

13th Steering Committee (SC) meeting of the TSO Forum (TSOF)

IAEA Headquarter, Vienna, Austria

18 April 2018

Final Summary

The 13th meeting of the Steering Committee (SC) of the Technical and Scientific Organizations' Forum (TSOF) was held in the IAEA the 18 April 2018 and gathered 15 participants from 12 Member States (MS). In addition, 5 officers from the IAEA attended and provided presentations to the Steering Committee Members.

Session 1: Opening Session

Mr G. Caruso (Director of NSOC, IAEA) opened the session by welcoming the participants and highlighting the achievements of the TSOF, particularly the IAEA-TECDOC-1835 on *the TSOs providing support to Regulatory Functions*, enriched recently by the development of both, a TSO self-assessment questionnaire and case-study based methodology. The development of the TSO self-assessment will help the Member States to assess their own technical and scientific capacity and support organization when the case studies will support the Member States in developing their strategy to develop or to strengthen the technical and scientific capacity. The cases studies are mainly stories based on real cases that highlight key lessons learnt to be considered by the member States when developing their strategies. In particular, a first workshop on technical and scientific capabilities in embarking countries took place on April 10-13, 2018 in Vienna. This workshop reached its objectives successfully with a high participation of representatives of regulatory bodies and TSOs from mix embarking countries and well established countries. In the near future, more cases studies need to be developed to complete the TSO experience library and a first national pilot workshop addressing specific needs of a Member State could be implemented.

Mr Caruso acknowledged the official nominations of Brian Thomas (US-NRC, United States of America) and Carla Eibl-Schwaeger (GRS, Germany), respectively as Chair and Vice-chair of the TSO Forum and their effective commitments in the TSO Forum activities.

Mr B.Thomas (Chair of TSOF, United States of America), welcomed the participants and the new members of the TSOF, in particular Mr Maciej Skrzypek (NCBJ, Poland) replacing Mr Jackowsky.

Ms C. Eibl-Schwaeger (GRS, Germany) summarised the main outcomes of the 12th Steering Committee that took place on October 19-20, 2017 in Vienna and she provided her positive feedback on the first TSO workshop that took place on April 10-13, 2018. She highlighted the strong commitment of the participants. The initiative of the workshop and the way it is implemented are major points. She suggested few ideas to improve the TSO self-assessment questionnaire. She also acknowledged the work of the Secretariat for the publishing of the IAEA-TECDOC-1835 that is a suitable format to provide core characteristics and examples on TSO supporting regulatory functions.

Mr K. Ben Ouaghrem (NMPS, IAEA) presented the status of actions (see appendix 1).

Mr G. Caruso (Director of NSOC, IAEA) provided the background of the on-going action related to the interface between safety and security. In particular, there is a need to create a document including safety and security together. The safety and security framework needs to be clarified. Both safety and security aspects should be taken into account during the design of a nuclear installation.

Mr B. Thomas (Chair of TSO, United States of America) encouraged all the members of the Steering Committee to contribute to the topics addressed by G. Caruso. He expressed his acknowledgement to the IAEA for taking the lead on those challenges.

Mr E. Beaupré highlighted that leadership and management for safety are both very important. He added that the theory and conceptual portion of the School to provide a common understanding of key concepts are a major point. There is a concrete need to develop case study, as it represents the particle example of what is happening. The overarching objective of School is to early midcareer professionals for developing their safety leadership potential through a better understanding of what leadership means, in practice in nuclear and radiological working environments, with their inherent complexities and often competing considerations. In the next couple of year, a one or two-weeks programs for schools should be implemented at the global level. A longer program would allow for further augmentation of the School including activities such as technical visits and more time for reflection. In the five to ten years the school initiative should be linked with the capacity building program of Member States.

