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Nuclear Information and Knowledge

News from the INIS and Nuclear Knowledge Management Section
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INIS and Nuclear Knowledge Management Section

IAEA Department of Nuclear Energy

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Knowledge Management in Nuclear Facilities

IAEA International Conference, 18 to 21 June 2007

The International Conference on Knowledge Management in Nuclear Facilities will be held in June 2007 at the IAEA's headquarters in Vienna. Its objectives are to:

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

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 those in regulatory organizations, governments, academia, vendors and other bodies concerned with the topic.

The conference is organized by the IAEA Department of Nuclear Energy, in close collaboration with the Department of Nuclear Safety and Security, highlighting the importance of nuclear knowledge management in both contexts.

Several national and international organizations are co-operating in this event: the European Atomic Forum (FORATOM), the European Commission (EC), the Japan Atomic Energy Agency (JAEA), the Nuclear Energy Institute (NEI), the OECD Nuclear Energy Agency (OECD/NEA), the World Nuclear Association (WNA) and the World Nuclear University (WNU).

A Policy Forum on status, strategic perspectives and key issues will be followed by plenary sessions on the benefits of nuclear knowledge management for safety, economics, innovation, and human resources. Expectations and views of the next generation of experts in the nuclear field will be the topic of a special "young generation" panel.

This will be the second major international conference on the topic, following the first conference on *"Nuclear Knowledge Management – Strategies, Information Management and Human Resource Development"*, also convened by the IAEA and held in France in 2004 (see p. 18).

Background. In recent years, new issues have emerged in Member States including ageing facilities and personnel, nuclear phase-out policies, the expectations 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 are underway. Knowledge management is becoming an important element of the organizational behaviour of the nuclear industry.

The Scientific Secretaries of the conference are Mr. P. J. Gowin (**P.Gowin@iaea.org**) and Mr. Y. Yanev (**Y.Yanev@iaea.org**), Nuclear Knowledge Management Unit, IAEA Department of Nuclear Energy, and Mr. C. Viktorsson (**C.Viktorsson@iaea.org**), Division of Nuclear Installation Safety, IAEA Department of Nuclear Safety and Security.

For more information, visit the Conference web site at: **www.iaea.org/inisnkm/nkm/conference2007.html**

Contact: Peter J. Gowin; **P.Gowin@iaea.org**

To Our Readers

Welcome to the first issue in 2007 of the *Nuclear Information and Knowledge* Newsletter. This issue particularly highlights our work on nuclear knowledge management (NKM).

The *International Conference on Knowledge Management in Nuclear Facilities* is rapidly approaching. I invite you to think about participating in this major event, if you have not already done so.

The work of the NKM Unit has been strengthened by a resolution on NKM passed during the 50th IAEA General Conference (GC) in September 2006. I believe that it gives us the mandate to direct even more of our energies towards the needs of developing countries in this important field.

This newsletter also reports about achievements and future challenges for the International Nuclear Information System (INIS). The development of our programme has been assisted by input received during the 33rd INIS Liaison Officers Meeting (ILOM) in late 2006. It is also gratifying to note that there was such a positive response to the "new style" ILOM, which involved INIS Liaison Officers as Session Chairs, featured many presentations on INIS-related activities in Member States, and included an exhibition that was considered informative and useful.

I am delighted that we are able to share with you feedback from some of our stakeholders within the Member States and international organizations, which they provided during the 50th GC and the ILOM.

Looking further into 2007, I would expect to see progress being made towards delivering the Five-Point Plan for INIS that I outlined during the ILOM (see p. 11). By this time next year, I hope to see tangible benefits emerging from the closer cooperation that we are promoting between the Section, Member States and international organizations.

I am pleased that we have two guest contributions in this issue from close collaborators of our Section. Anne Scanlon reports about Nucleus, the IAEA nuclear information and knowledge portal (p.9); while Ruth Hahn-Weinert introduces the International Nuclear Library Network (p.16).

As always, I appreciate receiving your feedback on the content of this newsletter.

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50th IAEA General Conference Reiterates Resolution on Nuclear Knowledge

The IAEA's General Conference reiterated a resolution on *Nuclear Knowledge* (GC(50)/RES/13) at its 50th session in September 2006. The General Conference specifically noted *"the important role which the Agency plays in assisting Member States in their preservation and enhancement of nuclear knowledge and in facilitating international collaboration"* and urged *"the Secretariat to continue to strengthen, subject to the availability of resources, its current and planned efforts in this area"*.

On the level of specific activities, the General Conference highlighted *inter alia* four areas:

[...] networking of nuclear education and training, including activities of the World Nuclear University and the Asian Network for Education in Nuclear Technology;

[...] guidance and methodologies for planning, designing and implementing nuclear knowledge management programmes [...], and to disseminate that guidance through expert missions, publications and workshops in Member States;

[...] enhance and make available to Member States nuclear information and knowledge resources on the peaceful use of nuclear energy, including the International Nuclear Information System (INIS) and the IAEA Library; and

[...] tools and methods to capture, share and preserve nuclear knowledge, considering also the increasing importance of information and knowledge available through the Internet.

In addition, the General Conference explicitly emphasized *"the importance of the planned International Conference on Knowledge Management in Nuclear Facilities in 2007 and* [invited] *Member States to contribute to the conference"* (see p. 1).

The resolution continues the strong support from the General Conference, following the first resolution at the 2002 General Conference. The resolution was then reiterated on a (bi)annual basis.

The recommendations were translated into a series of new activities of the IAEA, now implemented in a dedicated Sub-Programme on Nuclear Knowledge Management (C.3 in the IAEA's Programme and Budget 2006–2007).

INIS and NKM at the 50th General Conference

Briefing

A briefing on nuclear information and knowledge was held during the 50th General Conference, including presentations on Nuclear Knowledge Management (NKM), the International Nuclear Information System (INIS) and the International Nuclear Library Network (INLN).

The briefing focused on partnerships and networks as a means for innovation and knowledge management, and how they can overcome functional silos and help develop a learning organization (see also p. 16).

From left: Mr. R. Workman, Mr. A. Tolstenkov, INIS and NKM Section, and Ms. R. Hahn-Weinert, IAEA Library, welcoming delegates at the Briefing Session

Exhibition

The INIS and Nuclear Knowledge Management Section was represented at an exhibition during the 50th IAEA General Conference (18–21 September 2006), as part of the IAEA Department of Nuclear Energy's participation.

