nuclear and other radioactive material increasingly relies on robust information and computer systems. As innovation accelerates and dependence on digital technologies deepens, so too does the imperative to address vulnerabilities, including the risks of cyber-attacks, theft and manipulation of sensitive information. The conference will offer a dynamic global platform for participants to share experiences,

exchange expertise and strengthen international cooperation in this critical domain. By promoting meaningful dialogue and practical collaboration, it aims to ensure that computer security continues to advance as a strong, integrated and resilient cornerstone of nuclear security worldwide.

For more information please visit: [International Conference on Computer Security in the Nuclear World | IAEA](#)

International Conference on Topical Issues in Nuclear Installation Safety: Learning from the Past to Accelerate the Future (in-person, Vienna, Austria, 29 June – 3 July 2026)



Since 1998, the IAEA has convened the International Conference on Topical Issues in Nuclear Installation Safety (TIC), providing a vital platform to examine current practices, emerging challenges and innovations in nuclear installation safety. Recent editions have placed particular emphasis on advanced reactor technologies, including SMRs and next-generation designs, with TIC2022 underscoring the importance of strengthening safety frameworks to support innovation in reactor development.

Building on the insights and momentum generated by previous conferences, which have helped shape the IAEA's global efforts

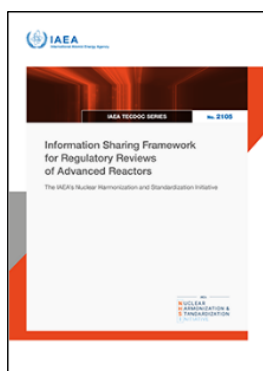
to enhance nuclear safety standards, the upcoming conference – International Conference on Topical Issues in Nuclear Installation Safety: Learning from the Past to Accelerate the Future – will be held in Vienna from 29 June to 3 July 2026.

For more information please visit: [International Conference on Topical Issues in Nuclear Installation Safety | IAEA](https://www.iaea.org/conferences/tic2026)

For more information about upcoming events organized by the IAEA, please click [here](#)

Recent IAEA Publications Related to SMR Safety

IAEA-TECDOC-2105: Information Sharing Framework for Regulatory Reviews of Advanced Reactors



This TECDOC, developed under the RT of the NHSI, provides a framework to strengthen information-sharing and cooperation among regulatory bodies. Focusing on advanced reactors – especially SMRs – it draws on multinational review experience to guide regulators, technical support organizations and industry in licensing activities. By promoting aligned regulatory practices, the TECDOC helps reduce design changes caused by differing national requirements and supports more efficient, globally coordinated reviews. Ultimately, it advances the safe and efficient deployment of advanced reactors.

Click [here](#) for more information.

IAEA-TECDOC-2118: Multinational Pre-licensing Joint Regulatory Review of Advanced Reactor Designs



This TECDOC, developed under the RT of the NHSI, presents a structured process for conducting multinational, pre-licensing joint regulatory reviews of SMRs and advanced reactor designs. Drawing on multinational review experience, it provides guidance for regulatory authorities, technical support organizations, reactor vendors, and other industry stakeholders involved in pre-licensing and licensing activities. By promoting coordinated reviews and aligned regulatory practices, the TECDOC helps identify potential design challenges early, reduces modifications arising from differing national requirements, and supports more efficient, globally harmonized regulatory processes.

Click [here](#) for more information.

For more information on the IAEA activities and publications related to the development, early deployment, and oversight of SMRs and their applications, please visit the [IAEA Platform on Small Modular Reactors and their Applications \(SMR Platform\)](#).

Subscribe [here](#) to the IAEA Nuclear Safety and Security Publications Alert.

SMR RF Members' News and Events

Canadian Nuclear Safety Commission (CNSC) News

Ontario Power Generation Inc. (OPG): Darlington New Nuclear Project (DNNP)

Following the issuance of the construction licence in April 2025, OPG has transitioned the DNNP into the implementation phase. Potential licence and amendment submissions are expected, including a Licence to Construct (LTC) amendment for a Low- and Intermediate-Level Waste Facility and licence amendments for Units 2, 3, and 4, aligned with upcoming project development milestones. In parallel, OPG has selected the Wesleyville region for potential large-scale new nuclear development. An initial project description is expected to be submitted for this new build initiative, with multiple reactor technologies currently under evaluation.

