



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

## **Design and Safety Analysis (DSA) Working Group**

**3 May 2024**

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

**Ref. No.: EVT2306850**

## **Information Sheet**

### **Background**

The [SMR Regulators' Forum \(SMR RF\)](#) was formed in 2014 as a response to the explicit interest expressed by a number of 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 light-water 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.

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 SMR RF Working Group on Design and Safety Analysis (DSA) during Phase 3 addressing the following:

- the integrated approach among safety, security and safeguards (the 3S); and
- the consideration of confinement/ containment systems for non-water cooled SMRs.

It also intends to provide useful insights for regulators in the development, deployment and oversight of SMRs.

## **Scope**

This webinar is mostly based on the SMR Regulators' Forum Phase 3 reports produced by its DSA Working Group: "*Safety, Security and Safeguards from a Regulatory Perspective: An Integrated Approach*" and "*Containment Systems*". It will focus on the main content and key considerations of the above reports.

## **Speakers**

- Opening Remarks:  
Mr Brian Smith  
Director of the Division of New and Renewed Licenses  
Office of Nuclear Reactor Regulation  
US Nuclear Regulatory Commission (USNRC)

- Safety, Security and Safeguards from a Regulatory Perspective: An Integrated Approach

Ms Sanja Simic  
Lead, Safety Analysis  
Directorate of Assessment and Analysis  
Canadian Nuclear Safety Commission (CNSC)

Mr Shahen Poghosyan  
Safety Assessment Section (SAS)  
Division of Nuclear Installation Safety (NSNI)  
Department of Nuclear Safety and Security (NS)  
International Atomic Energy Agency

- Confinement/ containment systems for non-water cooled SMRs

Mr Sébastien Israel  
Head of New Reactors Department  
Institut de Radioprotection et de Sûreté Nucléaire (IRSN)

## **Expected Outcomes**

The expected outcomes of the webinar include:

- increasing awareness among the IAEA Member States of challenges and common positions identified by the DSA Working Group of the SMR Regulators' Forum in regulating SMR during Phase 3;
- 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 experts from the SMR RF Members (including Observers), participants from the IAEA Member States interested in SMR as well as a wider general public wishing to have a better understanding of this topic.

## **Working Language**

English.

## **Participation and Registration**

The participation will be approved through an online registration:  
<https://iaea.webex.com/webex/register/r0e6ffa4e45b803ada177e9468d2b33fc>

## **Organization**

The event will be held virtually via WebEx on **3 May 2024 at 13:00 Central European Time (UTC+01:00)**.

## **SMR Regulators' Forum Scientific Secretary**

Ms Paula Calle Vives  
Regulatory Activities Section (RAS)  
Division of Nuclear Installation Safety (NSNI)  
Department of Nuclear Safety and Security (NS)  
International Atomic Energy Agency  
Vienna International Centre  
PO Box 100  
1400 VIENNA  
AUSTRIA  
Tel.: +43 1 2600 22664  
Email: P.Calle-Vives@iaea.org

### **Annexes**

- Annex I – Agenda

### **Annex I – Agenda**

	<b>Topic</b>	<b>Presenter</b>
13h00 – 13h15	Opening remarks, introduction of the SMR RF and the DSA Working Group	Mr B. Smith
13h15 – 13h40	Safety, Security and Safeguards from a Regulatory Perspective: An Integrated Approach	Ms S. Simic Mr S. Poghosyan
13h40 – 14h05	Confinement/ containment systems for non-water cooled SMRs	Mr S. Israel
14h05 – 14h30	Questions and Answers	All