



# **International Conference on Knowledge Management in Nuclear Facilities**

**Vienna, Austria  
18-21 June 2007**

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

*In cooperation with the*  
European Atomic Forum (FORATOM)  
European Commission (EC)  
Japan Atomic Energy Agency (JAEA)  
Nuclear Energy Institute (NEI)  
OECD Nuclear Energy Agency (OECD/NEA)  
World Nuclear Association (WNA)

## **ANNOUNCEMENT AND CALL FOR PAPERS**

## **1. BACKGROUND**

In recent years, new issues have emerged in Member States, including ageing facilities and personnel, nuclear phase-out policies, the expectation of nuclear growth in some regions and the objective to further improve the economic competitiveness of nuclear energy, while maintaining a high level of safety.

Awareness of the importance of nuclear knowledge management in addressing the challenges the industry is facing has grown significantly, both in the industry and in regulatory authorities, and a large number of projects is underway. Knowledge management is becoming an important element of the organizational behaviour of the nuclear industry.

In 2002, the IAEA General Conference adopted a new resolution on Nuclear Knowledge, emphasizing the importance of nuclear knowledge management. The resolution was reiterated in subsequent years. The conference is organized in response to those resolutions, also following the first conference on Nuclear Knowledge Management – Strategies, Information Management and Human Resource Development, organized by the Agency in 2004 in France.

## **2. OBJECTIVES**

The objectives of the conference are:

- to take stock of the recent developments in nuclear knowledge management;
- to demonstrate and discuss the benefits of nuclear knowledge management in promoting excellence in operation and safety of nuclear facilities;
- to promote the use of nuclear knowledge management in the nuclear industry;
- to provide insights and recommendations to the nuclear community.

## **3. AUDIENCE**

The conference addresses decision makers and professionals in the nuclear industry, including in particular all nuclear facilities in all phases of their life cycle, and from regulatory organizations, governments, academia, vendors and other bodies concerned with the topic.

## **4 THEMATIC SCOPE**

The conference will start with a policy forum:

### **Policy Forum: Status, Strategic Perspectives and Key Issues**

Leaders from nuclear industry, governmental organizations, regulators, research institutes and international organizations will give a top level overview of key issues in nuclear knowledge management, summarize the current status and give an outlook into the future.

The conference will then continue with the following topical sessions:

### **Session 1: Knowledge Management for Safety and Regulation**

Knowledge management is expected to produce tangible benefits both for the safety of nuclear installations and for the efficiency of regulatory activities. Presenters will address:

- The link between nuclear knowledge management activities and improved safety culture, safety and regulation, including benefits for reactor safety and radiation protection.
- Knowledge management for sustaining regulatory competence and in the fields of regulatory strategy and work planning.
- Sharing best practices and lessons learned in implementing internationally recognized safety standards and guides, e.g. through expert networks of excellence and peer reviews.

### **Session 2: Knowledge Management for Improved Performance and Economics**

The session will focus on success stories, case studies and best practices in implementing knowledge management in nuclear facilities leading to improved performance and economics. Presenters will address:

- Management involvement, organizational structure, relevant experience, selection and implementation of knowledge management tools, difficulties and lessons learned.
- A life cycle approach to knowledge management in nuclear facilities and the need for seamless information flow during the different phases of installation life.
- Knowledge management challenges in the face of generation change, economic pressures, life extension, modernization programmes or decommissioning.
- Changing relationships between knowledge owners like vendors, suppliers and maintenance organisations, regulators and technical support organizations.
- Knowledge management as a part of integrated management systems in new nuclear projects.

- Integration of knowledge management in business and work processes with the goal of maintaining and developing competence and reducing future needs for knowledge retention activities.
- Collaboration and communication portals and platforms and document management technologies for effectively sharing, storing and retrieving nuclear information.

### **Session 3: Knowledge Management for Innovation**

The session will discuss how knowledge management can help to support innovation, e.g. for a next generation of reactors. Presenters will address:

- The role of R&D in knowledge processes with specific attention to the design of advanced reactor concepts and advanced design tools.
- Innovative concepts and technologies to optimize knowledge flow in reactor design, licensing and operation, including instrumentation and control.
- Supporting decision making by providing the right information to the right people at the right time.
- Intellectual property rights.
- The role of knowledge transfer from the supplier of nuclear facilities to the operator, including the role of the national regulatory bodies.

### **Session 4: Human Resources, Education, Training and Public Information**

Sustaining and developing the nuclear workforce for existing and future nuclear installations and for developing new designs remains an important challenge for the nuclear community and for nuclear operators and designers. Presenters will address:

- Innovative international strategies for human resource development in the nuclear industry.
- Methods for identifying key experts, competency areas, knowledge gaps and critical knowledge losses.
- Capturing knowledge from leaving experts and sharing and transferring relevant knowledge.
- Recent developments in networking and partnerships in nuclear education and training, long distance and e-learning.
- Public understanding and acceptance of nuclear science and technology and the role of educational institutions at all levels.

