

IAEA-CN-215



IAEA

International Atomic Energy Agency

**International Conference on
Human Resource Development for
Nuclear Power Programmes:
Building and Sustaining Capacity**

(Strategies for Education and Training,
Networking and Knowledge Management)

Vienna, Austria

12–16 May 2014

Organized by the

International Atomic Energy Agency (IAEA)

Announcement and Call for Papers

A. Background

Participants in the International Atomic Energy Agency's (IAEA's) first major conference in this area, the International Conference on Human Resource Development for Introducing and Expanding Nuclear Power Programmes that was held in Abu Dhabi, United Arab Emirates, from 14 to 18 March 2010, placed a high value on information exchange and recommended that similar conferences be organized every four to five years. Furthermore, participants also:

- Highlighted the need to broaden nuclear engineering and technology curricula to include 'soft' sciences, such as risk analysis, law, and social sciences;
- Recognized that successful nuclear power programmes can succeed only with strong governmental and societal support; and
- Requested more cooperation — locally, nationally and internationally — in building human resources for a nuclear power programme, overcoming isolationist trends.

Consequently, the IAEA is organizing the International Conference on Human Resource Development for Nuclear Power Programmes: Building and Sustaining Capacity (Strategies for Education and Training, Networking and Knowledge Management) in Vienna, Austria, from 12 to 16 May 2014.

Capacity building is a major first step in the process of ensuring a sustainable supply of suitably qualified human resources that are ready to assume their responsibility for safe, responsible and sustainable use of nuclear technologies. Capacity building in the IAEA is defined as consisting of four essential elements: human resource development (HRD); education and training; knowledge management; and knowledge networks at the national, regional and international level. The IAEA's capacity building programmes cover all the nuclear safety areas — including safe operation, emergency preparedness and response, and regulatory effectiveness — and seek to build upon existing capacity building infrastructures. The importance of capacity building was underlined in the IAEA Action Plan on Nuclear Safety (2011), where one of the actions calls upon Member States with nuclear power programmes, as well as those planning to embark on such a programme, to strengthen, develop, maintain and implement their capacity building programmes. Also, the critical role of human resources and capacity building in developing and maintaining nuclear infrastructure was reiterated by subsequent international experts' meetings related to this topic.

This conference will focus on the global challenges of capacity building, HRD, education and training, nuclear knowledge management and the establishment of knowledge networks, including the themes reflected in the IAEA Action Plan on Nuclear Safety.

B. Objectives

The objectives of the conference are to:

- Review developments in the global status of HRD since the 2010 international conference;
- Emphasize the role of human resources and capacity building programmes at the national and organizational level for achieving safe, secure and sustainable nuclear power programmes;
- Discuss the importance of building competence in nuclear safety and security;
- Provide a forum for information exchange on national, as well as international, policies and practices;
- Share key elements and best practices related to the experience of Member States that are introducing, operating or expanding nuclear power programmes;
- Highlight the practices and issues regarding HRD at the organizational and national level;
- Highlight education and training programmes and practices;
- Emphasize the role of nuclear knowledge management for knowledge transfer and HRD; and
- Elaborate on the role and scope of various knowledge networks.

C. Format and Topics

A preliminary programme will be made available on the conference web page well in advance of the conference. The final programme and the Book of Contributed Papers will be available upon registration at the conference.

The conference will consist of an opening plenary session, five topic-specific sessions, and a closing plenary session.

To meet the conference's objectives, each topical session will have the following format:

- Presentations by invited keynote speakers;
- A set of presentations that supplement specific areas within the topical session and stimulate discussion among conference participants; and
- A set of interactive presentations that present state-of-the-art information and knowledge in the subject area.

Opening Plenary Session

This session will include:

- A review and recap of the 2010 international conference, and in particular of its key outcomes; and

- An overview of the current capacity building goals and strategies, with an emphasis on the importance of human resources and education and training, and reference to various other IAEA activities in the same area, including meetings on human and organizational factors.

Session 1: Human Resources and Capacity Building

This session will cover the following topics:

- Global demand for and supply of human resources for the establishment and management of nuclear power programmes;
- Feedback from relevant surveys carried out by the IAEA and other organizations; and
- Initiatives to enhance knowledge and understanding of the relationship between nuclear safety and security.

Session 2: Building and Sustaining Capacity through Education and Training

This session will cover the following topics:

- Education and training for specific target groups or organizations;
- Education and training — national initiatives, programmes and challenges;
- Innovative tools and techniques for education and training;
- Approaches to the assessment of training needs: lessons learned; and
- Competency framework: application of a uniform model.

Session 3: Preparing the Next Generation of Nuclear Professionals

This session will cover the following topics:

- Outreach through education as a tool for HRD and enhancing public understanding of nuclear power;
- The role of women in the current and future generations of nuclear professionals;
- Attracting young talent into nuclear power programmes; and
- Convergence of education and training activities: using practitioners to educate and educators to train.

Session 4: Knowledge Management

This session will cover the following topics:

- Knowledge management across the life cycle (e.g. knowledge generation, capture, validation,

transfer, and preservation);

- Knowledge management integration into day to day activities;
- Assessment of knowledge management maturity for Member States embarking on or expanding nuclear power programmes;
- Knowledge management implementation issues for different nuclear organizations; and
- Capturing and preserving knowledge, with an emphasis on the needs of newcomer countries.