"I consider the activity of the department as very important for present-day exchange of information and conserving the important knowledge for future generations."

Prof. Viatcheslav Kushinov
Director General, Joint Institute for Power and Nuclear Research – SOSNY
National Academy of Sciences of Belarus

The Section's exhibit featured a new display, a range of print and electronic information on current activities, and demonstrations of the new INIS Online Database to interested visitors. About 250 delegates from 59 Member States and six international organizations visited the Section's information stand in the course of the week. A special activity during the exhibition was an informal survey among the visitors, and many agreed to provide comments on the Section's activities

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"This is a most ingenious way of getting everyone involved to create a safe future for us and generations to come."

Dr. J.N. Micheni, Director
Kenyatta National Hospital
Kenya

"Botswana would like to take full advantage of the INIS services and link its research institutes to the wealth of information provided."

Stephen D. Williams, Deputy Director
Department of Research Science and Technology
Botswana

"INIS is the main support for the implementation of knowledge management."

Dr. M. Derdour
Commissariat à l'Énergie Atomique
Algeria

"Appreciate the information provided as an eye-opener to the functions and applications in nuclear issues."

Ms. Rhoda T. Ngarande
Embassy and Permanent Mission
Zimbabwe

News from Nuclear Knowledge Management

The IAEA has already published several documents on nuclear knowledge management (see **http://www.iaea.org/inisnkm/nkm/nkmPublications.html).** Several new publications are now in preparation in response to the growing awareness in Member States of the importance of managing nuclear knowledge. Starting in 2006, the Section has been preparing three new publications in cooperation with international experts from Member States.

Nuclear Knowledge Management – Basic Principles and Objectives

Experts from nine Member States and one international organization met at the IAEA on 6–8 November 2006 for a *Technical Meeting on Basic Requirements for Nuclear Knowledge Management*. The objective of the meeting was to identify the highest-level issues and principles for nuclear knowledge management in government, academia and industry, and propose the content, outline and potential contributors to a guidance document on *"Nuclear Knowledge Management – Basic Principles and Objectives"*.

This publication will be at the top level of a generic-document hierarchy within the *IAEA Nuclear Energy Series*. In conjunction with this publication, guides and reports provide detailed information and guidance for activities relating to knowledge management in organizations and facilities for nuclear power, the nuclear fuel cycle and radioactive waste management, and decommissioning of nuclear facilities. The publication will explain nuclear knowledge as a resource, its unique character, and the need for, and benefits of, nuclear knowledge management. The target audiences for this document are decision makers in Member States' governments, industry, R&D centres and academia concerned with nuclear issues.

Nuclear Knowledge Management – Basic Principles and Objectives is foreseen to be published in late 2007.

Contact: Peter J. Gowin; **P.Gowin@iaea.org**

Managing Knowledge for Nuclear Technology Development

Challenges and issues related to managing nuclear knowledge in the non-power generating nuclear sector, including government, industry and academic institutions in IAEA Member States, were discussed by 23 experts from 13 countries at the IAEA on 9–13 October 2006. The aim of the *Technical Meeting to Develop Guidance Documents for Nuclear Knowledge Management in Government, Industry and Academia* was to plan and outline a new guidance document on *"Managing Knowledge for Nuclear Technology Development"* to be published in the IAEA Nuclear Energy Series.

International experts met for an IAEA Technical Meeting to Develop Guidance Documents for Nuclear Knowledge Management in Government, Industry and Academia at the IAEA Headquarters in October 2006

The guidance document will be a cooperative effort of the meeting participants and the IAEA's NKM experts. Key objectives of the new document include:

- **Awareness:** Increasing the awareness of responsible individuals in these enterprises
- **Strategy:** Identifying the important elements needed for an effective NKM system
- **Tactics:** Providing guidance concerning methods for NKM implementation
- **Examples:** Sharing relevant lessons learned regarding NKM, including best practices from organizations outside the nuclear field.

The new document is intended for managers and professionals in non-power generating enterprises of the nuclear sector, who are responsible for developing and maintaining nuclear knowledge and worker competencies within their organizations.

Managing Knowledge for Nuclear Technology Development is foreseen to be published in early 2008.

Contact: Andrey Kosilov; **A.Kossilov@iaea.org**

Knowledge Management for Radioactive Waste Management

A new publication, developed in cooperation with the IAEA's Waste Technology Section, will address *Knowledge Management for Radioactive Waste Management* and give guidance to decision makers from governments, facility operators and regulators, and to professionals in planning, implementing and sustaining knowledge management programmes for radioactive waste management.

International experts met at the IAEA from 30 October–1 November 2006 to prepare a publication, which will address all aspects of managing tacit and explicit knowledge that exists in document form, and as skills and experiences of human beings. This includes information management, human resources, competence management, stakeholder involvement, management systems and approaches, and knowledge analysis and integration. It will be applicable to all facilities and organizations in radioactive waste management, including planning organizations, implementers, operators and regulators, and for waste treatment and storage.

Knowledge Management for Radioactive Waste Management will be published in 2008.

Contact: Peter J. Gowin; **P.Gowin@iaea.org**

Coordinated Research Project on Nuclear Knowledge Preservation

A Coordinated Research Project (CRP) on ***Comparative Analysis of Methods and Tools for Nuclear Knowledge Preservation*** supports the preservation of nuclear knowledge in Member States and the IAEA by selecting and implementing appropriate cost-effective technological solutions. The CRP will also take advantage of the expertise of the Section's INIS Unit, in terms of techniques, practical methods, approaches and software tools available, thus emphasizing synergies between nuclear knowledge management and nuclear information.

At the first Meeting of the CRP in November 2006, experts from national authorities and research institutions in Bulgaria, Canada, Jordan, Romania, the Russian Federation, the Philippines, and the EC's Joint Research Centre presented national activities and discussed new methods of preserving nuclear knowledge A web portal will facilitate cooperation among team members of the CRP.

Participants in the 1st Research Coordination Meeting on Comparative Analysis of Methods and Tools for Nuclear Knowledge Preservation, 13–17 November 2006, IAEA

The CRP Team, including groups of researchers from the above countries, will identify alternative knowledge preservation methods and tools to capture, process, organize, store, retrieve, exchange and communicate knowledge. Various types of information and media will be considered, including numerical, graphical and textual data, databases, computer programmes, videos and multimedia, as well as tacit knowledge. Based on the results of the comparative analysis, recommendations, solutions and benchmarks for nuclear knowledge preservation will be developed. Alternative solutions will also be specified, taking into account any technology gaps among Member States.

