



**International Conference on
Challenges Faced by Technical and
Scientific Support Organizations (TSOs)
in Enhancing Nuclear Safety and Security:
Strengthening Cooperation and Improving Capabilities**

Beijing, China

27–31 October 2014

**Organized by the
International Atomic Energy Agency (IAEA)**

**Hosted by the
Government of China**

**through the
Nuclear and Radiation Safety Centre
State Nuclear Security Technology Center, China Atomic Energy Authority
Radiation Monitoring Technical Center of Ministry of Environmental Protection
Suzhou Nuclear Safety Center, Suzhou Nuclear Power Research Institute
Beijing Review Center of Nuclear Safety**

**In cooperation with the
European Technical Safety Organisations Network (ETSON)**

Announcement and Call for Papers

A. Introduction

The International Conference on Challenges Faced by Technical and Scientific Support Organizations (TSOs) in Enhancing Nuclear Safety and Security to be held in Beijing, China, in October 2014 will continue the tradition established by the two preceding conferences on this subject, which were held, respectively, in Tokyo, Japan, in 2010 and in Aix-en-Provence, France, in 2007. Like these earlier conferences, the forthcoming one will play a vital part in the national and international efforts made to ensure the effectiveness of nuclear safety and security regulatory systems and will focus, in particular, on prerequisites and ways for maintaining and strengthening the actions of TSOs in supporting the enhancement of safety and security worldwide.

This conference is being organized by the International Atomic Energy Agency (IAEA) and will be hosted by the Government of China through the Nuclear and Radiation Safety Centre (NRSC).

Because nuclear safety and security are to a great extent scientific in nature, a regulatory body with responsibilities for nuclear facilities and other licensed activities involving radioactive material needs to have permanent access to supporting expertise. The suitable technical and scientific competence can either be provided internally to the regulatory body or through an external entity such as a TSO. The continuous generation of such expertise to be able to provide a competent and timely response to regulatory needs, and the development and maintenance of an appropriate knowledge base and associated tools and services, including training and tutoring services, are the main areas on which the conference will focus.

Since the last conference in 2010 the most challenging nuclear event has been the accident at TEPCO's Fukushima Daiichi nuclear power plant in March 2011. On 22 September 2011, the IAEA General Conference unanimously endorsed the approval of the draft IAEA Action Plan on Nuclear Safety by the Board of Governors. The Action Plan covers all the relevant aspects relating to nuclear safety, emergency preparedness and response, and radiation protection of people and the environment, as well as the relevant international legal framework. The Action Plan sets out a comprehensive programme of work, in 12 major areas, to strengthen nuclear safety worldwide.¹

This conference is being organized in connection with the implementation of the IAEA Action Plan on Nuclear Safety. It will be a major event specifically devoted to TSOs and their role in the light of the Fukushima Daiichi nuclear accident. The implications of the accident for all Member States — not only for those with operating nuclear power plants — and the activities of TSOs in response to the accident and beyond will be addressed.

B. Objectives

The conference aims to further develop the common understanding of the responsibilities, needs, functions and opportunities of TSOs, as well as to strengthen international cooperation and networking

¹ See the IAEA Action Plan on Nuclear Safety dashboard: <http://www-ns.iaea.org/actionplan/>.

among TSOs with a view to enhancing nuclear and radiation safety regulation, including through capacity building in countries embarking on nuclear power programmes for the first time.

The objectives of this conference are to assess and review ways to further improve the effectiveness of TSOs taking into account lessons learned from the Fukushima Daiichi nuclear accident. In particular, the conference will:

- Discuss the role of research and development in enhancing nuclear safety;
- Help participants to understand the impact of the Fukushima Daiichi accident on TSOs and to extract lessons to be learned;
- Highlight the role of TSOs in the implementation of the IAEA Action Plan on Nuclear Safety;
- Provide a forum for discussion of the roles, functions and value of TSOs in enhancing nuclear and radiation safety and nuclear security, including through capacity building in those countries launching or expanding their nuclear power programmes;
- Facilitate the exchange of experience and good practices in planning and implementing cooperative activities for capacity building and in identifying needs for assistance activities from the standpoint of recipient countries;
- Consider appropriate approaches for enhancing cooperation and effective networking among TSOs and beyond, including centres of excellence;
- Provide an overview of the technical and scientific support needed for maintaining a sustainable nuclear safety and security system; and
- Foster continued dialogue on all relevant technical, scientific, organizational and legal aspects at the international level.

