

Explanatory Meeting on the Methodology for Technical and Scientific Support Organizations Self Capability Assessment

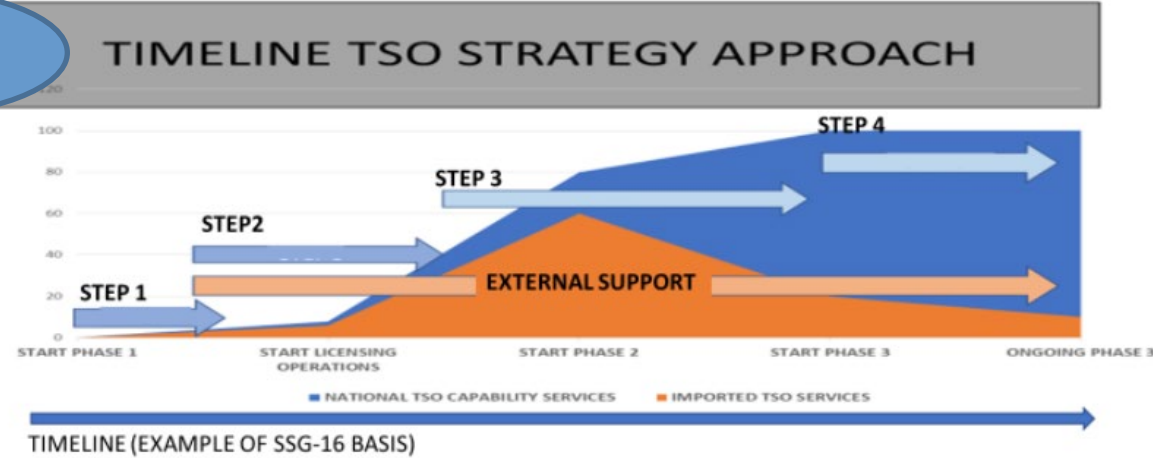
4.3 Feedback and lessons learned from previous workshops

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TOSCA Methodology

WHEN?



Case Study Library

You will find a list of TSO case studies of member states illustrating key TSO development and operational problematics.

WHY?

Establishment of
NNR TSO Case
Study_June 2020

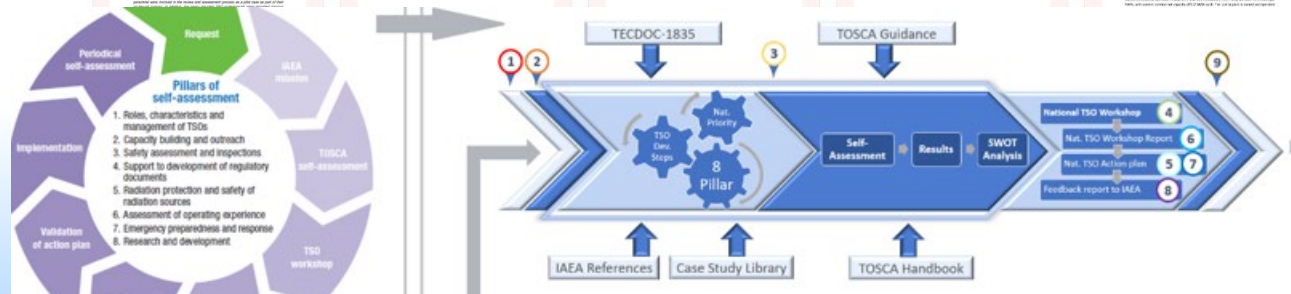
IRSN France TSO
Case study on
Research_Jan 2023

TSO Case Study
(final)_PNRA-
Pakistan

VTT Finland_TSO
Case
study_Research
Programmes

WHAT?

HOW?



WHO?





National Workshops /Promotion on the TOSCA Methodology

- **South Africa 2018** (whole regulatory system)
 - First Workshop based on a Excel tool for the SWOT analysis
- **Norway** (Regulator / internal TSO, Center of Excellence)
 - 2023: First workshop based on the TOSCA database, Phase A
 - 2024: Continuation of the TOSCA Self-Assessment, Phase B (in depth)
- **Promotation of the TOSCA Methodology**
 - 2021: IAEA General Conference etc.
 - 2024: IAEA Workshop for TSO in Riyadh (on operator side with the intention to enhance)

International / Regional Workshops on the TOSCA Methodology



- **International Workshop, Vienna, 2019**
 - Explanation of the TSO Forum work and the TOSCA methodology based on TECDOC-1835
- **International Workshop, Norway 2023**
 - First workshop to understand the TSO role in a regulatory system and to use the TOSCA methodology based on the TOSCA database
 - In cooperation with EuCAS, members from external and internal TSOs from the Northern European region et al.
- **Regional Workshop, Dushanbe 2023**
 - Second workshop to understand the TSO role in a regulatory system and to use the TOSCA methodology based on the TOSCA database
 - In cooperation with EuCAS, members from external and internal TSOs in Central Asia and Ex-Yugoslavia