Contact: Andrey Kosilov; **A.Kossilov@iaea.org**

Fast Reactor Knowledge Portal

Fast reactors may become an important reactor type in the future. Knowledge accumulated in the past is expected to be of crucial importance for their future development. In response to needs expressed by the Member States, the Section is implementing an initiative on fast reactor data retrieval and knowledge preservation (FRKP), together with the IAEA's Nuclear Power Technology Development Section.

Representatives from governmental, national and international organizations, research centres, universities and industry met at the IAEA on 28 November–1 December 2006 to review national activities and develop the requirements and specifications for the online ***Fast Reactor***

Knowledge Portal. The portal will then be implemented and maintained by the IAEA.

A document entitled ***Fast Reactor Knowledge Preservation System: Technical Requirements and Project Proposal*** is in print. It contains the taxonomy of the Fast Reactor Knowledge Preservation System (FRKPS).

IAEA Fast Reactor Data Retrieval and Knowledge Preservation Initiative

The initiative provides an overall framework for the various programmes being implemented in the Member States.

The main goals are to:

- halt the ongoing destruction of information;
- retrieve and assess data to determine which information and data should be retained;
- consider how information from different programmes could be linked, and
- determine which standards should exist and be employed in software and hardware, to permit knowledge preservation over the next 30 to 40 years.

Contact: Andrey Kosilov; **A.Kossilov@iaea.org**

Technical Cooperation Projects on Nuclear Knowledge Management

2006 was an important year for the Section's NKM activities with regard to collaboration with the IAEA Department of Technical Cooperation (TC). Several TC projects were approved for a duration of four years (2007–2010).

Strengthening Capabilities for Nuclear Knowledge Preservation

This regional project for the TC Region Europe assists IAEA Member States in establishing policies and strategies to preserve and enhance knowledge, competence and expertise. It provides practical guidance for implementing NKM in governmental organizations, industry and academia in the European region. In particular, the project aims at:

- enhancing the sustainable development of nuclear power and non-power nuclear applications by implementing NKM;
- managing national nuclear knowledge and expertise, including nuclear education, also taking into account national goals and priorities; and
- preserving and enhancing information and knowledge resources on the peaceful uses of nuclear energy.

The activities to be undertaken between 2007 and 2010 will include: convening a regional forum for exchanging experiences and information on the implementation of NKM and nuclear education; assisting in establishing or enhancing NKM systems in nuclear power plants and other nuclear institutions; elaborating recommendations to improve curricula in power and non-power nuclear applications; devising nuclear knowledge maps in areas of common interest and inventories of existing national information resources; and providing practical guidance on risk management of knowledge loss in nuclear industry organizations.

Contact: Andrey Kosilov; **A.Kossilov@iaea.org**

Supporting Web-Based Nuclear Education and Training through Regional Networking

This regional TC project sponsors the Asian Network for Education and Nuclear Technology (ANENT). It promotes web-based education and training programmes by consolidating and standardizing materials and curricula in nuclear sciences and applications.

The ANENT web portal will play a focal role in offering new types of online learning opportunities to nuclear researchers and engineers in the region (see p. 8).

Contact: Keiko Hanamitsu; **k.hanamitsu@iaea.org**

Nuclear Knowledge Management and Preservation in Kazakhstan

In cooperation with the Kazakhstan Atomic Energy Committee and other governmental, nuclear research and industrial organizations, this national TC project will support capacity building and developing infrastructure in Kazakhstan through expert advice and a forum for the transfer of expertise.

It thus assists the Government of Kazakhstan in preserving knowledge in critical areas, enhancing capacity, and further developing expertise and knowledge in nuclear science and technology. By 2010, national organizations in Kazakhstan should be able to apply modern knowledge management principles, methods and tools to improve their performance.

Contact: Andrey Kosilov; **A.Kossilov@iaea.org**

Regional Workshop on Managing Nuclear Knowledge (Project RER/0/027)

organized by the IAEA in cooperation with the Government of Germany through the Forschungszentrum Karlsruhe and the German Alliance for Competence in Nuclear Technology

21–25 May 2007, Karlsruhe, Germany

Networking in Nuclear Education and Training

School of Nuclear Knowledge Management

In cooperation with the Abdus Salam International Centre for Theoretical Physics (ICTP) and the World Nuclear University (WNU), the IAEA organized a School of Nuclear Knowledge Management at ICTP in Trieste from 18–22 September 2006.

Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy (Photo Credit: Massimo Silvano)

The training event provided 36 nuclear experts from 23 Member States with an overview and basic understanding of the tools, mechanisms and challenges of NKM. The School also offered opportunities for exchanging experiences and sharing information on implementing NKM, including lessons learned from knowledge management projects, examples of good practices, and national experiences in NKM programmes in academia, industry, the governmental sector and technical support organizations. Five sessions addressed the issues forming the framework for activities in nuclear knowledge management:

- Policies and Strategies in Nuclear Knowledge Management
- Human Resources Planning and Knowledge Transfer
- Practical Examples of Knowledge Management in Member States
- Managing Nuclear Information Resources
- Networking for Education and Training.

Nuclear experts from IAEA Member States participated in the 2006 School for Nuclear Knowledge Management at ICTP, Trieste

Participants' Feedback: An evaluation of the 2006 School for Nuclear Knowledge Management indicated that this training event met participants' expectations. Participants found the School useful in terms of applying what they had learned in their own organizations, and expressed satisfaction with the technical content and quality of presentations. The facilities and support services provided by the hosts at ICTP were excellent. Special thanks go to the local organizer, **Mr. C. Tuniz**, and the ICTP administrative staff, who fully deserved the appreciation expressed by all participants and lecturers.

"The School in Trieste provided me with comprehensive knowledge, from a very basic understanding to practical examples how knowledge management has been and should be applied in the nuclear industry. I am sure other participants felt the same way."

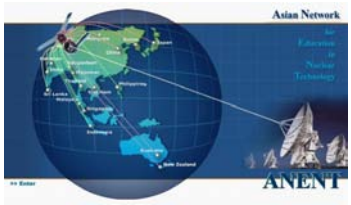
Nyoman Iswarayoga
Programme Manager
Yayasan Pelangi Indonesia

"I have returned to Vietnam. My boss highly appreciated the content of the School. Now we are reviewing all our materials. We will try our best to apply what I have been taught. I think that this workshop should be continued and open widely for participants from around the world."