## 5. PAPERS AND POSTERS

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

### (a) Submission of synopses

Persons who wish to present a paper or poster at the conference must submit an **extended synopsis** (in English) of 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 the completed Form for Submission of a Paper (Form B) and the Participation Form (Form A). The extended synopsis and the forms must be sent to the competent official authority (see Section 13) for transmission to the IAEA in time for them to be received by the IAEA by **22 January 2007**. In addition, the synopsis should be sent electronically to the Scientific Secretariat, Mr. Nixon Pereppadan, email: N.Pereppadan@iaea.org. The synopsis should give enough information on the contents 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 in Word 2000 on the conference web page (see Section 14). The specifications and instructions for preparing the synopsis and how to use the synopsis template are given in the attached "Instructions on How to Prepare the Synopsis and Submit it Electronically". Also attached to this announcement is a sample extended synopsis.

The synopsis will be considered only if the Participation Form A and Paper Submission Form B have been received by the IAEA through the official governmental channels or one of the cooperating organizations.

### (b) Acceptance of papers/posters

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 will be selected for poster presentation.

Authors will be informed by **the end of February 2007** whether their paper has been accepted by the Programme Committee on the basis of the synopsis submitted. At the same time authors will be advised if their paper has been accepted for oral presentation or for presentation as a poster. Furthermore, those authors who are asked to prepare full papers for publication in the proceedings will receive guidelines for the preparation of papers. However, all of the accepted synopses will be reproduced in unedited form in the Book of Extended Synopses which will be distributed at registration.

(c) **Submission of full papers**

Full papers have to be submitted to the Conference Secretariat, Mr. Nixon Pereppadan, email: N.Pereppadan@iaea.org, by **18 May 2007**.

(d) **Proceedings**

Proceedings of the conference will be published after the conference. The IAEA reserves the right to refuse the presentation or publication of any paper that does not meet the expectations raised by the information originally given in the extended synopsis.

## **6. PARTICIPATION**

All persons wishing to participate in the symposium are requested to **register in advance online** via the conference web site:

<http://www-pub.iaea.org/MTCD/Meetings/Announcements.asp?ConfID=153>.

In addition they must send a completed Participation Form (Form A) and, if relevant, the Paper Submission Form (Form B) and the Grant Application Form (Form C) to the competent national authority (see Section 13) for subsequent transmission to the IAEA. 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 designation has been received by the IAEA will receive further information on the Symposium approximately three months prior to the conference. This information will also be posted on the symposium website.

## **7. EXPENDITURES**

No registration fee is charged to participants. As a general rule, the IAEA does not pay for participants' travel and living expenses. However, limited funds are available to help meet the cost of attendance of selected specialists, mainly those from developing countries with low economic resources. Generally not more than one travel grant may be awarded to any one country.

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:

- (a) be submitted by **22 January 2007**;
- (b) be accompanied by a duly completed and signed Grant Application Form (Form C).

Applications that do not comply with the conditions mentioned under (a) and (b) cannot be considered. The grants will be lump sums usually covering **only part of the cost** of attendance.

## **8. EXHIBITION**

A limited amount of space will be available for commercial exhibitors' displays/exhibits during the conference. Interested parties should contact the Scientific Secretariat.

## **9. WORKING LANGUAGE**

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

## **10. DISTRIBUTION OF DOCUMENTS**

A preliminary programme of the conference will be sent to participants before the meeting. The final programme and the Book of Extended Synopses will be distributed at registration.

## **11. ACCOMMODATION**

Detailed information on accommodation and other items will be sent directly to all designated participants approximately three months before the meeting. This information will also be made available on the conference web page as soon as possible.

## **12. VISA**

Designated participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria as soon as possible. Please note that Austria is a Schengen State and therefore persons who require a visa will have to apply for a 'Schengen visa' at least 14 days before entry into Austria. 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. At present the Schengen States are: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain and Sweden.

## **13. CHANNELS OF COMMUNICATION**

The Participation Form (Form A), the Form for Submission of a Paper (Form B), together with a copy of each synopsis, and, if applicable, the Grant Application Form (Form C), should be sent to the competent official authority (Ministry of Foreign Affairs or national atomic energy authority) or to one of the cooperating organizations for transmission to the IAEA.

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

#### **14. CONFERENCE WEB PAGE**

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

<http://www-pub.iaea.org/MTCD/Meetings/Announcements.asp?ConfID=153>

Information about the conference will also be made available through the Agency's knowledge management web site:

[www.iaea.org/inisnkm](http://www.iaea.org/inisnkm)

#### **15. CONFERENCE SECRETARIAT**

##### **Scientific Secretariat**

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## **Administration and Organization**

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