

IAEA Technical and Scientific Support Organizations Forum (TSOF)

Technical and Scientific Support Organization (TSO) is an organization or organizational unit designated, or otherwise recognized by a regulatory body and/or a government, to provide expertise and services to support nuclear and radiation safety and all related scientific and technical issues.

The maintenance of expertise supporting the regulatory bodies' functions and the arrangements between a regulatory body and its technical support organizations are identified as key pillars of the framework for safety.

IAEA TSO Forum (TSOF)

The TSOF, established in 2010 by IAEA, provides a platform to encourage open dialogue and sharing of scientific and technical information among TSOs worldwide. It promotes coordination and collaboration among the TSOF Member States to strengthen and improve nuclear safety globally.

The TSOF collaborates closely with Organization for Economic Co-operation and Development Nuclear Energy Agency (OECD NEA) and Regulatory Cooperation Forum (RCF). The TSOF works to:

- Strengthen the role of technical and scientific capabilities in Member States;
- Support technical and scientific capabilities in countries expanding or embarking on nuclear programme;
- Promote coordination and collaboration among the TSOF members to foster scientific and technical capacity building;

- Share safety and security research, development and experiences including lessons learned;
- Share feedback on the use of the IAEA safety standards and other publications.

The TSOF Steering Committee oversees the forum's activities and provides advice on policies and strategies for the forum. It meets at least once per year and is headed by a Chairperson who is appointed by the forum for a two-year period. The Steering Committee's membership is defined and reviewed every two years. IAEA Secretariat supports the activities of TSOF and its Steering Committee and maintains the TSOF website <https://gnssn.iaea.org/main/tsof>

TSOF initiatives

- Harmonizing the TSO activities by drafting of specific documents (e.g. TECDOCs)
- Support to develop and maintain TSO capabilities in embarking countries with the TSO self-assessment (TOSCA) methodology and National Workshops
- Organizing TSO Conferences
- Research and Development to support expertise in safety

IAEA TECDOC-1835

This TECDOC is intended to serve as a reference publication on TSO and describes the core characteristics, organizational aspects and types of services provided by a TSO to support regulatory functions and infrastructure in Member States.

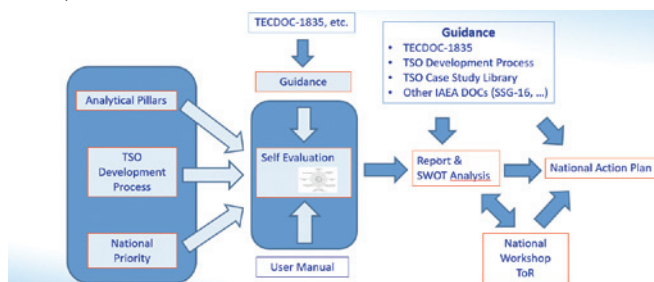


Support in development of TSO capabilities

Development of a Self-Assessment Questionnaire (SAQ) to assess scientific and technical capabilities of the TSO focusing on the core TSO technical areas (based on TECDOC-1835):

- What are the scientific & technical capabilities of the TSO?
- How are these developed, managed and sustained?
- How are these applied in regulatory functions, particularly in reviews and assessments?

SAQ Tool: Structure



TSO workshops

The TSOF supports in organizing National Workshops in member countries to foster TSO efforts in establishing and maintaining technical and scientific capabilities for supporting regulatory functions. During the workshop an analysis of the results of the self-assessment by the host organization is carried out by means of SAQ supported by a spider web chart analysis tool. The first such pilot workshop was organized in South Africa, 25–29 November 2019.

Any member of TSOF may request to organize such a national workshop through the IAEA.



TSO conferences

These conferences are organized to highlight initiatives as well as challenges/issues in developing and strengthening scientific and technical capabilities to support regulatory decision-making:

- 5th TSO Conference is planned to be held in Russian Federation in 2022.

Safety research and development

An essential characteristic of a TSO is its capability to perform R&D activities to support the regulatory body or other public authorities. The TSOF provides an opportunity to the international community and TSOs worldwide to participate in international collaborative R&D projects to optimize their use of resources, facilitate cost effective and efficient research, share expertise and facilitate the building of a common understanding at the international level.



Members and partners

Member States: Belgium, Canada, China, Czech Republic, Finland, France, Germany, Italy, Japan, Lithuania, Pakistan, Poland, Republic of Korea, Russian Federation, Slovakia, Slovenia, South Africa, Ukraine, United Kingdom, United States of America.

Partner organizations: European Commission and its Joint Research Centre (JRC), European Training and Tutoring Institute (ENSTTI) and European Technical Safety Organizations Network (ETSON).

How to join TSO Forum?

The TSOF membership is open to TSOs and expert groups carrying out TSO functions from all IAEA Member States. Representatives from the EC, OECD/NEA and established regional TSOs may participate as observers. For membership, please contact TSOF.Contact-Point@iaea.org. For more information, please visit the TSOF website at <https://gnssn.iaea.org/main/tsof>