Nguyen Minh Hoang
Vietnam Agency for Radiation
Nuclear Safety and Control (VARANSAC)

2007 School of Nuclear Knowledge Management
ICTP, Trieste, Italy
24–28 September 2007
A Cooperation of the IAEA, ICTP and WNU
Contact: A.Kossilov@iaea.org
Visit: http://cdsagenda5.ictp.trieste.it/full_display.php?ida=a06217

What's New in ANENT?



www.anent-iaea.org

ANENT, the Asian Network for Education in Nuclear Technology, has entered a new phase in 2007. The network is now sponsored by an IAEA Regional Technical Cooperation (TC) Project on ***Supporting Web-Based Nuclear Education and Training through Regional Networking*** which will run from 2007 to 2010. The project will promote the development of the web-based education and training programmes by consolidating and standardizing materials and curricula in nuclear sciences and applications. The ANENT web-portal is expected to play a focal role in offering new type of learning opportunities through the internet to qualified nuclear researchers and engineers in the region.

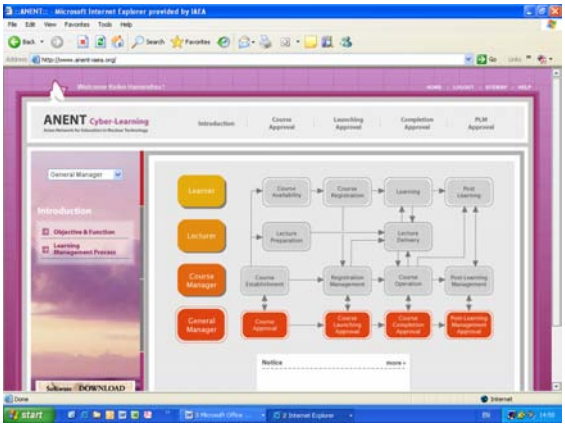
3rd Coordination Meeting

At the 3rd Coordination Committee Meeting, held on 4–8 September 2006 in Daejeon, Republic of Korea, national coordinators of ANENT from 11 Member States reached a consensus on how to coordinate and implement further activities for web-based education and training within the framework of this new TC Project. The members agreed to develop new standardized curricula and materials for a cyber platform and distance learning programme, and organize training courses in the Asian region to disseminate new types of education and training courses. Closer interactions, and taking advantage of synergies between existing networks and ANENT, were also proposed.

Opening Session of the ANENT Meeting at the Korea Atomic Energy Research Institute (KAERI) in Daejeon, September 2006.
At head table: Mr. S. K. Yang, Korean Ministry of Science and Technology (left), Mr. Y. Yanev, Head, NKM Unit (right)

Cyber Learning

Cyber learning includes online education and training systems using advanced IT. It enables a large number of people to receive high-quality universal education regardless of time and place. ANENT has created the prototype cyber platform on its web site prior to the start of the TC project.



ANENT Cyber-Learning Platform

2007 Work Plan

The work plan for 2007 incorporates several activities such as a National Coordinators Meeting, a Regional Training Course, a Task Force, Expert Missions and Fellowships. In February 2007, the TC project started with an expert mission to the IAEA to develop guidance for listing the available materials. The experts investigated the training and educational activities and associated available materials in the IAEA, and developed guidance and suggestions based on their survey for further listing and collection of the materials.

About ANENT

ANENT was established in February 2004 as a regional partnership to address the need of sustainable education and training in nuclear knowledge management in the Asian region. For the past three years, ANENT members have worked on various tasks such as developing an ANENT web portal (**www.anent-iaea.org**) and a proposal for reference curricula on nuclear engineering.

The Asian network currently includes 28 member institutions in 12 countries in the Asia and Pacific region, including Australia, China, India, Indonesia, Malaysia, Mongolia, Pakistan, the Philippines Republic of Korea, Sri Lanka, Thailand, and Vietnam, and six collaborating members, e.g. the European Nuclear Education Network Association (ENEN), the World Nuclear University (WNU), and MEPhI, the Moscow Engineering Physics Institute (State University), Russian Federation.

Contact: Keiko Hanamitsu; **k.hanamitsu@iaea.org**

More About Nucleus

http://nucleus.iaea.org

You may recall reading about Nucleus in the previous issue of this Newsletter (No. 2, September 2006). ***Anne Scanlon****, the Project Manager of Nucleus, gives an update on recent and upcoming developments on the IAEA nuclear information and knowledge portal.*

Nucleus is the one common access point to the IAEA's multitude of scientific and technical information resources. These resources include web sites, databases and documents; for example, the INIS Database and the Power Reactor Information System (PRIS) web site. The first version has been available on the Internet for a year now, and work continues to improve on this initial version, based on the feedback generated to date. One of the more recent developments has been the addition of single sign-on (SSO). This function enables users to authenticate (login) once and gain access to multiple restricted information resources to which they have been given rights.

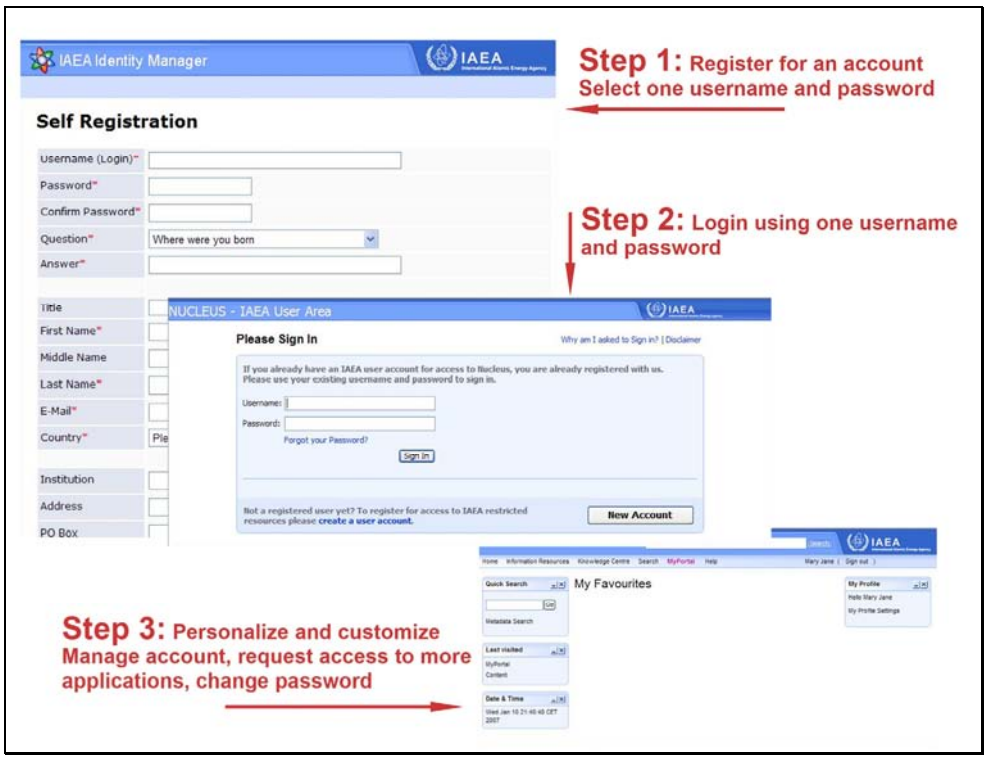
Nucleus is not restricted but users are required to log in to take advantage of the personalization features. First they create their account on the registration page of Nucleus; this requires minimal information. Then users can log in to the personalization area of Nucleus and request access to restricted resources and/or customize Nucleus to their specific needs. Logged in users can switch to any of the applications they have rights to without further prompting. Of course they have only one user name and password to remember.