Mr G. Caruso emphasized the undergoing efforts to strengthen capacity building activities. He added that the agency is too focused on technology and not enough on leadership, whereas the lack of leadership was the reason of most of the nuclear accidents in the past. He also highlighted the importance of the harmonization of activities and of the Pilot International School of Nuclear and Radiological Leadership for Safety for preparing young professionals through real cases. In the near future, more cases studies need to be developed to complete the TSO experience library and a first national pilot workshop addressing specific needs of a Member State could be implemented. The objective is to have a school in each region of the World and several interested countries.

Mr S. Mallick (Section Head of PSCS, IAEA) provided an update on the current review of the services offered by the IAEA. There is a need to look from different aspects such as the implementation, the modularity, the flexibility, and guidelines, to better understand to improve the services.

Mr B. Thomas (Chair of TSO, United States of America), added that there is a need to improve the access to information in particular concerning the Proceedings of the TSO conference 2014.

Mr K. Ben Ouaghrem emphasized that there is an on-going tremendous amount of work to be done to harmonize the proceedings. The material of the presentations will be on the TSO forum website.

Session 2: TSO initiative to support technical and scientific capacity in Regulatory functions

Overview of the TSO initiative, published IAEA-TECDOC-1835 and feedback from the 1st workshop on Technical and Scientific capacity in embarking countries April 10-13, 2018

Mr K. Ben Ouaghrem provided a feedback on the first TSO workshop that took place on April 10-13, 2018. 23 participants from 13 Member States attended the workshop: TSOs and regulatory bodies from Bangladesh, Belarus, Canada, Germany, Finland, France, Iran, Kazakhstan, Kenya, Republic of Korea, Pakistan, Poland, Russian Federation and South Africa. This was a great opportunity to present the different aspects of the TSOs supporting regulatory functions and to share experience feedback from the participants to improve the tools: the TSO self-assessment questionnaire and the case study based methodology.

A. Khamaza (SEC NRS, Russian Federation) proposed to create a prioritization roadmap for competences related to TSO initiative. The roadmap is intended to be used by the regulatory body in the embarking country to establish or develop its scientific and technical capabilities or by the Member-State willing to establish a TSO within regulatory infrastructure. The SEC NRS representative suggested the Agency to organize a Consultancy Meeting specifically to discuss and develop a draft of such prioritization roadmap. The participants of this CM could be TSO members who participated in development of TECDOC, case-studies, TSO self-assessment questionnaire and who are well familiar with TSO initiatives and productively contribute.

Mr B. Thomas (Chair of TSO, United States of America), proposed to provide a case study on the training and development needs of a regulatory body, as the topic is too often overlooked.

Mr B. Autrusson (IRSN, France) proposed to develop a case-study on the interaction between TSOs and operating organizations in research (link between IRSN and CEA research facilities).

Mr P. Liska (VUJE, Slovakia) highlighted that in the future, Slovakia, considers establishing non-profit organizations. The main goal is not the independency of the organization, but to keep the competence of nuclear safety.

Session 3: Preparation of the 4th TSO Conference 2018 in Brussels, Belgium

Mr K. Ben Ouaghrem provided the main outcomes of the 3rd Programme Committee that took place on April 16-17, 2018 in Vienna. 96 abstracts have been submitted on INDICO. The conference was announced via Note Verbale in December 2017. INDICO was opened on January 18, 2018 and the deadline initially on March 17 was postponed till April 13, 2018 to accommodate late submissions. All abstracts were reviewed by PC members and spread among the 6 topical sessions. The sub-sessions on radiation safety and on waste management safety were merged. The President and the Vice-President of the Conference are respectively Mr Masiera from ARN (Argentina) and Mr Sung from KINS (republic of Korea). All sessions chairs were identified. The Secretariat will review the abstracts and final agenda of the conference internally and confirm the abstracts by end of May 2018. The deadline for the submission of draft papers is on July 3, 2018. The deadline for review of the draft papers on August 15, 2018.

Benoit De Boeck, Chair of ETSON provided the agenda of the ETSON side-event (see appendix 3) and the rules of the ETSON award. The Secretariat will inform participants about the ETSON award in a generic email. Deadline for submission to ETSON award will be May 15, 2018.

