

Workshop Summary

The Workshop on “Managing Nuclear Knowledge” was organized in co-operation with the Abdus Salam International Centre for Theoretical Physics (ICTP) and held in Trieste, Italy from 8 November to 12 November 2004. There were 45 participants from 23 countries, including delegates from academia, operating organizations, technical support and research centers and medical facilities.

The objective of the Workshop was to give participants an overview and basic understanding of the tools, mechanisms and challenges of Nuclear Knowledge Management and at the same time to focus on nuclear aspects, with the aim to make results and insights directly applicable in a workplace in the nuclear sector.

The following issues have been addressed during the Workshop as the issues forming the framework for activities in nuclear knowledge management:

- Managing and Preserving Nuclear Knowledge
- Managing Nuclear Information
- Managing Nuclear Knowledge in the Nuclear Industry
- Human Resources and Training
- Networking Education and Training
- Nuclear Communications

The issues outlined in the workshop programme including the Agency strategies, approaches and current activities on the subject were discussed and the participants presented their views, experience and the current difficulties being faced in the areas of Nuclear Knowledge Management.

The experts and the IAEA staff made presentations ranging from the fundamentals of Nuclear Knowledge Management to practical experience in applying Nuclear Knowledge Management in their organizations. A majority of the material presented at the workshop was placed on a CD-ROM, which was distributed among the participants; also the IAEA technical reports relevant to the workshop topic available electronically were placed on this CD-ROM as well.

The list of main presentations made during the workshop is given below:

1. Managing and Preserving Nuclear Knowledge

- Managing Nuclear Knowledge, Claudio TUNIZ (ICTP, Italy)
- What is Knowledge Management?, T. HEIGL (GRS, Germany)
- Knowledge Preservation for Nuclear Power Plants, Yanko YANEV (IAEA)
- Nuclear Knowledge Management in Belgium, Peter DE REGGE (SCKCEN, Belgium)

2. Managing Nuclear Information

- Knowledge management Tools in the IAEA, W. MANDL (IAEA)
- Structuring and Organizing Nuclear Information, A. NEVYJEL (IAEA)
- The International Nuclear Information System, T. ATIEH (IAEA)
- Preservation of Nuclear Information and Records, A. TOLSTENKOV (IAEA)
- Searching and Accessing Information, H. BACHMANN (Convera AG, Switzerland)

3. Managing Nuclear Knowledge in the Nuclear Industry

- Preserving and Transferring Knowledge in the Nuclear Industry, A. KAZENNOV (IAEA)
- Managing Nuclear Safety Knowledge, Luis LEDERMAN (IAEA)
- Applying Knowledge Management in a Nuclear Organization: GRS Company Profile and Nuclear Knowledge Management: The GRS Realization T. HEIGL and P. PUHR-WESTERHEIDE (GRS, Germany)
- Knowledge Preservation of Atucha Type Reactor: Case of Study: KP-Data Management and Technical Information in NPP, Claudia L. VETERE (CNEA, Argentina)
- Knowledge Management Perspective at BARC, Rajesh K. JAIN (BARC, India)

4. Human Recourses and Training

- IAEA's Knowledge Management in non-Power Nuclear Applications: Present State and Future, Part 1: P. DANESI, Part 2: P. ANDREO (IAEA)
- Human Resources and Training in Nuclear Sector, A. KOSSILOV (IAEA)
- Multimedia course on Radiation Protection, Reza AFZALZADEH (AEOI, Iran)
- Lessons Learned from Education in Nuclear Engineering at Hanoi University of Technology, Phung Van DUAN (Hanoi University of Technology, Vietnam)

5. Networking Education and Training

- Networking Education and Training, Peter GOWIN (Germany)
- The European Nuclear Education Network Association. Peter DE REGGE (SCKCEN, Belgium)
- The Asian Network for Education in Nuclear Technology, Rohini HEWAMANNA (AEA, Sri Lanka) and Phung Van DUAN (Hanoi University of Technology, Vietnam)

6. Nuclear Communications

- Nuclear Communication Challenges, David KINLEY (IAEA)

The Workshop on Managing Nuclear Knowledge was the first of this kind in the Agency and was organized in close connection with the International Conference on Nuclear Knowledge Management - Strategies, Information Management and Human Resource Development (7-10 September 2004 Saclay, France). The workshop served as a tool to implement the Conference recommendation on dissemination of the best practice in the subject area based on the IAEA strategy in effective nuclear knowledge management and promote activities supporting the current national needs.

The end-of workshop questionnaire and the evaluation session showed that the most of the participants confirmed that the workshop was useful to them and that they would try and implement some of the ideas discussed at the workshop. There is general recognition among the participants that the use of nuclear technology relies on the accumulation of knowledge. This includes technical information in the form of scientific research, engineering analysis, design documentation, operational data, maintenance records, regulatory reviews and other documents and data. It also includes knowledge embodied in people – scientists, engineers and technicians that are all the human resources engaged in the profession.

Participants generally expressed satisfaction with the quality of presentations. The majority of participants (50% - excellent and 46% - good) indicated that the invited experts demonstrated a thorough knowledge and understanding of their subject providing in their presentations theoretical knowledge concepts related to real life situation.

The wider objective of the workshop to create a personal network between professionals working in NKM area from different organizations to enable continuing exchange of experience on Nuclear Knowledge Management between themselves and the Agency was also realized.