C. Topics

The conference sessions will be structured around the following topical issues:

Topical Issue 1: The Role of TSOs in Relation to the Fukushima Daiichi Accident

- National and international experiences
- Revision of national safety requirements
- Response to the IAEA Action Plan on Nuclear Safety by Member States
- Root cause investigations and simulations
- Fukushima research

Topical Issue 2: Interface Issues

- Meeting the challenges of the safety–security interface
- Public communication and awareness
- Interface issues with the regulators
- Interface issues with licensees and industry

Topical Issue 3: Emergency Preparedness and Response

- National role of a TSO during an emergency
- Assessment and prognosis during an emergency (short, medium and long term)
- Emergency worker protection (on- and off-site)
- Training and exercises for emergency conditions (on- and off-site)
- Medical emergency preparedness and response

Topical Issue 4: Maintaining and Strengthening TSO Capabilities

- Human and organizational factors
- Knowledge management
- Training and tutoring
- Research and development activities
- Safety and security cultures

Topical Issue 5: Networking among TSOs and Beyond

- Contribution of IAEA to effective networking
- Progress made since the last conference
- TSOs in a small or a newcomer country
- TSOs' support to strengthen newcomer countries
- Sharing of experiences and practices
- Regional networks

D. Target Audience

The conference is directed at a broad range of experts in the areas of nuclear safety and security, and aims to bring together the world's senior representatives from TSOs, regulatory bodies, industry/operators, research organizations and other relevant stakeholders.

E. Programme Structure

The conference will consist of an opening plenary, five topical sessions with panel discussions and a concluding session.

The **opening plenary** will consist of opening addresses followed by a keynote panel discussion to highlight and prioritize urgent policy and technical challenges in nuclear safety and security to be addressed pursuant to the major objectives of the conference.

The **five topical sessions** will address the topical issues listed in Section C. After the panel discussions in the technical sessions, conclusions and recommendations will be drawn up.

Each session will consist of:

- Opening of the session by the Chairperson;
- Invited papers to cover the topical issues specified (each invited paper will be allotted 20 minutes); and
- A panel discussion.

The **panel discussions** will address the challenges resulting from the keynote panel discussion, as well as from the topical sessions, and will focus on actions needed to enhance the global nuclear safety and security framework. Members of the panel in these discussions will include the invited speakers of the respective session. Authors of contributed papers (see Section F) may be invited onto the panel if it is considered that they can make a significant active contribution to the discussions.

The discussions will bring into focus the essence of the various sessions and will provide strong input for the conference's concluding session.

At the **closing session**, the President of the conference will present session summaries according to the topical issues listed in Section C. From these summaries the President of the conference will develop the summary and conclusions of the conference, including visions, strategies and actions for the future, as well as issues for consideration by governments, regulatory bodies, TSOs and international organizations.

F. Synopses and Contributed Papers

Concise papers on topics falling within the scope of the conference (see Section C) may be submitted as contributions to the conference. All papers, apart from invited papers, must present original work and must not have been published elsewhere.

Authors of accepted papers are expected to present the substance of their papers in the form of **posters, which will be exhibited in a Poster Area**. It is expected that at least one author of each poster will attend the conference in order to be available to discuss the poster.

F.1. Submission of Synopses

Anyone wishing to present a paper at the conference must submit a synopsis **in electronic format** (no paper copies) directly to the IAEA. Instructions on how to upload the synopsis to the conference's web browser-based file submission system (IAEA-INDICO) will be available on the conference web page (see Section O) as of 10 February 2014. The synopses **must** be submitted through this system **between 11 February and 18 April 2014**. No other form of submission will be accepted.

In addition, authors must submit the following two forms to their appropriate governmental authority (see section G) for transmission to the IAEA. These forms must be received by the IAEA no later than **18 April 2014**.

- Participation Form (Form A)
- Form for Submission of a Paper (Form B)

IMPORTANT: The electronically received synopses will be considered by the Programme Committee only if these two forms have been received by the IAEA through the established official channels (see Section G).

F.2. Acceptance of Synopses

Authors will be notified by email by **16 May 2014** as to whether, on the basis of the electronically received synopses, their papers have been accepted for poster presentation.