At this stage only a few of the IAEA applications have been converted to use the SSO solution. We will continue to add applications to SSO, so that eventually all applications will be part of SSO. Users will then be able to use one username and password to access the whole range of applications.

Other Nucleus developments include the addition of more resources to the catalogue. Some existing resources are going through a make-over to integrate them more tightly into the Nucleus framework. As the number of resources grows, it is becoming more apparent that smarter browsing of the catalogue is required. Working closely with the INIS and Nuclear Knowledge Management Section, a tool to enable guided navigation of the resources is under construction. Bringing improvements to the existing search is another task currently underway.

So be sure to check back regularly on **http://nucleus.iaea.org** to see what new developments and features have been added.

Contact: Anne Scanlon**; A.Scanlon@iaea.org**



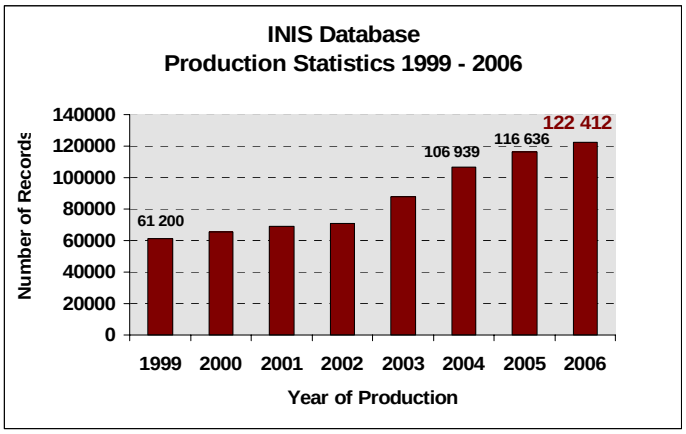
Personalisation Feature of Nucleus

News from INIS

INIS 2006: Facts and Figures

INIS Database

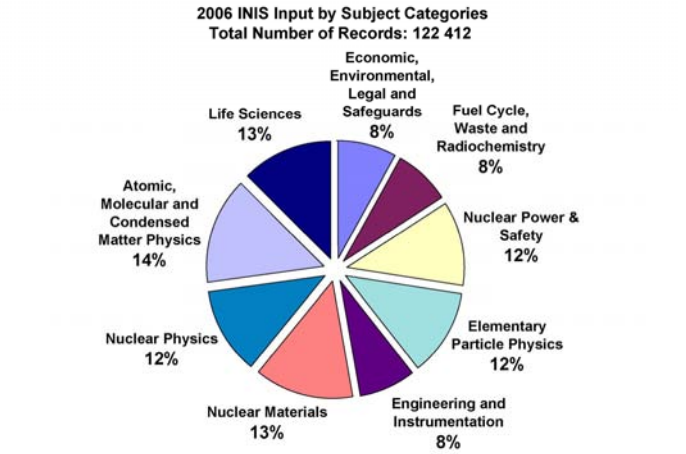
The production year 2006 was successfully completed with the last update (Volume 37/50) of the INIS Bibliographic Database in December. In 2006, **122 412** records were added, including **27 921** records of non-conventional literature (NCL). This represents a 100 percent increase compared with 1999 — an impressive result, which has been achieved in cooperation with Member States and by the introduction of Computer-Assisted Indexing (CAI). At the end of 2006, the total number of records in the INIS Database was **2 778 427.**



Annual input to the INIS Database doubled between 1999 and 2006

INIS Online Database

A new version of the INIS Online Database was released, now offering a multilingual interface including English, German, Japanese, Portuguese and Spanish, and currently direct online access to **189 611** full-text documents (PDFs), full-text search and other new or enhanced features.



Percentage of records added to individual subject categories in the INIS Database in 2006

Four New INIS Members

Three Member States and one international organization joined the International Nuclear Information System (INIS) in 2006**:** the Central African Republic, Luxembourg, Namibia, and the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC). By the end of 2006, INIS had 140 members.

Free Access for Universities

By the end of 2006, students and faculty from 323 universities and academic institutions in 60 Member States benefited from cost-free access to the INIS Online Database and its unique full-text collection.

Read more about this service in the **IAEA Bulletin 48/1** at **http://www.iaea.org/Publications/Magazines/Bulletin/Bull481/htmls/inis.htm**.

In addition, 44 free registrations were issued for temporary access during nuclear-related conferences and training events.

Digitization

More than 1 500 000 pages were digitized in 2006, in close cooperation with the French and Russian INIS Centres and the IAEA Depatment of Nuclear Sciences and Applications. Digitization of the French historical CEA-R microfiche collection was also completed.

Multilingual Thesaurus

The first electronic version of the INIS Multilingual Thesaurus (Arabic—Chinese—English—French—German—Russian—Spanish) was developed in cooperation with the national INIS Centres of the Syrian Arab Republic, China, France, Germany, the Russian Federation and Spain. (see also p. 15).

Cooperation with the IAEA Library

2006 was the year when a real synergy between INIS and the IAEA Library began. Several joint INIS/Library training sessions were conducted, the INIS thesaurus was loaded onto the IAEA Library's integrated library system, and two important projects were initiated: the digitization of technical reports of the Library, and the development of the INIS/Library cross-database search system.

