Safe Uranium Production and NORM Activity Regulatory Forum (SUNREG Forum)

21 June 2018

The IAEA and its Member States wish to facilitate dialogue, cooperation and interaction between Member States that have or are considering uranium production1 or NORM activities. This would be accomplished through a regulatory forum that would help disseminate lessons learned, general knowledge and best practices, and develop guidance and support.

1. Background

The production of uranium production and the management of Naturally Occurring Radioactive Materials (NORM) have important safety and environmental protection considerations. Additional challenges are posed by new applications for uranium production, as well as increasing expectations for protection of health and the environment.

At its 2016 General Conference, the IAEA made resolutions relating to strengthening international cooperation in relation to uranium production and NORM. Resolution GC(60)/RES/9 Articles 68, 69 and 100 state that the General Conference:

68. Requests the Secretariat to assist Member States, upon request, to strengthen their capabilities for the realistic assessment of radiological impacts of material containing enhanced levels of naturally occurring radioactive materials (NORM) and to continue to develop guidance to optimize radiation protection in the management of such materials, taking into account GSR Part 3;

69. Encourages Member States to share safety-relevant experiences and practices in the field of handling NORM and NORM residues;

100. Requests the Secretariat to assist Member States, upon request, in implementing Safety Standards and recognized international best practices in uranium production, including management of the resulting waste.

2017 GC(61)/RES/8, Paras 103, 104

103. Encourages Member States to plan for the decommissioning of facilities during the facility design phase, and update as appropriate, and to put mechanisms in place to ensure resources are available for implementation;

104. Requests the Secretariat to assist Member States, upon request, in the safe management of radioactive residues from uranium production and other activities involving NORM;

113. Encourages the Secretariat to support and coordinate regional and inter-regional efforts, including through the GNSSN, for the sharing of knowledge, expertise and experience on safety relevant issues;

The Agency workshop on Safety Infrastructure for Uranium Production from 29 August to 2 September 2016, in Vienna, highlighted issues and challenges Member States are facing in the regulation of uranium production. There are similar challenges with the regulation of NORM

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1 Uranium production includes mining and milling/processing

Member States that may be introducing uranium production for the first time into their regulatory programmes, or those with insufficient expertise or resources to properly address uranium production or NORM activities. A regulatory forum centred on the safety of uranium production and NORM would be a timely and effective mean to address the workshop recommendations and the GC commitment.

2. Objectives

The objectives of the forum are to help build capacity in all Member States undertaking or considering uranium production or the management of NORM activities and NORM residues. The forum would promote good regulation and safe and environmentally responsible practices, through the application of IAEA Safety Standards.

The SUNREG Forum would promote and increase the exchange of information and expertise among its participants, including regular updates on best practice approaches, targeted assistance in review and provision of expertise, and identification of gaps in guidance and support.

This Forum would support the utilization of IAEA tools and training materials. It would also provide strategic input for future IAEA work in areas related to safety of uranium production and NORM activities.

The Forum would assist Member States to implement a sound regulatory regime for the regulation of uranium production and the management of NORM activities and residues, with the objectives of protecting human health and the environment and preventing the creation of future legacy sites.

3. Scope

The Forum addresses primarily safety and regulatory aspects of uranium production and management of NORM activities.

The Forum is meant for regulatory bodies in Member States, who are undertaking or considering uranium production or the management of NORM activities and NORM residues.

The specific activities would include:

1) Providing strategic advice to the IAEA to direct its activities in relation to safety and regulatory aspects of uranium production and NORM in the following areas:
   a) Providing technical support to organizations or Member States;
   b) Developing training and demonstration activities with a regional or thematic focus;
   c) Producing IAEA guidance, reports and other documents;
   d) Establishing infrastructure to facilitate the sharing of information amongst members;
   e) Organizing meetings or workshops to progress forum objectives;
2) Facilitating sharing and exchange of knowledge and experience amongst members;
3) Fostering cooperation and communication among regulatory bodies, various levels of government, and interested parties;
4) Identifying the range of IAEA activities, documents and networks relevant to the Forum’s objectives, and providing links and connections to them;
5) Promoting regulatory effectiveness concepts including safety culture.

4. Organization/Structure

The SUNREG Forum will coordinate topical working groups or projects around specific topics of interest to the SUNREG Forum community. These will exist for as long as there is a demonstrated need and so long as they are proving to be useful. It will be overseen by a Steering Committee and supported by an IAEA Scientific Secretary.