More information regarding the DNNP can be found [here](#).

Bruce Power: Bruce C Nuclear Project

As previously reported, Bruce Power is seeking a Licence to Prepare Site for up to 4,800 MWe of new capacity under the Bruce C Project. The project continues to advance through the Impact Statement Phase under the Impact Assessment Act. An Initial Project Description, using a bounding approach supported by plant parameter envelope data to allow flexibility in final technology selection, has been submitted.

Energy Alberta

Energy Alberta continues to advance its proposal to construct up to 4,800 MWe at a greenfield site in Alberta using four CANDU MONARK reactors configured as twin-unit plants. The project remains within the 180-day Planning Phase of the Impact Assessment process. In August 2025, Energy Alberta requested a 3–6 month pause to allow for expanded Indigenous and community engagement—underscoring the importance of early and sustained consultation for large-scale greenfield developments.

Others SMR Developments

- [NB Power's ARC 100 Project](#)

NB Power continues to advance its ARC-100 sodium-cooled fast reactor proposal adjacent to the existing CANDU unit at Point Lepreau. A Licence to Prepare Site application for one ARC-100 unit has been under review since June 2023, alongside a provincial environmental assessment.

- [SaskPower's SMR Project](#)

SaskPower is progressing pre-planning activities for SMR deployment in the Estevan region, with the BWRX-300 identified as the preferred technology. Preparatory work underway in anticipation of a Licence to Prepare Site application.

- [Saskatchewan Research Council Nuclear \(SRCN\)'s Microreactor Project](#)

The SRCN is collaborating with Westinghouse Electric Company on a potential first of a kind eVinci microreactor demonstration in Saskatchewan. The 5 MWe advanced reactor design uses TRISO fuel and features an above-ground configuration. Intended applications include high-grade industrial heat and electricity supply for remote locations.

China National Nuclear Safety Administration (NNSA) News

SMR Technologies in China

China currently has a diverse array of SMR concepts either operating, under construction, or in research. These include high temperature gas cooled reactors (HTGRs), integrated pressurized water reactors (PWRs), floating offshore units, and thorium-based molten salt reactors.

Key projects include:

- HTR-PM, the world's first modular HTGR, is now in operation. Its inherent safety characteristics and on-line refueling make it a milestone in advanced reactor design.
- ACP100, the first integrated PWR SMR to receive a construction license in China (2021), is now under construction at the Changjiang site in Hainan Province. Hot functional tests have been underway at the site since January 2026.
- ACPR50S, a compact offshore SMR designed for deployment on floating platforms, reflects China's efforts to expand nuclear energy applications beyond land-based installations.
- Additional designs under study, such as NHR200-II and the Integrated Heating Reactor, support applications ranging from district heating to industrial steam supply and desalination.

State Office for Nuclear Safety (SÚJB) of Czechia News

Atomic Act - Amendment

Following the entry into force of the amended Atomic Act on 1 July 2025, the State Office for Nuclear Safety has been actively preparing the implementing legislation and guides implementing the changes introduced in the law, including those affecting licensing procedures, safety related requirements, and regulatory oversight processes.

Organizational Leadership and Governance

Mr Štěpán Kochánek was appointed as the new Chair of the Czech State Office for Nuclear Safety (SÚJB) following a government decision on 16 February 2026. He assumed the role on 18 February 2026, succeeding the late Dana Drábová. Kochánek has served at SÚJB since 2003, most recently as Deputy-Chair and Director of the Nuclear Safety Section. His extensive regulatory experience includes leadership in nuclear safety, security, radioactive waste management, nuclear law, and participation in international technical support projects.

Radiation and Nuclear Safety Authority in Finland (STUK) News

Fortum: SMRs and Large New Builds

Fortum continues advancing pre-licensing activities for the Westinghouse Advanced Passive 1000 (AP1000), the Électricité de France (EDF) European Pressurized Reactor (EPR), and the GE Hitachi Nuclear Energy (GEH) Boiling Water Reactor X300 (BWRX300) designs. Additional pre-licensing reviews are planned for 2025–2026. These efforts support potential SMR and large-scale reactor deployment in Finland.