Contact: Anatoli Tolstenkov; **A.Tolstenkov@iaea.org**

"INIS is distinguished by its valuable approach to help and assist scientists and researchers in obtaining relevant scientific and technical information on research and development in their area of activities. Therefore INIS has a valuable role in the transfer of know-how in nuclear science and technology to all IAEA Member States."

Prof. Elsayed Elkattan
Chairman, Nuclear Materials Authority
Egypt

INIS 2007: Focus on Partnerships Main Strategy and Directions

The main directions of the International Nuclear Information System are guided by the IAEA Medium-Term Strategy for 2006 to 2011:

"Enhance the impact of the IAEA's work through strengthened relationships with Member States, development and funding organizations, scientific and technical institutions and the private sector".

In line with this strategy, the theme of "partnerships" is guiding the activities of INIS in 2007. Developing partnerships, more active communication with INIS Members and end-users of INIS products and services, and a better understanding of the needs of existing and potential users by INIS Members and the INIS Secretariat are key strategic objectives, as defined at an INIS Strategic Consultancy Meeting in 2006 and adopted by the 33rd INIS Liaison Officers Meeting (see p. 12).

A Five-Point Plan for INIS

The strategic approach to managing INIS in 2007 and beyond is based on the Five-Point Plan for INIS, presented by Robert Workman, Head, INIS and NKM Section, at the INIS Liaison Officers Meeting in late 2006 (see p. 12).

1. Conduct a Survey of all INIS Members

A review of all aspects of the role of the INIS Liaison Officers (ILOs) will be carried out with the aim of identifying whether there is any need for additional support from the INIS Secretariat. It will also explore alternative scenarios that could be adopted.

2. Develop a Network of Information Resources

Linked to the above survey will be an investigation of those information resources available within the INIS Member States and international member organizations, and how they could be linked strategically to Nucleus, the IAEA's online portal for nuclear information and knowledge. The aim is to create a network of information resources, with INIS at the hub of a nuclear web (NucWeb) that will provide end-users with easy access to nuclear information by utilizing a powerful search engine.

3. Deal with Reductions in Human Resources

The "nuclear renaissance" – the renewed interest in nuclear power around the world – requires additional human resources within the IAEA programmes directly related to nuclear power. This development will have a consequential impact on the resources available for INIS during 2007. In order to cope with this reduction in manpower, a range of options is being considered. These include a possible reduction in the subject scope of, and the volume of additions to, the INIS Database.

4. Involve Member States in Nuclear Knowledge Management Activities

The IAEA's nuclear knowledge management activities have developed significantly over the past three years. This strategic development is a positive step forward, and offers INIS Members the potential of participating in these activities. It complements the role that INIS plays in nuclear information management.

5. Create a Joint Marketing Plan for INIS

Developing and implementing a marketing plan for INIS will be a concerted effort for INIS Members and the INIS Secretariat. More effective and targeted marketing of the products and services that INIS offers should enhance the growth in usage that the system merits.

Contact: Robert Workman; **R.Workman@iaea.org**

INIS in 2007

In 2007, the INIS Secretariat plans, amongst others, to:

- implement the new INIS Data Processing System (IDPS);
- add at least 100 000 records to the INIS Database;
- automate information capturing and input preparation for the INIS Database;
- integrate the INIS Database on CD-ROM and the NCL Database into one single product on DVD;
- continue cooperation with INIS Members on the digital preservation of literature stored on microfiche or in print;
- develop and implement the INIS/IAEA Library/Waste Management cross-database search system (also called "federated search"), using the Convera RetrievalWare search engine;
- prepare an IAEA Technical Report on *INIS: Past, Present and Future*; and
- convene the Joint INIS/ETDE Technical Committee Meeting in November 2007.

Contact: Anatoli Tolstenkov; **A.Tolstenkov@iaea.org**

33rd INIS Liaison Officers Meeting

The 33rd Consultative Meeting of INIS Liaison Officers (ILOs), held at the IAEA on 30 October–1 November 2006, brought together representatives from 58 countries and three international organizations. These INIS Members represent the core of the INIS community, and provide over 95 percent of the input to the INIS Database. Despite some financial constraints, the INIS Secretariat was able to provide financial support to participants from the most active national INIS Centres in developing countries.

This time, preparations, follow-up procedures, and the format of the meeting were different. An online discussion forum, the *INIS Informal Communication Network*, facilitated preparing the meeting agenda, recommendations and the final report in close consultation with the ILOs. Also, Liaison Officers chaired individual sessions, and many delegates participated actively in discussions.

"...This ILO meeting differs from previous ones… it is more alive, and more national INIS Centres than usual have been given a chance to make their presentations. This allows us to learn about the possibilities to improve the work in our own centres. It is a very fruitful way to communicate.

Ms. Makhtuba Kadirova
INIS Liaison Officer, Uzbekistan

Nine ILOs made presentations with a focus on INIS usage and promotion: Ms. D. Cutler (ETDE), Ms. M. Tumanova (ICSTI), Ms. M. Islam (Bangladesh), Mr. U. Ivaniukovich (Belarus), Mr. P. Adamek (Czech Republic), Ms. C. Brulet (France), Mr. R. Al-Shanana (Syrian Arab Republic), Mr. E. Kimaro (United Republic of Tanzania), and Ms. M. Kadirova (Uzbekistan).

Session on INIS Database usage in Member States, chaired by the INIS Liaison Officer of India

From left: Mr. U. Ivaniukovich, Belarus, Ms. C. Brulet, France, Mr. V. Kumar, India, Mr. R. Al-Shanaa, Syrian Arab Republic

Mr. Y. Sokolov, Deputy Director General, Head of the Department of Nuclear Energy, who opened the meeting, encouraged the participants to think about the future of INIS and its users' needs, taking into account the new realities of the information age. He also emphasized the important role of INIS with respect to nuclear knowledge preservation and management, as highlighted in the IAEA General Conference Resolution on Nuclear Knowledge (see p. 3), and being a resource important for building needed infrastructure in countries that have decided to join the nuclear power programme.

Presentations and discussions focused on four main agenda items:

- INIS strategic issues;
- usage of the INIS Database;
- promotion and outreach for INIS products and services; and
- technical developments.