Steering Committee:

The SUNREG Forum will be led by a Steering Committee. The Chair of the Steering Committee may be appointed by the IAEA Scientific Secretary or forum members for a set period of time. The Chair is required to have the appropriate management and topical experience. The Chairperson will be assisted by a Secretariat provided by the IAEA. The chair, with assistance from the scientific secretary and Forum members, will choose four members to serve on the committee for set period of time. The Forum members also need to have topical and management experience to adequately support the topical areas covered by the committee.

Responsibilities of the Steering Committee include:

- Creating topical working groups (TWGs) on the basis of needs identified by SUNREG Forum Members and identify and appoint Chairs of these TWGs;
- Monitoring and review of the project at regular Steering Committee meetings;
- Coordinating and disseminating lessons learned between TWGs;
- Identifying the range of IAEA activities, documents and networks relevant to the Forum’s objectives, and providing links and connections to them;
- Identify and assist coordination with other activities within the IAEA relevant to the Forum objectives;
- Controlling project scope as emergent issues force changes to be considered, ensuring that scope aligns with the agreed forum objectives;
- Resolving project conflicts and disputes, reconciling differences of opinion and approach.
- Holding an Annual Plenary Meeting;
- Submitting recommendations from the Forum that are for the IAEA;
- Publishing an Annual Report.

The Steering Committee is responsible for approving major project elements such as:

- Prioritization of project objectives and outcomes as identified in the project work plans;
- Deliverables as identified in the project work plans;
- Schedule;
- Risk management strategies, ensuring that strategies to address potential threats to the project's success have been identified, and approved, and that the threats are regularly re-assessed;
- Project management and quality assurance practices.

**IAEA Scientific Secretary:** The IAEA Scientific Secretary will solicit and facilitate participation of SUNREG Forum Members, establish and coordinate support from the SUNREG Forum Steering Committee, engage with and be the principal contact for the TWG Chairs, pursue appropriate links to other networks and organizations, develop relationships with potential sponsor agencies (e.g., international organizations, individual government agencies), and solicit funds.

**Topical Working Groups:** Subsets of the SUNREG Forum Members organized around a common topic. The TWGs could have a topical focus to address specific issues.

Topical Working Groups will:

- Canvas and coordinate the input of forum members regarding issues and gaps in their areas of interest
- Consider the issues raised and identify projects and actions that may address them
- Prioritize projects and actions based on members’ needs and propose these to the SC
- For authorized projects, appoint a project lead and project team, and develop a project plan
- Progress and deliver projects
- Recommending development by the IAEA or forum members of guidance, support and training to address identified gaps
- Contribute to the Annual Report

**Topical Working Group Chairs:** Individuals with experience and knowledge on the specific TWG topic, along with general knowledge of other SUNREG Forum topics; responsible for coordinating activities to ensure sharing of expertise and knowledge on the specific WG topic in coordination with Regional Coordinators, as appropriate. A Vice Chair will also be appointed to support and act as back up for the Chair.

Topical Working Groups Chairs, under the direction of the Steering Committee, will:

- Draft a work plan for the TWG. The plan will identify the objectives for the working group, intended outcomes and deliverables, and a preliminary schedule
- Lead and coordinate the work of the TWG
- Report progress and outcomes to the SC

5. **TOPICAL WORKING GROUPS**
Based on the outcomes of the September 2016 IAEA Workshop on Safety Infrastructure for Uranium Production, the following Topical Working Groups are initially proposed: Regulation and Cross-Cutting Issues, Uranium Production, and NORM.

The issues that each TWG will address will depend on the needs of the members of that TWG, however the following issues are likely to be relevant and are proposed to be covered initially. These were raised during the 2016 IAEA Workshop on Safety Infrastructure for Uranium Production, or have been raised during development of the IAEA draft Safety Report *Safety Aspects of Uranium Production*. The TWGs are also a forum for discussing new and emerging technologies and challenges.

**Regulation and Cross-Cutting Issues TWG**

- Legislation and regulatory framework, especially for new facility applications
- Funding and resources including staffing and training
- Technical capability
- Communication and involvement of interested parties
- Transportation and other ancillary activities
- Financial assurance and institutional control
- Contingency planning and response

**Uranium Production TWG**

- General requirements for uranium production
- Life-cycle planning of activities
- Site characterization and environmental assessments
- Construction and operation
- Management of tailings
- Groundwater protection- prevention, monitoring and restoration
- Termination of operations including end state criteria and decommissioning

**NORM TWG**

- General requirements for the management of NORM
- Identification of NORM activities
- Application of the graded approach
- Legacy site hazards
- Management of residues including reuse and disposal options
- Decommissioning