F.3. Submission of Full Papers

Only authors of accepted synopses are requested to submit a full paper. Full papers must be submitted through the IAEA-INDICO file submission system. Specifications for the layout and electronic format of the full papers and for the preparation of posters will be available on the conference web page.

To permit proper review of papers, the electronic version of the draft contributed paper must be received by the Scientific Secretariat not later than **15 July 2014**.

Final acceptance will occur after a peer review process. Furthermore, the Secretariat reserves the right to exclude papers that do not comply with its quality standards and/or do not apply to one of the topics in Section C above.

The deadline for electronic submission of the final full papers as PDF files is **20 September 2014**. The IAEA will not accept papers submitted after the deadline, and any subsequent submission by email will not be accepted either.

IMPORTANT: The system for electronic submission of papers, IAEA-INDICO, is the sole mechanism for submission of regular papers. Authors are encouraged to submit papers as early as possible.

F.4. Conference Proceedings

The proceedings will be published by the IAEA as soon as possible after the conference. Contributed papers and respective posters will be compiled unedited in electronic format and attached to the proceedings.

G. Participation and Registration

All persons wishing to participate in the conference are requested to **register online in advance** through the conference web page (see Section O). **In addition**, they must send a completed

- Participation Form (Form A)
- Form for Submission of a Paper (Form B), (if applicable)
- Grant Application Form (Form C), (if applicable)

to the competent official authority:

- Ministry of Foreign Affairs or
- National Atomic Energy Authority

or to one of the organizations invited to participate for subsequent transmission to the IAEA (Official.Mail@iaea.org).

A participant will be accepted only if the Participation Form is transmitted through the competent official authority of an IAEA Member State or by an organization invited to participate.

Participants whose official designations have been received by the IAEA will receive further information on the conference at least three months before the start of the conference. This information will also be posted on the conference web page.

H. Expenditures/Grants

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of participants in the conference. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Such assistance may be offered upon specific request to normally one participant per country provided that, in the IAEA's view, the participant on whose behalf assistance is requested will make an important contribution to the conference.

If governments wish to apply for a grant on behalf of one of their participants, they should address specific requests to the IAEA to this effect. Governments should ensure that applications for grants are:

1. Submitted by **18 April 2014**
2. Accompanied by a duly completed and signed Grant Application Form (Form C)
3. Accompanied by a completed Participation Form (Form A)

Applications that do not comply with the above conditions cannot be considered.

Approved grants will be issued in the form of a lump sum payment that usually **covers only part of the cost of attendance**.

I. Distribution of Documents

A preliminary programme of the conference will be made available on the conference web page (see Section O) before the start of the conference. The final programme and the Book of Synopses will be available free of charge upon registration at the conference.

J. Working Language

The working language of the conference will be English.

K. Accommodation

Detailed information on accommodation and other administrative matters will be sent directly to all officially registered participants approximately three months before the conference. This information will also be made available on the conference web page (see Section O).

L. Visas

Participants who are not citizens of China must obtain a Chinese visa before entry into China, with the exception of visa-free entry based on relevant agreements or regulations. Designated participants who require a visa to enter China should submit the necessary application documents to the Chinese Embassy (Consulate/Office) in their home country/city at least four weeks before travelling to China. Designated participants will be required to submit a letter of invitation in support of their visa application.

Chinese Visa Application Service Center website: <http://www.visaforchina.org/>

M. Key Deadlines

Submission of synopses, including Form B, to the IAEA through official channels:	18 April 2014
Submission of grant applications using Form C to the IAEA through official channels:	18 April 2014
Notification of acceptance of synopses	16 May 2014
Submission of draft contributed papers:	15 July 2014
Submission of final contributed paper and poster:	20 September 2014

Persons interested in participating in the conference without presenting a paper must submit, through the established official channels, the **Participation Form (Form A)** to the IAEA (preferably via email to: Official.Mail@iaea.org) as soon as possible.

N. Conference Secretariat

General postal address and contact details of the IAEA Secretariat:

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretaries and correspondence on administrative matters to the IAEA Conference Services Section.

O. Conference Web Page

Please visit the IAEA conference web page regularly for new information regarding this conference:

<http://www-pub.iaea.org/iaeameetings/46083/International-Conference-on-Challenges-Faced-By-Technical-and-Scientific-Support-Organizations-TSOs-in-Enhancing-Nuclear-Safety-and-Security>