



TSO Self-Capability Assessment (TOSCA)

Technical and Scientific Support Organizations Self Capability Assessment (TOSCA)

A new innovative web-based tool for the self-assessment of capabilities of Technical and Scientific Support Organizations (TSOs) supporting national regulatory bodies

What is the TSOF ?

The Technical Support Organizations Forum (TSOF), established in 2010 by the IAEA, promotes collaboration among TSOs and other organizations interested in technical and scientific issues related to nuclear safety and security.

TSOF is open to TSOs and expert groups nominated by IAEA Member States. Representatives of the European Commission, the Organization for Economic Co-operation and Development Nuclear Energy Agency (OECD NEA) and regional TSO networks participate as observers. A TSOF Steering Committee facilitates and oversees the implementation of the forum's programme.

What does TSO Forum offer?

This forum offers a platform to develop common approaches to build and maintain a high level of safety in line with the IAEA Safety Standards (www.iaea.org/resources/safety-standards). It is an initiative to help Member States develop and strengthen their technical and scientific capabilities, based on an IAEA TECDOC 1835 developed with the support of the Forum.

Regulatory functions require support by scientific and technical expertise.

The support provided by the TSOs can facilitate development and/or provision of regulations and guides, notification and authorization, licensing procedures, regulatory review and assessment, regulatory inspection, enforcement, emergency preparedness and response and communication as well as opportunities to engage in consultation with interested parties.

There is no 'one size fits all' standard model for a technical and scientific support organization.

In this context, TECDOC-1835 defines core notions and values, to help countries to evaluate their current and future needs for technical and scientific support to cover the safety and security of the whole life cycle of their national nuclear facilities. This publication also provides some illustrative national examples on how to develop and enhance TSO capabilities. It also highlights that the organization and



resourcing of technical and scientific support is a responsibility of each country and should be in line with regulatory processes to achieve technical competence, sustainability as well as independence.

What is TOSCA?

The IAEA TSO Forum, based on recommendations of the International TSO Conferences, identified a need to further support countries in the self-assessment of their technical and scientific support capabilities. In response, a new self-assessment methodology and corresponding web-based IT tool was developed, called TOSCA.

The TOSCA tool is user-friendly and allows all stakeholders (government bodies, regulatory authorities, technical support providers including those embedded in regulatory bodies) to be included in the self-assessment process. TOSCA provides visual displays to synthesize the results of the self-assessment and support analysis (Fig. 1).

Implementation

The TOSCA implementation roadmap covers the following main steps (Fig. 2):

- Select from the broad list of topics covered in TECDOC 1835 and corresponding details of the relevant general safety requirements (GSR), the fields of technical support expertise which a country needs for assessment;
- Define the targets and expectations against which current technical support capabilities will be benchmarked;
- Assess these capabilities in terms of organization and processes, and in terms of performance of the support actually provided;
- Elaborate the main conclusions drawn from the self-assessment, and present them at a national TSO workshop;
- Develop an action plan to further enhance national technical and scientific support

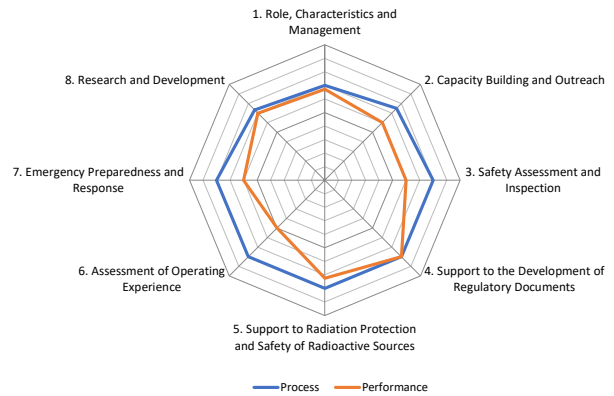


Fig. 1: Display of results

capabilities and ensure their sustainability, in line with current and future national regulatory needs.

Upon request from Member States, the IAEA will provide relevant support to conduct the self-assessment exercise (Fig. 3). This includes a preliminary mission of IAEA experts to the country, followed by a national TSO workshop, which includes all key stakeholders to work and develop a national TSO action plan for developing, enhancing and sustaining technical and scientific capabilities supporting regulatory functions.

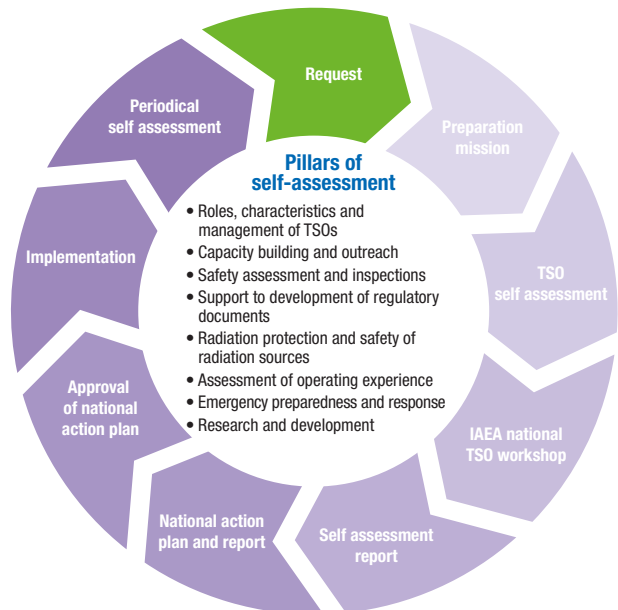


Fig. 3: Self Assessment Exercise

Interested in the TOSCA approach and self-assessment tool?

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Visit: <https://gnssn.iaea.org/main/tsof>

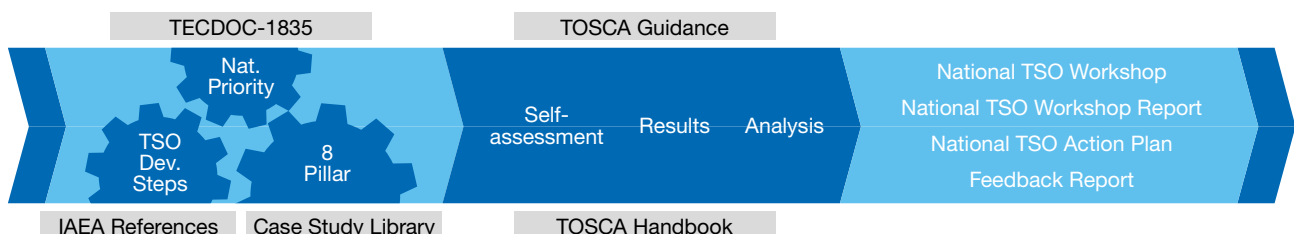


Fig. 2: Roadmap