Session 5: Knowledge Networks

This session will cover the following topics:

- Comparative advantages of nuclear knowledge networks: a way forward;
- International initiatives, programmes and challenges in relation to knowledge networks;
- Experience related to global, regional and topical networks; and
- Methods and tools to build up sustainable knowledge networks.

Closing Plenary Session

The closing session will include short presentations followed by a panel discussion.

To conclude the conference, the Chairperson and the individual session chairs will participate in a panel discussion on key issues related to HRD and capacity building and will present their summaries.

D. Contributed Papers and Interactive Presentations

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

(a) Submission of abstracts

Anyone wishing to present a paper at the conference is requested to submit first an abstract of not more than 300 words. The abstract should give enough information on the contents of the proposed paper to enable the Programme Committee to evaluate it. Authors should state to which of the topics outlined in Section C their contribution relates.

Instructions on how to upload the abstract to the conference's web browser-based file submission system (IAEA-INDICO) are available on the conference web page (see Section M). The abstracts must be submitted through this system by 30 November 2013. No other form of submission will be accepted.

In addition, the abstracts should be submitted together with a completed Participation Form (Form A) and Form for Submission of a Paper (Form B) to the competent official authority (see Section E) for subsequent electronic transmission to the IAEA (official.mail@iaea.org), to be received by the IAEA by **30 November 2013**. Introductory and general matters should not be included.

(b) Acceptance of papers for oral or interactive presentation

The abstract 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 established official channels.

A limited number of abstracts will be selected for submission of a full paper and, consequently, for either oral or interactive presentation.

The oral presentation should be delivered during the sessions of the conference.

An interactive presentation should provide concise information related to the proposed paper and its delivery method can take the form of, but is not limited to, multimedia presentations, demonstrations, simulations and models and videos, together with any handout material the author may wish to share.

Authors will be notified by **31 January 2014** as to whether their abstracts have been accepted and, if so, whether the full papers should be delivered as oral or interactive presentations.

Authors will be asked to provide their full length paper (a maximum of 4 pages) by **28 February 2014**. Guidelines and a template for the preparation and submission of full papers will be made available at the conference web page.

The papers that have been accepted by the Programme Committee will be reproduced in unedited form in the Book of Contributed Papers, which will be distributed to all participants at registration.

The Secretariat reserves the right to exclude papers that do not comply with its quality standards and/or that do not apply to one of the topics outlined in Section C above.

(c) Proceedings

The proceedings of the conference will be published by the IAEA and made available on its website as soon as possible after the conference.

E. Participation

The focus of this conference is on capacity building policies and strategies, as well as on their implementation by the diverse stakeholders associated with nuclear power programmes. Thus, potential attendees and relevant organizations would include:

- Line managers as well as human resource and training managers and specialists from organizations that operate, maintain, administer, manage, regulate or otherwise support nuclear power programmes;
- Government officials and staff involved in nuclear power programmes;
- Regulatory bodies and technical support organizations;

- Management, heads of department and teaching staff of universities, technical schools, educational institutions and national, regional and international training centres with nuclear power related programmes;
- Managers, human resource specialists and trainers from supplier and operator organizations working in the nuclear industry;
- Senior representatives of professional and trade organizations that support the nuclear industry;
- Leaders of national and international organizations that establish policies and programmes in areas related to HRD of importance to the nuclear industry, in particular nuclear power plant vendors;
- Managers and specialists from organizations that communicate with nuclear industry stakeholders, particularly potential future employees in the nuclear industry; and
- Representatives of the next generation of nuclear professionals.

All persons wishing to participate in the conference are requested to **register online in advance** through the conference web page. 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 their competent national authority (e.g. Ministry of Foreign Affairs or National Atomic Energy Authority), or to one of the organizations invited to participate, for subsequent electronic 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 from the IAEA further information approximately three months before the opening of the conference. This information will also be posted on the conference web page (see Section M).

F. Expenditures

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of designated participants in the conference. The IAEA has, however, limited funds at its disposal to help cover the cost of attendance of selected 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 specialists, they should address specific requests to the IAEA to this effect. Governments should ensure that applications for grants are:

1. Submitted by **30 November 2013**;
2. Accompanied by a completed and signed Grant Application Form (Form C); and

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**.

G. Working Language

The working language of the conference will be English. All communications and papers must be sent to the IAEA in English.

H. Conference Venue and Accommodation

The conference will be held at the IAEA's Headquarters in Vienna, Austria. Detailed information on accommodation and other relevant matters will be sent directly to all designated participants approximately three months before the opening of the conference. This information will also be made available on the conference web page as soon as possible.

I. Exhibition

A limited amount of space will be available for commercial vendors' displays/exhibits during the conference. Interested parties should contact the Scientific Secretariat by email (HR-Conf-2014.Contact-Point@iaea.org) before **31 October 2013**.

J. 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.

K. Key Deadlines

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|---|-------------------------|
| Submission of Form for Submission of a Paper (Form B) and abstract: | 30 November 2013 |
| Submission of Grant Application Form (Form C): | 30 November 2013 |
| Notification of acceptance of papers: | 31 January 2014 |
| Submission of accepted full paper (4 pages max.): | 28 February 2014 |

L. Conference Secretariat

General contact details of the Conference Secretariat:

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

M. Conference Web Page

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

<http://www-pub.iaea.org/iaemeetings/46084/International-Conference-on-Human-Resource-Development>