

Webinar Series on Small Modular Reactor (SMR) Regulators' Forum Phase 3 Reports

Licensing Working Group

18 June 2024

13:00 – 14:30 Central European Time (UTC+01:00)

Ref. No.: EVT2307111

Information Sheet

Background

The <u>SMR Regulators' Forum (SMR RF)</u> was formed in 2014 as a response to the explicit interest expressed by a number of the IAEA Member States to evaluate and discuss the benefits of forming a regulator-to-regulator entity driven by its Members that would specifically address regulatory issues related to SMRs. Currently, the Forum has 11 Members, and, since its foundation, it has completed three sequential phases with relevant outcomes:

- a Pilot Phase, conducted from March 2015 to May 2017, with the objective of addressing different issues (Graded Approach, Defence-in-Depth and Emergency Planning Zone Size) for both lightwater and non-light-water SMR designs;
- Phase 2, conducted from May 2017 to December 2020, was developed by 3 Working Groups on: Licensing issues; Design and Safety Analysis (DSA); and Manufacturing, Commissioning and Operations (MCCO); and
- Phase 3, conducted from January 2021 to December 2023, that covered issues that are the focus of this Webinar Series.

The scope of the Forum is, based on shared regulatory experience among Forum Members, to identify, enhance understanding of, and address key regulatory challenges that may emerge in future SMR regulatory and licensing discussions and, if possible, to develop and recommend common regulatory

positions. This effort is expected to help enhance safety and efficiency in SMR regulation, including licensing, and to enable regulators to consider changes, if necessary, to their requirements and regulatory practices.

Due to the close alignment with its objectives and its past and present programme of work, in particularly with respect to harmonization of regulatory approaches, the Forum was invited to lead the work of one of the Regulatory Track Working Groups (RT-WG) of the IAEA Nuclear Harmonization and Standardization Initiative (NHSI) launched by the IAEA DG Rafael Mariano Grossi in March 2022. Since July 2022, the Forum has been leading NHSI-RT-WG3, tasked with developing processes for leveraging other regulatory bodies' reviews and for enabling regulators to work together during ongoing regulatory reviews. The Forum's Licensing Issues WG has served as the main organizational modality for the NHSI-RT-WG3, with its focus, membership and schedule adjusted accordingly.

The IAEA serves as the Scientific Secretariat for the SMR RF, appointed by the Regulatory Activities Section (RAS) of the Division of Nuclear Installation Safety (NSNI). The Scientific Secretariat has, among others, the responsibility to promote the Forum, its activities and outputs, and to support the SMR RF Steering Committee and Working Groups (WGs) in achieving the Forum's objectives.

Overall, the IAEA provides webinar series for Member States considering the possibility of introducing nuclear power as part of their energy mix. Through these webinars, the IAEA provides a platform for sharing Member States' experiences and lessons learned from developing nuclear power programmes in compliance with nuclear safety requirements and recommendations.

This particular webinar series is implemented with the aim to disseminate the main findings of the SMR RF WGs in line with the Forum's objective of sharing SMR regulatory knowledge and experience among its Members and with other stakeholders.

Objectives

The webinar's objective is to present the key challenges identified, and main common positions developed by the NSHI WG3, led by the SMR RF, with respect to processes on how:

- regulators can use other regulators' reviews; and
- regulators can work together during regulatory reviews that are carried out at the same time.

It also intends to share the lessons learned from multinational/bilateral reviews and other cooperative activities and other international harmonization efforts, including those of the IAEA.

Scope

This webinar is mostly based on the draft TECDOC produced by the NHSI WG 3, led by the SMR RF, *"Enabling SMR Regulatory Reviews: Effective Leveraging and Cooperative Reviews"*. It will focus on the main content and key considerations of the above document regarding the regulatory reviews carried out by Member States during the pre-licensing and licensing processes.

Speakers

• Opening Remarks:

Ms Paula Calle Vives Technical Lead for New Technologies Regulatory Activities Section (RAS) International Atomic Energy Agency (IAEA)

• Leveraging Information: Scenarios, preconditions and approaches

Mr Matthew Bamber Principal Inspector Delivery Management Group Lead (DMGL) Office for Nuclear Regulation (ONR) Vice-Chairperson of the SMR RF

• Impact of specific scenarios, managing risks and ensuring efficiencies

Mr Sean Belyea Senior Project Officer Advanced Reactor Licensing Division Canadian Nuclear Safety Commission (CNSC) Chair of the SMR RF Licensing WG (NHSI Regulatory Track WG3)

Expected Outcomes

The expected outcomes of the webinar include:

- increasing awareness among the IAEA Member States of challenges and common positions identified by the Licensing Working Group of the SMR Regulators' Forum (NHSI WG3) in regulating SMR;
- sharing of experiences and lessons learned with the IAEA Member States' regulatory bodies; and
- enhancing knowledge of the IAEA and SMR Regulators' Forum, its activities and outputs.

Target audiences

This webinar is open to the SMR RF experts and Observers, experts from other NHSI WGs (including observers), participants from the IAEA Member States interested in SMR and/or NHSI, as well as a wider general public wishing to have a better understanding of these issues.

Working Language

English.

Participation and Registration

The participation will be approved through an online registration:https://iaea.webex.com/weblink/register/r833d6d3c036212ccb5f624b1219ad5d2Error!Hyperlink

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Organization

The event will be held virtually via WebEx on 18 June 2024 at 13:00 Central European Time (UTC+01:00).

SMR Regulators' Forum Scientific Secretary

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Annexes

• Annex I – Agenda

Annex I – Agenda

	Торіс	Presenter
13h00 – 13h15	Opening remarks, introduction to SMR RF and NHSI collaborative work	Ms Calle Vives
13h15 – 13h40	Leveraging Information: Scenarios, preconditions and approaches	Mr Bamber
13h40 – 14h05	Impact of specific scenarios, managing risks and ensuring efficiencies	Mr Belyea
14h05 – 14h30	Questions and Answers	All