Feedback and Lessons Learned (TOSCA Methodology)

- **General Findings**

- Involvement of all national stakeholders (RB, TSO internal + external entities, Universities, Labs, Institutes etc.) from the very beginning, especially the RB when a TSO has to be established
 - Clear definition of national priorities and development steps according to each regulatory function support
 - Common internal discussions on the process- and performance-oriented questions
 - Involvement of a relatively small amount of experts for the self-assessment
 - It is recommended to complete the questionnaire swiftly (2-3 months)
 - The SWOT Analysis Report based on the results of the tool leads to the national / strategic action plan
- ✓ **A periodic review after a certain time is recommended and valuable**

Feedback and Lessons Learned (TOSCA Methodology)



- **Newly developing countries**
 - Focus on the broader analysis (Phase A) together with technical topics in parallel or at a later stage (Phase B)
 - Exchange with other countries in a similar situation during regional or international workshops is very useful
 - Learning from the case studies
 - The SWOT Analysis Report based on the results of the tool leads to the national / strategic action plan
 - And might even considered regional solutions of TSO approaches

Feedback and Lessons Learned (TOSCA Methodology)



General Considerations

- **Competencies to be identified and prioritized** aligned with national policies and needs on a **long-term sustainable view** providing technical support as well as research activities (incl. new topics, SMRs etc.)
- key issue is the **legal basis** and content of the mandate of the regulatory body.
- When identifying the requirements of the TSO and the tasks that the TSO will undertake, clear **engagement is needed between government, regulators and the TSO** that takes into account the mandate of the regulator
- **Priorities for research** that might be carried out by a TSO may be identified by examining the key uncertainties affecting the results of safety assessments.

Feedback and Lessons Learned (TOSCA Methodology)

General Considerations

- a **time-step approach** is suggested to evaluating potential new competency on a regular basis, e.g., examining likely activities over the **next 5 years**.
- The mandate for a TSO should include clear mechanisms for **interactions between the TSO, regulators and operators**, as well as any other relevant organisations, according to local dependencies.
- In some instances, and particularly for **smaller countries**, it may be clear that the competencies are not available. Consideration will then be needed as to whether to look at **longer-term training or recruitment from abroad**, or some combination. Where there are similar needs in neighboring countries, the establishment of a **regional TSO could help address issues with respect to capacity and capability building**.
- If a TSO is permitted to support other bodies than the regulator, **conflicts of interest** may arise and rules of engagement between the TSO and others have to be established. Bringing together the different players has also been demonstrated to be an effective and pragmatic approach to identifying and addressing issues. .
- It has been recognized through various fora that an improved interface is often required between the **regulation of nuclear security and the regulation of radiation safety**.



IAEA

International Atomic Energy Agency
Atoms for Peace and Development

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Thank you!

Feedback and Lessons Learned (International Workshop Tadjikistan)

1. Participants unanimously invite EuCAS SC to further enhance its activities in subjects like TSOs establishment and operation, safety culture, and leadership and management for safety.
2. After all discussions it was concluded: In establishing a TSO, there is no one solution fit for all. Each country should choose the model of TSO taking into consideration its regulatory framework for safety and particularities.
3. At the Workshop participants assessed TOSCA self-assessment as very important for further strengthening safety infrastructure. They expressed expectation for TSO Forum to make available the TOSCA self-assessment methodology and tool to IAEA Member States for in-depth information and direct use.
4. Based on the interest expressed towards the Regional TSOs, participants are inviting IAEA and Member States to further investigate and support the possibility of establishment and operation of Regional TSOs (e.g. Balkan, Central Asia, Scandinavian countries) and make them operational as per common interest of respective Member States. Based on the expressed interest in the regional TSOs, the participants will encourage the IAEA and the Member States to further explore and support the possibility of establishing and implementing regional TSOs (e.g. in the Balkan countries, in Central Asia and in the Scandinavian countries) and to make them ready for operation in the common interest of the respective interested Member States.
5. Interested Member States (such as Bosnia and Herzegovina, Serbia, Azerbaijan, Tajikistan) have shown strong interest to seek IAEA's support through its funding mechanisms (e.g. TC Regional Projects) for the establishment of TSOs and their self-assessment using TOSCA tool.
6. The establishment of (internal or external) TSOs to be further discussed within IAEA and other fora e.g. via additional regional and international workshops.