



International Experts' Meeting on Severe Accident Management in the Light of the Accident at the Fukushima Daiichi Nuclear Power Plant

Organized in connection with the implementation of the
IAEA Action Plan on Nuclear Safety

**IAEA Headquarters
Vienna, Austria
17–20 March 2014**

Announcement and Call for Papers

A. Background

Against the backdrop of the accident at TEPCO's Fukushima Daiichi nuclear power plant (NPP) in March 2011, the Director General of the International Atomic Energy Agency (IAEA) convened the IAEA Ministerial Conference on Nuclear Safety in June 2011. The Conference adopted a Ministerial Declaration which, inter alia, requested the Director General to prepare a draft "action plan on nuclear safety" covering 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.

On 22 September 2011, the IAEA General Conference unanimously endorsed the IAEA Action Plan on Nuclear Safety. The Action Plan defines a comprehensive programme of work, in 12 major areas, to strengthen nuclear safety worldwide. The action related to communication and information dissemination requests the IAEA Secretariat "to organize international experts' meetings to analyse all

relevant technical aspects and learn the lessons from the Fukushima Daiichi nuclear power station accident”.¹ This meeting is being organized in response to that request.

B. Objectives

The overall objective of this international experts’ meeting (IEM) is to gather and share knowledge and experience gained in the light of the Fukushima Daiichi accident concerning severe accident management, as well as to identify lessons learned and best practices.

The specific objectives of the IEM are to:

- Share improvements made to severe accident management programmes following the Fukushima Daiichi accident;
- Discuss the appropriate regulatory treatment of severe accident management;
- Discuss how to effectively train and equip operators to effectively implement severe accident management guidelines (SAMGs);
- Identify any knowledge gaps related to the implementation of SAMGs and the ways to fill these gaps;
- Discuss linkages between on-site and off-site response plans during a severe nuclear accident; and
- Identify potential priority areas for research and development.

The IEM is expected to be of particular interest to relevant government ministries, nuclear facility managers and nuclear regulators, technical support organizations (TSOs), national nuclear safety authorities, international organizations, and national and international research organizations working in the fields of severe accident management and emergency response.

C. Format

An opening address will be delivered by an IAEA senior management representative.

The IEM will consist of a plenary session and several parallel working sessions.

The plenary session will include keynote presentations by invited international experts. Presentations will be given by experts from the IAEA and other international organizations, as well as from Japan and other IAEA Member States, and will focus on national responses to the Fukushima Daiichi nuclear accident. The plenary session will provide an opportunity to take a retrospective look at what has been achieved since the accident and to summarize the work that remains in the area of severe accident management. There will also be presentations by industry and regulatory representatives, as

¹ The full text of the Action Plan is available from the IAEA Action Plan on Nuclear Safety Dashboard: <http://www-ns.iaea.org/actionplan/>.

well as by TSOs, thus offering a broad global vision on severe accident management in the light of the Fukushima Daiichi accident with a view to stimulating discussion.

The parallel working sessions will feature presentations and discussions by international experts and participants which will focus on the technical and regulatory aspects of severe accident management, including considerations of emergency response. Discussions will be held from the perspective of operating organizations, regulatory bodies, governmental organizations and TSOs.

An annotated programme will be made available on the IEM web page (see Section K below) in due course.

Summaries of all the technical presentations and discussions, including lessons learned, and recommendations for further activities, as well as input for future research and development areas and their priorities, will be prepared by the Chairperson and the co-Chairpersons of the IEM and will be presented at the closing plenary session.

D. Topics

The participants of the IEM will share knowledge and experience, as well as identify lessons learned, in the areas described below. Other ongoing IAEA activities will provide additional inputs for the meeting. The overall themes of the five working sessions and the specific topics to be covered are as follows:

- **Enhancements to severe accident management guidelines**
 - Guidelines for multi-unit accidents, spent fuel pools and low power and shutdown modes
 - Consideration of damaged infrastructure both on-site and off-site to the plant
 - Enhancements to the analytical basis for the development of SAMGs
- **Regulatory issues related to severe accident management**
 - Member State activities regarding the proper regulatory treatment of SAMGs
 - Requirements for staff training, both off-site and on-site exercises and equipment qualification
 - Validation requirements for SAMGs and the periodicity of their review
- **Effective implementation of severe accident management guidelines**
 - Operating organization perspective on training programmes
 - Industry-wide programmes for sharing knowledge on severe accident management
 - Industry programmes for emergency equipment maintenance, testing and qualification and arrangements for access to this equipment in an emergency

