

**Asian Nuclear Safety Network (ANSN)
Terms of Reference
for Topical Group on Safety Management of Research Reactors (SMRRTG)**

May 2018

Background

The Asian Nuclear Safety Network (ANSN) was established by the International Atomic Energy Agency (IAEA) in 2002 to pool, analyse and share nuclear safety-related information, knowledge and experience among IAEA Member States participating in the Network. After an initial pilot stage, ANSN was fully implemented in 2004. The Network's activities are carried out within the framework of the IAEA's Extrabudgetary Programme on the Safety of Nuclear Installations in South East Asia, Pacific and Far East Countries. ANSN was first set up as a basic information sharing mechanism and then became a human and cyber network for facilitating sustainable regional cooperation to capture and disseminate basic and applied nuclear safety knowledge.

A few years after ANSN's establishment, with growing worldwide interest to consider launching nuclear power program as a viable energy source, interest in nuclear power gained momentum in several emerging countries. This led to proposals that the focus of the Network's activities should shift to nuclear safety capacity building, including the main elements of a nuclear power programme.

Accordingly, "Vision for ANSN by the Year 2020" (Vision 2020) was adopted at the second ANSN Nuclear Safety Strategy Dialogue meeting, which was held in Seoul, Republic of Korea, in April 2009, and since then it has served as a fundamental document guiding the Network's activities. Vision 2020 envisaged the establishment of a regional capacity building system consisting of: (a) education and training resources, using existing training centres in ANSN member countries and virtual training centres based on e-libraries, etc.; (b) technical support and advisory services, with the creation of 'virtual', web-based technical and scientific support organizations (TSOs); and (c) peer review and support arrangements. The Vision 2020 focused on the active use of state-of-the-art information technology (IT).

However, the environment in which ANSN was operating changed significantly after the Fukushima Daiichi Nuclear Power Plant accident in March 2011. At the 55th regular session of the IAEA General Conference in September of that year, the IAEA Action Plan on Nuclear Safety was adopted and this called on Member States to undertake specific actions to further strengthen nuclear safety, emergency preparedness and radiation protection. As indicated in the Action Plan, Member States planning to embark on a nuclear power programme were requested to develop nuclear safety infrastructure and to strengthen and maintain capacity building, with the assistance from the IAEA Secretariat upon their request. This underlined the importance of taking the initiative in such efforts by the Member States themselves.

Under these circumstances, ANSN has adopted a new "ANSN Vision" which emphasizes the regional cooperation aspect of the Network's activities as well as the member countries' self-initiative to identify areas for improvement to achieve a high level of nuclear safety. ANSN member countries that are considering or preparing to embark on nuclear power programmes are encouraged to focus on capacity building, with those countries that already utilize nuclear power providing them with useful information, in-depth knowledge and practical experience related to nuclear safety and relevant services. ANSN aims to contribute to the activities by all member countries to enhance the safety of nuclear installations in the region, by providing continuous support for capacity building through the Network's activities.

Introduction

During the first ANSN Steering Committee in March 2004, General Terms of Reference (ToR) for the ANSN Topical Groups (TGs) were defined. Within this frame and to fulfil the objectives of the Topical Group on Safety Management of Research Reactors (SMRRTG), ensuring suitable working methods and self-assessment, specific terms of reference for SMRRTG have been defined as follows.

At the 10th ANSN Steering Committee meeting held in Singapore in October 2009, it was discussed and agreed to establish the ANSN project management team for further strengthening ANSN work. Under this agreement, the ANSN Programme Manager (PM) was assigned to oversee all ANSN activities and to bear other general management responsibilities and the ANSN Project Management Officer (PMO) was assigned to monitor, track and manage the national and regional activities. Based on the new management support functions, the ToR of SMRRTG was modified to reflect the new roles of PMO and Technical Officer.

It has been expected that SMRRTG will consider conducting self-assessment for the purpose of identifying gaps against the IAEA safety standards in cooperation with Self-assessment Coordination Group (SACG), and the identified gaps will be useful to create SMRRTG support activity plans.

Considering the function of Self-Assessment Coordination Group (SACG), the ToR of SMRRTG was updated and agreed upon in 2018.