Steady Energy: LDR-50

The Finnish company Steady Energy has completed Phase 1 of the conceptual design assessment for its LDR-50 SMR, designed for district heating with a thermal capacity of 50 MW. The design allows for 1 to 4 reactors per plant, providing flexibility for different city heating needs.

The initial review was positive for the aspects assessed, but it was limited due to the current lack of detailed design information. Steady Energy plans to continue developing the conceptual design and will apply for a further assessment in the future. International cooperation is now beginning with Sweden, the Czech Republic, Poland, and Ukraine, building on the initial findings.

Land Use Planning

Several Finnish municipalities are advancing land use planning to support new nuclear development:

Tornio (Northern Finland, near Sweden): SMRs for industrial applications

Loviisa (Southern Finland): Options for SMRs or large-scale reactors at existing facilities

Kuopio (Eastern Finland): SMRs for district heating

Helsinki (Capital region): District heating or combined heat and power (CHP) reactors, with three shortlisted sites

SMR Development in Helsinki

The municipal energy company of Helsinki (Helen) has launched an Environmental Impact Assessment to explore potential SMR deployment. The study focuses on three candidate sites: Salmisaari, an industrial site suitable for district heating only; Vuosaari, an industrial site with potential for district heating or CHP; and Norrberget, a greenfield site near industrial facilities also suitable for district heating or CHP. Multiple reactor designs are under consideration, reflecting Helen's flexible approach to meeting Helsinki's energy and heating needs.

French Authority for Nuclear Safety and Radiation Protection (ASNR) News

Technical Exchanges on SMR Projects

ASNR, the French Authority for Nuclear Safety and Radiation Protection, continues working with project developers to identify potential challenges early in SMR development. Preparatory reviews are in progress for BLUE CAPSULE, HEXANA and OTRERA. After having started a preparatory review, THORIZON has changed its plan and introduced, in its development program, a demonstrator before the first industrial reactor leading to coming back to a screening phase. In the regulatory phase, CALOGENA and NEWCLEO are at pre-licensing, while STELLARIA and JIMMY are at licensing (Construction license application).

For more details on technical exchanges: [ASNR SMR Projects](#)

NUWARD Joint Early Review

The NUWARD Joint Early Review initiative, launched in 2022 by ASNR, STUK, and SUJB, continues to support early regulatory engagement for SMR development:

- Phase 1: Completed in September 2023;
- Phase 2: November 2023 – November 2025 (with the Polish National Atomic Energy Agency (PAA), the Swedish Radiation Safety Authority (SSM), and the Authority for Nuclear Safety and Radiation Protection of the Netherlands (ANVS) joining);
- Phase 3: Launched in March 2026.

The review aims to provide early feedback on SMR designs, share knowledge and regulatory expectations, and support safety improvements before formal licensing begins.

The Japan Nuclear Regulation Authority (NRA) News

Replacement Reactor

The NRA continues technical exchanges with ATENA (Atomic Energy Association) regarding Japan's innovative light water reactor designs. These discussions, held in seven meetings from December 2024 to January 2026, focused on areas where ATENA noted potential regulatory uncertainty, such as responses to severe accidents based on permanent equipment. The NRA provided regulatory policy guidance to enhance regulatory predictability in March 2026.

Nuclear Policy

Act on Green Transformation (GX) – Decarbonized Power Sources: Effective June 6, 2025, the act allows periods of reactor shutdown beyond the operator's control to be excluded from the 60-year operational limit.

7th Strategic Energy Plan: Approved on February 18, 2025, the plan supports R&D of advanced reactors—including SMRs, fast reactors, HTGRs, and nuclear fusion—and strengthens supply chains and human resources. Find more information [here](#).

