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1. Background
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1. Background
The Milestones of TSOF Development

- **2007**: 1st TSO Conf.: TSOs from different countries joint effort to develop a common understanding.
- **2010**: 2nd TSO Conf.: Regulatory functions need to be science based. **Creation of TSO Forum (TSOF) as a platform for networking between support organizations.**
- **2011**: Fukushima Daiichi accident: the “need for appropriate technical and scientific support” is one of the area of improvement for strengthening the effectiveness of national regulatory bodies.
The Milestones of TSOF Development

- **2014**, 3rd TSO Conference. About 250 participants from 42 Member States and 5 organizations:
  - Lessons from Fukushima Daiichi accident,
  - Acknowledge the role of TSO on research and development (R&D)
  - TSOs to support building nuclear safety and security capacity in embarking countries.

- **2015**, IEM 8 on Strengthening Research and Development Effectiveness and IEM 9 on Assessment and Prognosis in Response to a Nuclear or Radiological Emergency – Highlighted the role of TSOs
2. Recent Development of TSO Activities within TSOF
TSOF Steering Committee meetings

- **March 2015: 7th TSOF SC meeting** in Vienna – 25 participants from 15 Member States and the European Commission. Adoption of an action plan.

- **October 2015: 8th TSOF SC meeting** in Vienna - 23 participants from 14 Member States and from the European Commission.

  - Each meeting focuses on selected thematic issues.
  - Exchange of experience and information among TSO representatives.
  - Review of progress on planned actions.
  - Discussion of future objectives
Development of a TECDOC on TSOs

TECDOC titled “Technical and Scientific Support Organizations (TSOs) and their Services provided in Support to Regulatory Functions” in preparation since March 2015.

• First CS 23-25 March (in parallel with a meeting organized by NE Department of a Draft for TSO in support to nuclear power project, to review and expand the existing TECDOC-1078).

• 2nd CS on 25-28 August for Drafting of a TECDOC on Technical and Scientific Support Organizations.

• DPP approved on 1 October 2015.

• 3rd CS on 14-16 October 2015.

• Current work to produce a consolidated version

• Final draft in Spring 2016 → Publication expected end 2016.
Over the past forty years, several major research projects have been achieved at international level in order to solve gaps in the state-of-the-art mainly identified after TMI and Chernobyl accidents (PHEBUS FP, SARNET, etc...). The International Expert Meetings under the frame of the IAEA Action Plan launched after the Fukushima Daiichi accident have shown **needs in R&D to support nuclear safety expertise.** As nuclear R&D still remains cost demanding, **international collaboration is still needed** to share the costs and knowledge gained.

**Example of R&D initiatives at national, regional and international level**
New activity on R&D

- Identification of common R&D needs (survey + CSs)
- Promotion of projects related to R&D to support nuclear safety expertise => Attract financiers
- Foster the cooperation between already existing research entities (OECD/NEA, EPRI, NUGENIA, etc....)
- Foster the knowledge transfer through dedicated technical workshop in R&D
- Foster the involvement of embarking countries in relevant international research programme (skills development of PhD students and strengthening of the cooperation)
Growing coordination between TSOF and other key initiatives

- Through IEM, TSOF Steering Committee meetings and TECDOC development:
  - Coordination with Agency supported TSO activities on **operator side** (under leadership on NE Department).
3. Next Steps and Challenges
New initiatives listed in the TSOF Action Plan

• Finalize TECDOC.
• Finalize Proceedings of 2014 TSO Conference.
• Identify common R&D needs to support nuclear safety expertise and promote related R&D projects (Survey + CS).
• Develop TSOs activities related to Capacity Building (in coordination with RCF, ANSN, FNRBA, ANNuR)
  - Facilitate the *provision of TSOs support to countries developing their safety infrastructure* through their involvement in workshops and capacity building activities.
  - Develop preliminary mechanisms to support the establishment of TSOs in embarking countries.
New initiatives listed in the TSOF Action Plan

- Develop a database of TSO experts who can be contacted by the Agency to implement capacity building activities (depending on availability and interest). Accessible on TSOF website, only to TSOF SC members and IAEA.

- Compile a list of basic TSO data per country.

- Organize a TSO side event (i.e. TSOF Plenary Meeting) during the 2016 IAEA General Conference.

- Prepare: 4th TSO Conference in 2018

  Proposed TSO Conference:
  - in Brussels, Belgium (to be hosted and co-organized with BEL V)
  - in October 2018
Thank you for your attention