Objectives

- To identify and share good practices and lessons learned among ANSN member countries for safety design, construction, operation (including ageing management), modification and decommissioning of research reactors as well as to be a source of expertise in these matters;
- To enhance the capability of safety design, construction, operation (including ageing management), modification and decommissioning of research reactors in the region, consistent with the IAEA safety standards and associated technical documents;
- To promote the implementation of the Code of Conduct on the Safety of Research Reactors;
- To enhance the peer review process in the area of Integrated Safety Evaluation, promoting the establishment by participating member countries of self-assessment reports on the safety of research reactors, evaluating the results and providing recommendations for further improvement;
- To promote a strong safety culture within regulatory bodies and operating organizations through SMRRTG activities;
- To promote the mutual exchange of information through ANSN and to foster the sharing of knowledge and experience on the safety of research reactors;
- To promote the mutual cooperation between participating countries in the safety operation of research reactors; and
- To provide feedback on the experience in implementing SMRRTG activity plans and the needs of additional activity plans with strong justification to the ANSN PMO and the SACG Coordinator.

Structure

■ Coordinator

The Coordinator will

- Be responsible for the chairmanship of SMRRTG;
- Lead SMRRTG meetings and discussion;
- Provide feedbacks about the experience in implementing SMRRTG activity plans and the needs of additional activity plans with strong justification to the Project Management Officer (PMO) and the Self-Assessment Coordination Group (SACG) Coordinator;
- Ensure that support activity plans of SMRRTG are implemented as scheduled;
- Participate in the meeting of SACG, as required, to develop and amend draft ANSN activity plan based on the results of self-assessment by ANSN member countries and feedbacks by SMRRTG members;
- Support the SACG Coordinator to evaluate the efficiency of the working methods and the effectiveness of results, including capacity building achievements in SMRRTG member countries, through implementation of SMRRTG activities;
- Facilitate communications with the IAEA Technical Officer; and
- Represent SMRRTG so that its activities can be coordinated, if necessary, with the activities of other topical groups, for capacity building in safety operation of research reactors.

When there are plural coordinators, the chief coordinator is to be selected among them and will carry out the role and responsibilities of the coordinator described above.

■ National Representatives

The representatives at a national level will

- Have good knowledge of nuclear safety and safety management of research reactors;
- Be able to provide broad views of their own organizational or national perspectives;
- Maintain continuous participation in SMRRTG activities to ensure consistent contribution to fulfilling SMRRTG objectives;
- Have the responsibility of informing on the national research reactor safety management issues and resulting-progress to SMRRTG activities; and
- Implement actions as agreed in the SMRRTG biennial meetings.

■ IAEA Representatives

◆ Project Management Officer (PMO)

The IAEA PMO will

- Develop and formulate draft activity plans of SMRRTG in cooperation with the SACG and considering the feedbacks by the SMRRTG Coordinator and the IAEA Technical Officer; and
- Facilitate and monitor the preparation and implementation of SMRRTG activities and take necessary actions, in cooperation with the IAEA Technical Officer and the Coordinator, as well as relevant ANSN members countries as appropriate, to ensure implementation of the planned activities in a timely manner.

◆ Technical Officer (TO)

The IAEA TO will

- Provide the Coordinator with technical support to the formulation of feedbacks about the experience in implementing SMRRTG activity plans and the needs of additional activity plans with strong justification;
- Develop the technical documents for preparation of SMRRTG activities (i.e., prospectus, agenda, presentation materials);

- Select experts for the workshops, meetings and other relevant activities of SMRRTG in coordination with the Coordinator, SMRRTG members, and the PMO as necessary;
 - Participate in SMRRTG activities (i.e., workshops, meetings and other relevant activities) and provide information on newly developed IAEA publications related to SMRRTG;
 - Create an event record sheet in cooperation with participants of SMRRTG activity and submit it to the PMO and the SMRRTG Coordinator; and
- Participate in the meeting of SMRRTG, as requested, to develop and amend draft ANSN activity plan based on the results of self-assessment by ANSN member countries and feedbacks by SMRRTG members.

Working Mechanism

■ Biennial meeting

A group meeting will take place once every two years. The meeting will be organized in conjunction with a SMRRTG activity (i.e., a regional workshop).

■ Meeting output

At each group biennial meeting, the following points will be discussed and formulated:

- A summary of the meeting for publication on the ANSN web site;
- An event record sheet, based on the prescribed format and the guidelines, on SMRRTG activities that will be submitted by SMRRTG Technical Officer to the PMO for compiling into an ANSN Progress Report;
- Actions (if any) and their deadlines;
- Feedbacks about the experience in implementing SMRRTG activity plans and the needs (if any) of additional activity plans with strong justifications, which will be provided to the PMO and the SACG Coordinator.

If needed, Task Force (TF) dealing with specific issues may be set up as a result of the group biennial meeting. The TF will have a leader who will report to the PMO and the Coordinator of SMRRTG on the progress of its activities. Between the meetings, there will be communication and follow-up by e-mail and other applicable information technology tools.

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