Nuclear Safety and Security Commission (NSSC) in Korea News

i-SMR (Innovative SMR)

The pre-licensing review for the i-SMR was conducted from October 2023 to December 2025. This involved reviewing the applicability of current regulatory standards and methods for demonstrating safety through active communication between regulators and developers from the design stage. The pre-licensing review has contributed to enhancing mutual understanding between regulators and developers and resolving regulatory uncertainties, continuously pushing forward with the establishment of a regulatory framework for SMRs. An application for Standard Design Approval was submitted in late February 2026, and a document conformity review is currently in progress.

Roadmap for Establishing the SMR Regulatory Framework

The NSSC announced "Roadmap for Establishing an SMR Regulatory Framework" in February 2026. To provide regulatory predictability to the developers and enable the regulator to secure the resources necessary to build an optimal infrastructure, the goal of the roadmap is to establish a regulatory framework (by 2030) covering diverse purposes and designs, shifting the safety validation paradigm toward performance-based approach.

Dutch Authority for Nuclear Safety and Radiation Protection (ANVS) News

National Policy and New Nuclear

Following the October 2025 national elections, the newly started Netherlands' minority Cabinet is continuing preparations for new nuclear projects, reaffirming its commitment to expanding nuclear capacity through two to four new nuclear reactors, large-scale and/or small modular ones. In its latest progress letter to Parliament, the Government outlined a plan to establish a state-owned company, NEO NL, to lead the first phase of the NPP program, while remaining open to private sector participation. A dedicated government support package is proposed to strengthen project financing and investor confidence, alongside a strategy to build long-term partnerships with project contractors. A concept decision on the preferred locations for the first two NPPs is expected in 2026, followed by public consultation. That same year, a competitive bidding process will be launched for two plants, with options for two additional units. The new cabinet will accelerate SMRs and support maritime nuclear innovation. It has also installed a Ministerial Taskforce to accelerate tens of innovative projects, using rapid deployment forces, to support future economic growth. They may include nuclear projects.

At the same time (October 2025), a comprehensive national SMR strategy has been published, centred on structured stakeholder engagement and detailed simulations addressing spatial planning, licensing, energy integration, value chain development, and construction and operational roles. According to the Strategy SMRs will be formally embedded in national energy planning, with the ANVS responsible for nuclear safety oversight. Also, the siting authority will depend on capacity: projects of 500 Mwe fall under national jurisdiction, while those below 500 MW may be managed at regional or national level depending on the application. Notably, the first SMR – regardless of size – will be overseen at national level to ensure coordinated learning and regulatory alignment. While the state does not plan direct investment in SMRs, it will provide financial support for design assessments to ensure compliance with regulatory requirements. First of all, experience will be gathered with these strategic approaches, followed by embedding in the legal frameworks.

Regulatory developments

A major modernization of the Dutch Safety Requirements (DSR, VOBK in Dutch) has been completed end of 2025, as well as a more detailed version of the Pre-licensing Guidance. The ANVS is currently in a phase of orientation with a number of initiating companies. Two aiming for implementing a LW-SMR (RR-SMR/BWRX300) and one MSR designer. A maritime company is designing an HTGR for application on land and a few years later for maritime application (floating and/or propulsion).

National Nuclear Regulator (NNR) of South Africa News

Integrated Resource Plan 2025 (IRP 2025)

South Africa is strengthening long-term energy security through the Integrated Resource Plan 2025 (IRP 2025), approved by Cabinet in October 2025. The plan confirms nuclear power as a key component of the future energy mix, providing for 5.2 GWe of new nuclear capacity by 2036 as part of a diversified and resilient generation portfolio. Implementation will be supported by a Nuclear Industrial Plan (NIP), aimed at developing economies of scale across the nuclear fuel cycle, strengthening local capabilities, and enhancing international competitiveness.

Cabinet has also approved the revival of the Pebble Bed Modular Reactor (PBMR) programme, previously placed under care and maintenance in 2010. This decision enables the South African Nuclear Energy Corporation (Necsa) to engage partners and investors to advance the development and deployment of small modular reactors (SMRs). In support of this objective, Necsa has launched an Expression of Interest (EOI) process to attract qualified organisations and technology providers to collaborate on SMR design, development, and implementation. The initiative aligns with IRP 2025 and reflects growing recognition of SMRs as a flexible, reliable, and low-carbon power generation solution.