INIS Liaison Officers during their 33rd Meeting; front: Ms. K.M. Gonzalez Sanchez, Alternate INIS Liaison Officer, Cuba

INIS Members play a unique role as both users of, and contributors to, the INIS Database. Developing active partnerships, communication and a better understanding between the ILOs and the INIS Secretariat is crucial for the future health of INIS and its members, as Mr. R. Workman, Section Head of INIS and Nuclear Knowledge Management, pointed out. This is reflected in a **Five-Point Plan** he presented, which was adopted by the meeting participants. It will be the basis for strategically managing INIS in 2007 and the years to come (see p. 11).

"...Comprehensiveness is still a very important criterion of quality considerations."

Ms. Christa Brulet
INIS Liaison Officer, France

The INIS Liaison Officers approved 35 decisions and recommendations, including the new Vision and Mission of INIS (see **http://www.iaea.org/inisnkm/vision.htm**). Comprehensiveness and timeliness of the INIS Database are the most important features. Effective partnerships, as addressed in the Five-Point Plan, should be one of the

main strategic directions, since they are a basic requirement for the continued success of INIS. The ILOs also recommended preparing a joint marketing plan for INIS.

Guest speakers at the meeting were Ms. A. Scanlon, Project Manager of Nucleus, who introduced the IAEA nuclear information and knowledge portal (see p. 9), and Ms. R. Hahn-Weinert, Section Head of the IAEA Library. She presented the International Nuclear Library Network (see p. 16), and hosted a tour of the library that offered an overview of IAEA Library services.

"INIS represents an ideal way for the introduction and the development of nuclear techniques and technology in developing countries."

Mr. Toudjani Soumana
INIS Liaison Officer, Niger

From left: Mr. A. Tolstenkov and Ms. S. Rieder, INIS and NKM Section, in discussion with Mr. B. Hitson, INIS Liaison Officer of the USA

"The usage and attractiveness of the INIS Database among our scientists and engineers is very good."

Mr. Haim Rotem
Alternate INIS Liaison Officer, Israel

Side Event: 4th Regional Meeting of RRIAN Members

INIS Liaison Officers from Latin America and the Caribbean, who are also representatives of RRIAN, the Latin American Network on Nuclear Information (see p. 17), took the opportunity of attending the INIS Liaison Officers Meeting and held their 4th Regional Meeting at the IAEA on 30 October 2006. Participants from Argentina, Brazil, Chile, Colombia, Cuba, Mexico and Uruguay, plus Spain, exchanged information on current INIS-related activities in their countries with members of the INIS Secretariat. They discussed opportunities and challenges facing their countries regarding input contributions to the INIS Database and addressed issues of human and financial resources. Future projects on knowledge preservation and digitization of historical literature collections in the region may benefit from Mexico's experience: the ongoing digital preservation project in the Instituto Nacional de Investigaciones Nucleares (ININ) is an excellent example of cooperation between a national INIS Centre and the INIS Secretariat. It was also decided to create a handbook of best practices on preservation of nuclear information, to assist countries in the region in this important activity.

"I take the opportunity to emphasize the good use of the INIS products, the Database... and access to the NCL as well as the distance learning course."

Ms. Alejandra T. Chavez Flores
INIS Liaison Officer, Argentina

Exhibition

An exhibition, held in parallel with the INIS Liaision Officers Meeting, offered delegates the opportunity to learn more about the activities of other INIS Members. **Argentina, Bangladesh, Brazil, Bulgaria, China, India, Macedonia, and the International Centre for Scientific and Technical Information (ICSTI)** participated and provided posters and information material on their INIS-related and other activities. The work of the INIS and Nuclear Knowledge Management Section and other Divisions and Sections within the IAEA was also presented—the IAEA Library demonstrated its online services, the Division of Personnel provided information on job opportunities and recruitment procedures, new IAEA books and reports were displayed by the Publications Section, and the Division of Information Technology presented the IAEA's nuclear information and knowledge portal, Nucleus.

Delegates gathered information and met with IAEA staff in the exhibition area. From right: Ms. E. Mucha, Australia, and Mr. E. Price, IAEA Library

"The idea of the exhibition is very good; it is an opportunity to exchange information – to see the distribution of services and products of INIS from the point of view of each country, to improve promotion and reach new users."

Ms. Maria Betania Monte Alto Lambert
INIS Liaison Officer, Brazil

Contact: Anatoli Tolstenkov; **A.Tolstenkov@iaea.org**

INIS Membership Reaches 140

ABACC, the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (**http://www.abacc.org**) joined INIS in late 2006 as the 23rd international organization participating in the system.

Ms. Ioná Ponce Pereira serves as INIS Liaison Officer; **Mr. José Orpet Marques Peixoto** is the Alternate INIS Liaison Officer.

"As a frequent user of INIS services, I would like to highlight the importance of this tool for all of us, who are dealing with the broad universe of knowledge in the nuclear field."

Antonio Abel Oliveira, Secretary
Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC), Brazil

We welcome **the Grand-Duchy of Luxembourg** as the **140th INIS Member**. Luxembourg is the 117th Member State joining the system. The national INIS Centre for Luxembourg is located within the Ministry of Health (**http://www.ms.etat.lu/**).

Mr. Patrick Majerus serves as INIS Liaison Officer, and **Mr. Charles Thibo** is the Alternate INIS Liaison Officer.

Regional INIS Training Course

26-30 November 2006, Damascus, Syria

The Atomic Energy Commission of Syria (AECS) hosted a Regional Training Course on INIS for 16 participants from eight Member States, including Iraq, Jordan, Lebanon, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic and Yemen. They were staff members of national INIS centres and universities with nuclear curricula. This INIS training course was the first to be conducted in the Arabic language, the mother tongue of the participants.

From left: Mr. I. Othman, Director General of AECS, Mr. P. Salema, IAEA Department of Technical Cooperation, Ms. T. Atieh, INIS and NKM Section, Mr. R. Kamel, Asia and the Pacific Section 1, IAEA Department of Technical Cooperation

In their opening addresses, Professor I. Othman, Director General of AECS, and Mr. P. Salema, Director of the Division for Asia and the Pacific, IAEA Department of Technical Cooperation (TC), emphasized the importance of nuclear information management and preservation, and encouraged the participants to benefit from this training opportunity, especially since the course was held in the Arabic language. Mr. Salema also stressed the importance of this regional course, and encouraged future similar activities.