- **On-site emergency response planning and interface with severe accident management guidelines**
 - Loss of emergency response equipment and systems
 - Operator fatigue and loss of key personnel
 - Access to vital equipment during a severe accident
- **Off-site emergency response planning for severe accidents in the presence of extreme natural events**
 - Off-site to on-site interface and communication challenges
 - Command and control issues
 - Loss of emergency response equipment and systems and critical off-site infrastructure

Presentations will be given on each topic by internationally recognized experts in their respective areas.

E. Contributed Papers

Concise papers on issues falling within the topics outlined in Section D above may be submitted as contributions to the IEM. All papers, apart from invited papers, must present original work and should not have been published elsewhere.

(a) Submission of synopses

Experts from IAEA Member States who wish to present a paper at the IEM must submit an extended synopsis (in English) of maximum 800 words (i.e. two A4 format pages of single spaced typing, or the equivalent, including any tables or diagrams and a few pertinent references), together with a completed Form for Submission of a Paper (Form B) and Participation Form (Form A), to the competent official authority for subsequent electronic transmission to the IAEA (official.mail@iaea.org). These documents must be received by the IAEA by **15 January 2014**. In addition, the synopsis must be sent electronically to: iem7@iaea.org. The synopsis should give enough information on the content of the proposed paper to enable the Selection Committee to evaluate it. Introductory and general matters should not be included.

Authors are urged to make use of the “Extended Synopsis Template” available on the IEM web page (see Section K).

(b) Acceptance of papers

The synopsis will be considered only if the Participation Form (Form A) and Form for Submission of a Paper (Form B) have been received by the above-mentioned deadline and through the appropriate official channels.

In order to provide ample time for discussion, the number of papers that can be accepted for oral presentation is limited. If the number of relevant and high quality papers submitted for selection exceeds the acceptable number, some of them may be selected for poster presentation instead.

Authors will be informed by **15 February 2014** as to whether their paper has been accepted by the Selection Committee on the basis of the synopsis submitted. At the same time, authors will be advised as to whether their paper has been accepted for oral presentation. Advance copies of presentations/posters have to be submitted by **15 February 2014**.

The IEM Secretariat reserves the right to exclude papers that do not comply with the IAEA's quality standards and/or do not apply to one of the topics listed in Section D.

F. Participation

The IEM is targeted at experts from IAEA Member States with experience in the operation of NPPs, as well as from IAEA Member States that are in the advanced stages of developing new nuclear power programmes. All experts designated by Member States to participate in the meeting are requested to **register online in advance** through the IEM web page (see Section K). In addition, they are required to send a completed Participation Form (Form A) and, if applicable, the Form for Submission of a Paper (Form B) and the Grant Application Form (Form C) to the competent national authority (e.g. the 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 national authority of a Member State of the IAEA or by an organization invited to participate.

Participants whose official designations have been received by the IAEA will receive further information on the IEM approximately two months before the beginning of the meeting. This information will also be posted on the IEM web page.

G. Expenditures

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 meeting. 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 meeting. If governments wish to apply for a grant on behalf of one of their experts, they should address specific requests to the IAEA to this effect. Governments should ensure that applications for grants are submitted by **15 February 2014** and that they are accompanied by a duly completed and signed Grant Application Form (Form C).

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

H. Working Language

The working language of the IEM will be English. All communications, synopses and full papers must be sent to the IAEA in English.

I. Visas

Designated participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria at least four weeks before they travel to Austria. Since Austria is a Schengen State, persons requiring a visa will have to apply for a Schengen visa. In States where Austria has no diplomatic mission, visas can be obtained from the consular authority of a Schengen Partner State representing Austria in the country in question.

J. IEM Secretariat

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K. IEM web page

Please visit the IEM web page regularly for new information regarding the meeting:

<http://www-pub.iaea.org/iaemeetings/46832/IEM7>