Strengthening the Regulatory Framework

The regulatory framework has been enhanced through the enactment of the National Nuclear Regulatory Amendment Act (Act 26 of 2024), which came into force in June 2025 and aligns national oversight with international best practice. Draft General and Specific Nuclear Safety Regulations are at an advanced stage, complemented by the development of SMR-specific guidance to ensure a modern, robust, and adaptive regulatory regime for emerging nuclear technologies.

The UK Office for Nuclear Regulation (ONR) News²

Great British Energy – Nuclear (GBE-N)

Following the selection of Rolls-Royce SMR as the preferred technology for the UK's first SMR programme, GBE-N has continued to advance preparations for deployment and future siting activities. Toward the end of last year, the UK Government announced Wylfa as the designated site for the initial deployment of the RR SMR. Work is now ongoing to establish the necessary contractual arrangements supporting project initiation. In parallel, GBE-N is preparing to establish the Development Company and undertake preparatory activities for entry into the Nuclear Site Licensing (NSL) process.

GBE-N has also launched a comprehensive site characterisation programme at Oldbury, supporting potential future new-build projects. Additionally, at the request of the UK Government, GBE-N has begun a nation-wide site identification exercise, including Scotland, to assess potential locations suitable for a future GWe-scale reactor development.

UK Nuclear Policy

The new National Policy Statement for Nuclear (EN-7) entered into force in December 2025. EN-7 introduces a developer-led approach to site identification, supported through screening criteria applied with input from the Health and Safety Executive (HSE) and other government bodies. Several developers have already begun identifying potential sites for SMR and AMR projects, though in Wales, siting of facilities below 350 MWe follows the Welsh Infrastructure Act rather than EN-7.

Early in 2025, the Government initiated a comprehensive review of the UK nuclear regulatory regime, examining processes across all relevant regulators. This review has produced a "hard-hitting" report, and changes – some requiring legislation or cultural shifts – are being considered for implementation over the next years.

Toward the end of 2025, the UK-US Transatlantic Nuclear Partnership was signed, fostering collaboration on technology deployment and market access. The UK Budget and Prime Minister's Strategic Steer also signalled strong support for nuclear development.

Together, these developments signal a rapidly evolving policy environment, with significant implications for new nuclear deployment in the coming months.

Update on SMR Generic Design Assessment (GDA)

The UK continues to progress multiple SMR designs through its regulatory processes.

- **Rolls-Royce SMR** entered the GDA in April 2022 and is now in Step 3, with completion expected in 2027. The associated NSL process for deployment at Wylfa is planned to proceed in parallel from 2026.
- Two additional SMR designs—the **Holtec SMR-300** and **GE Hitachi BWRX-300**—entered GDA in late 2023. Both have completed Step 1 and are concluding Step 2, with Holtec now engaging in discussions on potential pathways to deployment.
- The **Westinghouse AP300** has been cleared to begin GDA, with the start of the process expected in early 2026.

The U.S. Nuclear Regulatory Commission (U.S. NRC) News

Building on last edition's overview of the NRC's implementation of the Accelerating Deployment of Versatile, Advanced Nuclear for Clean Energy (ADVANCE) Act and ongoing modernization initiatives, recent developments highlight continued progress across several regulatory workstreams and licensing activities.

ADVANCE Act

Following the ADVANCE Act of 2024, the NRC has completed several required actions, including updating its mission statement and issuing reports on advanced manufacturing, construction methods, licensing efficiencies, and environmental reviews. Related policy work includes Commission decisions on microreactor licensing considerations, covering factory-based fuel loading and Nth-of-a-kind deployment pathways.

For further information, please visit: [ADVANCE Act](#)

Rulemaking Activities

The NRC is advancing multiple rulemaking efforts supporting the deployment of advanced nuclear technologies. Work continues on the 10 CFR Part 53 - Risk-Informed, Technology-Inclusive Regulatory Framework for Advanced

² This update reflects the status of developments and policy positions as of 31 December 2025.

Reactors, with the draft final rulemaking package scheduled for Commission submittal by May 2026, ahead of the statutory deadline for final publication on December 2027. Learn more [here](#).