K. Ben Ouaghrem apologized as some IAEA presenters could not deliver their presentations for some reasons (duty travels).

Closing remarks by the Chair of TSO

Mr B. Thomas (Chair of TSO, United States of America), acknowledged the work of the Steering Committee members and highlighted the progress made with respect to the work plan of the TSO Forum.

Appendix 1 – Action

No	Action	Details
1	<u>Meetings for 2017-2018</u>	
	1 st Programme Committee Meeting for TSO Conference	10 th - 11 th April 2017, VIC Room <i>DONE</i>
	11 th TSO Steering Committee meeting	12 th – 13 th April 2017, VIC Room <i>DONE</i>
	2 nd Programme Committee Meeting for the preparation TSO Conference	17 th - 18 th October 2017, in Vienna <i>DONE</i>
	12 th TSO Steering Committee meeting	19 th – 20 th October 2017, in Vienna <i>DONE</i>
	3 rd Programme Committee Meeting for the preparation TSO Conference	16th - 17th April 2018, in VIC Room M4 <i>DONE</i>
	13 th TSO Steering Committee meeting	18th – 19th April 2018, in Vienna <i>DONE</i>
	14 th TSO Steering Committee meeting	11th - 12th April 2019, in VIC Room
	15 th TSO Steering Committee meeting	21st - 22nd October 2019, in Vienna Room M4
	2 Consultancy meetings	December 12-15, 2017, in VIC M0E79 <i>DONE</i> <ul style="list-style-type: none"> • CS5 Development of case-studies based on the experience of PNRA (Pakistan) • CS6 Development of TSO self-assessment with a module on radiation safety • Preparation of the workshop 2018
Workshop developing and sustaining TSOs	Workshop 10-13 April in Board room A <i>DONE</i> Report under drafting	
CS R&D and TSO experts	Postponed 2019 TBC	
8 th CS	8th-9th April 2019 M0E68 in Vienna	
2	<u>IAEA-TECDOC-1835</u> on Technical And Scientific Support organizations Providing Support to Regulatory Functions	Published in March 2019 <i>DONE</i>
3	<u>TSO initiative: Development of Technical and Scientific Capability to support Regulatory Functions</u>	2 Consultancy meetings (TSO self-assessment and cases study) July 17-21, 2017, 2 Consultancy meetings (TSO self-assessment and cases study) Dec 12-15, 2017, in VIC M0E79 Workshop April 10-13, 2018, VIC Board Room A. The contributions of previous meetings have been integrated in

		<p>one document. <i>DONE</i></p> <p>Consultancy meetings to address (postponed after November 2018):</p> <ul style="list-style-type: none"> • Improvement of the TSO self-assessment questionnaire; • Development of a prioritization roadmap for competences related to TSO; • Development of a case study on the training and development needs of a regulatory body (US-NRC); • Development of a case-study on the interaction between TSOs and operating organizations in research (IRSN).
4	<u>List of experts</u>	<p>Postponed to 2019 TBC</p> <ul style="list-style-type: none"> • Definition of list of domains of expertise among TSO Forum (Jointly with NSNS)
5	<u>R&D activities of TSOs</u> <u>Preparation of a survey and mapping (research projects and infrastructures, codes)</u>	<p>Follow-up of the presentation and proposal provide by Eija-Karita Puska during the TSO workshop for 2019.</p>
6	<u>TSO conference 2018</u>	<p>3rd PC meeting April 16-17, 2018 <i>DONE</i></p> <p>Abstract confirmation <i>DONE</i></p> <ul style="list-style-type: none"> • Preparation of the conclusions of the TSO Conference in Summer 2018 • Invitation letters for session chairs and President by Mid-July 2018 • Submission of Draft papers by July 3rd 2018 • Review of draft papers (July-August 15, 2018)
7	<u>Communication & promotion</u>	<p>Before General Conference GC62</p> <ul style="list-style-type: none"> • TSO Forum factsheet has to be revised (Lithuania, South Africa, Ukraine, ETSON are missing) • Brochure on the TSO Forum (including TSO initiative) to be developed before GC62 • Side event ETSON-TSO Forum during the GC62 (not requested, presentation to be accommodated during GNSSN plenary)