In parallel, the Generic Environmental Impact Statement for Licensing New Nuclear Reactors remains on track, with the final rule expected to be published in June 2026. Learn more [here](#).

The NRC is also reviewing lessons learned from prior new reactor licensing to identify options for greater regulatory flexibility under Parts 50 and 52. Learn more [here](#).

Licensing Reviews and Applications

The NRC continues to advance its portfolio of new reactor applications. NuScale's US460 received its Standard Design Approval in May 2025, issued ahead of schedule, while NRC staff has completed its final safety evaluation for the Terra Power's Kemmerer Power Station 1, in December 2025. Some construction permit applications are under review, including applications from Long Mott Energy (X-energy) and the Tennessee Valley Authority (BWRX-300), both targeting safety evaluations in late 2026. For more information, please visit: [Advanced Reactor Application Projects | Nuclear Regulatory Commission](#)

The NRC reports active engagement with more than 25 potential applicants, including several associated with maritime nuclear applications – an area that raises novel jurisdictional and regulatory considerations.

Behind the Scenes: Interview with Mr Izaias Botelho, SMR RF Secretariat Team Member from 2023 to 2025

Mr Izaias Botelho served as a member of the SMR Regulators' Forum Secretariat from 2023 to 2025. Here, he reflects on his professional journey in the nuclear field, his role within the Forum, and his views on the impact of Forum's recent activities. The interview also offers a brief insight into his personal interests.

How long have you been working in the nuclear field, and what have been some of the key responsibilities or roles you have taken on during your professional journey?

"I started my career in the nuclear field as a designer in the Brazilian centrifuges development team after completing my Master's in 2008. Two years later, I joined the Design Team of the Brazilian nuclear-powered submarine, initially as a technical lead. After 10 years, I was promoted to project manager deputy and, subsequently, to project manager. In this role, I was assigned as a permanent member of the Brazilian Navy Safeguards Commission, responsible for drafting the Special Procedures to be negotiated with the IAEA. After a 2-year period at the IAEA, I returned to Brazil to be involved in industrialization activities for the nuclear submarine construction."

What has been the most rewarding aspect of your professional journey thus far?

"One of the most rewarding aspects of my journey is seeing how I have supported the nuclear field in Brazil and contributed to global nuclear safety. I have gained valuable skills, worked with amazing professionals, and built lasting friendships along the way"

How long have you been involved with the SMR RF and in what capacity?

"I worked as a member of the SMR RF Scientific Secretariat from 2023 to 2025. In this period, in addition to the biannual meetings implementation, my IAEA colleagues and I had the opportunity to support the Forum with the completion of the SMR RF Phase 3 reports and launch of the Forum's Phase 4 of work, with the Licensing WG leading the work of the NHSI RT on approaches for collaborative reviews and effective everaging. I supported implementation of three webinars and five educational workshops (Morocco, Czech Republic, Brazil, India and South Africa), and foster many Forum's communication outputs, such as the new webpage, several Newsletter editions, social media posts and new promotional materials."

In your view, what has been the biggest impact of the Forum so far?

"In my view, the SMR RF achieved excellence in proposing solutions for SMR licensing and regulatory challenges. The Forum's key contributions include widely sharing its outcomes through regional workshops, webinars, School for Regulating SMRs, publications, Newsletters, and other international events – all boosting nuclear safety worldwide."

Which topic from Phase 3 of the Forum's work (2021–2023) did you find the most interesting and why?

"I have a particular interest in all topics developed during Phase 3, given my involvement in their development. However, considering my technical background on design, I am especially impressed with the 3S-by-design report – it efficiently addresses key challenges for designers to integrate safety, security and safeguards in an early design stage."

How would you describe yourself outside of work? What activities do you enjoy, and what are your personal interests or hobbies?

"I believe a good life means making good memories and building friendships. I love traveling with family – discovering cultures, tastes, and histories. And gatherings with loved ones are just the best."



Mr Izaías Botelho

SMR RF Secretariat Member (2023-2025)
Brazil Cost-Free Expert
International Atomic Energy Agency