Appendix 2 - List of participants

Title	Last Name	First Name	Country	Organization	
Mr	Webster	Philip	Canada	CNSC - Canadian Nuclear Safety Commission	Attended
Mr	De Boeck	Benoit	Belgium	Bel V	Attended
Mr	Van Haesendonck	Michel	Belgium	Bel V	Attended
Mr	Xiong	Xiaowei	China	NSC - Nuclear and Radiation Safety Center	Excused
Mr	Wastin	Franck	EC (European Union)	JRC - Joint Research Centre	Excused
Ms	Puska	Eija-Karita	Finland	VTT - Technical Research Centre of Finland	Attended
Mr	Autrusson	Bruno	France	IRSN - Institut de Radioprotection et de Sûreté Nucléaire	Attended
Mr	Louvat	Didier	France	ENSTTI – European Nuclear Safety Training and Tutoring Institute	Excused
Ms	Carla	Eibl-Schwaeger	Germany	GRS - Gesellschaft für Anlagen- und Reaktorsicherheit	Attended
Mr	Madonna	Antonio	Italy	ITER-Consult	Attended
Mr	Rocchi	Federico	Italy	FSN-SICNUC-PSSN	Attended
Mr	Negrenti	Emmanuele	Italy	FSN-SICNUC-PSSN	Attended
Mr	Tomita	Kazuhide	Japan	NRA - Nuclear Regulation Authority	Attended
Mr	Jo Jhung	Myung	Korea, Republic of	KINS - Korea Institute of Nuclear Safety	Attended
Mr	Uspuras	Eugenijus	Lithuania	LEI – Lithuanian Energy Institute	Excused
Mr	Maqbul	Naveed	Pakistan	PNRA – Pakistan Nuclear Regulatory Body	Excused
Mr	Skrzypek	Maciej	Poland	NCBJ	Attended
Mr	Khamaza	Alexander	Russian Federation	SEC NRS - Scientific and Engineering Centre for Nuclear and Radiation Safety	Attended
Mr	Mistryugov	Denis	Russian Federation	SEC NRS - Scientific and Engineering Centre for Nuclear and Radiation Safety	Attended
Ms	Fedotova	Nataliya	Russian Federation	SEC NRS - Scientific and Engineering Centre for Nuclear and Radiation Safety	Attended
Mr	Liska	Peter	Slovakia	VUJE - Engineering, Design and Research Co.	Attended
Ms	Mkhosi	Margaret	South Africa	NNR – National Nuclear Regulator	Attended
Mr	Pecherytsia	Oleksandr	Ukraine	SSTC NRS - State Scientific and Technical Center for Nuclear and Radiation Safety	Excused
Mr	Thomas	Brian	United States of America	US NRC – Nuclear Regulatory Commission - Office of Nuclear Regulatory Research	Attended

Appendix 3 – ETSON side event during TSO Conference 2018

12.30 – 14.00	Lunch Break: TSO Café and poster session (<i>90 minutes</i>)
14:00 – 15:00	Continuation of the session 1 – Roles of the TSOs
15.00 – 15.30	Panel discussion
15.30 – 16.00	Coffee break: with TSO Café
16.00 – 18.00	ETSON Side Event
16.00 – 16.25	Presentation of ETSON (ETSON President, B. De Boeck)
16.25 – 17.00	ETSON Award 2018: Science Slam (5 presentations of 7' each)
17.00 – 17.45	Technical presentations by ETSON. Possibilities: <ul style="list-style-type: none">• from the TBRS• from the ERG• from the KMG• from the JSP• from the ENSTTI• support activities to the IAEA TSO Forum
17.45 – 18.00	ETSON Award 2018 Ceremony