The course provided hands-on training on all aspects of the INIS operation, input preparation, and retrieving information from the INIS Database and other IAEA online resources including Nucleus, the portal to the IAEA's nuclear knowledge and information resources. Promotion and outreach for INIS was discussed in detail, including several practical approaches. Discussions also focused on the important role of the national INIS centres in collecting and disseminating nuclear information within their countries, and supporting national nuclear activities including nuclear knowledge preservation. A presentation on the International Nuclear Library Network (INLN) highlighted the advantages of joining this network.

Hands-on training at the INIS Training Course in Damascus

In terms of future regional cooperation, a preliminary agreement on two main activities was reached: first, to prepare an Arabic version of the interface of the INIS Online Database, and second, to translate the help files in the INIS Online Database into the Arabic language.

Contact: Taghrid Atieh; **T.Atieh@iaea.org**

National INIS Seminar in Niger

1-2 December 2006, Niamey, Niger

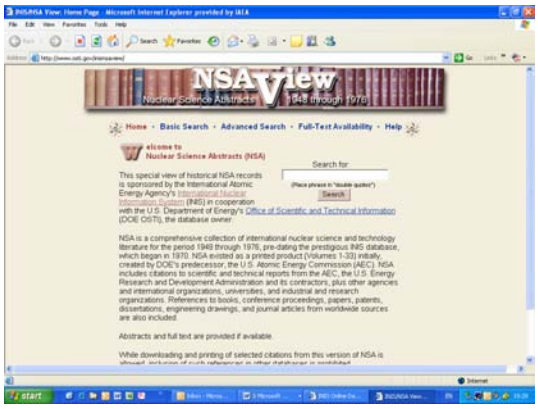
In a cooperation between the Ministère des Mines et de l'Énergie (MME) and the IAEA, a two-day national INIS Seminar was held in Niger. Twenty participants from the MME, and from institutes in the agriculture, mining, geology and medicine sectors, and universities attended the event. The Seminar provided an introduction to INIS, highlighted the benefits of active participation, and encouraged national contributions to the system. As one of the expected outcomes, INIS products and services should be increasingly used to support national nuclear activities in Niger.

Contact: Taghrid Atieh; **T.Atieh@iaea.org**

INIS Snapshots

Partnership with OSTI

As a result of cooperation between the US INIS Centre at the Office of Scientific and Technical Information (OSTI) and the IAEA, a search interface for the Nuclear Science Abstracts (NSA) of the Energy Citations Database (ECD) has been made available to INIS users. The NSA contain more than 829 000 items from NSA printed volumes. At present, over 172 000 of these have digitized abstracts, and more than 500 items include full texts. The NSA View is accessible directly from the INIS Online Database. It allows the user to search records from the NSA Database directly without having to search through the full ECD.



INIS DVD — Chernobyl: The Accident and its Consequences

This new DVD includes a comprehensive compilation of records from the INIS Database on the Chernobyl accident and its consequences, covering the period 1986 to 2006. The DVD offers access to 20 993 bibliographic references, 5 039 full-text documents and a bibliometrical analysis. Copies of this DVD are available free of charge to INIS Members, Permanent Missions to the IAEA, participants in IAEA Conferences, and IAEA staff.

Contact: inis.cbl@iaea.org

Japanese Interface for INIS Database

Users of the INIS Online Database are now able to select the Japanese language for their search interface, in addition to English, German, Portuguese and Spanish. Special thanks go to the national INIS Centre in Japan and **Mr. Minoru Yonezawa**, who translated the database interface. Individually registered users can select their preferred language from one of the above in their *"Profile"* in the INIS Online Database.

New Version of Joint ETDE/INIS Thesaurus

The ETDE/INIS Joint Thesaurus (Rev. 2) is now available in print and electronic format. The Joint Thesaurus contains the controlled terminology for indexing all information within the subject scope of INIS and the Energy Technology Data Exchange (ETDE). The terminology is used in subject descriptions for input to, or retrieval of, information in these systems. Including updates to September 2006, Revision 2 contains 21 147 valid descriptors and 9 114 forbidden terms. Suggestions for improvements are welcome, and can be sent to the thesaurus specialists at **inis@iaea.org** or **info@etde.org.**

To order the ETDE/INIS Joint Thesaurus, go to: **www.iaea.org/Publications/** or send an e-mail to: **sales.publications@iaea.org**.

INIS Multilingual Thesaurus on CD-ROM

The INIS Multilingual Thesaurus is a tool to assist users of the INIS Database in indexing, and searching for, literature in several languages. The Thesaurus also serves workers in the nuclear field who are not directly connected with INIS, as well as translators, interpreters, authors and others working in the areas of languages, semantics or terminological reference.

The INIS Mulitlingual Thesaurus is now available on CD-ROM. The translations of the terminology from the English version (source language) into Arabic, Chinese, French, German, Russian and Spanish (target languages) were performed by specialists from the INIS centres of the Syrian Arab Republic, China, France, Germany, the Russian Federation and Spain, respectively.

Copies of the CD-ROM can be ordered at:
www.iaea.org/Publications/
sales.publications@iaea.org

New Guidelines for NCL Submission

Full texts of INIS's "grey", non-conventional literature (NCL) in PDF can now be processed by the INIS Imaging System. A new document provides guidelines on how to prepare and submit electronic full texts, particularly in PDF. It is available on the INIS Members Area of the Section web site (**www.iaea.org/inisnkm**). This format facilitates an efficient and speedy processing of contributions from INIS Members.

New Contact E-mail for NCL

Enquiries on creating and submitting INIS non-conventional literature (NCL) as electronic full-text documents can now be sent to a new mailbox, dedicated to all NCL matters: **INISNCL@iaea.org**.

This contact address is serviced in English, French, German and Spanish.

Joint INIS/Library Training

The joint training programme, launched at the end of 2006, improves awareness and usage of products and services offered by INIS and the IAEA Library for users within the IAEA.

The training sessions provide information on the scope, access and searching tools for the INIS Database and IAEA Library resources, including ADAMS (Agency-wide Documents Access and Management System), the Energy Citations Database, ETDEWeb, Science Direct and SourceOECD.

While the first two sessions in November 2006 were conducted for staff of the IAEA Department of Nuclear Energy, future sessions will also include participants from other IAEA Departments.

Ms. C. Krieger-Levine, INIS and NKM Section, explaining the use of the INIS Database

Doing More with Less: The International Nuclear Library Network

***Ruth Hahn-Weinert**, Section Head of the IAEA Library, introduces this international library network and highlights its advantages for IAEA Member States.*

Strategy and Guiding Principles

Nuclear libraries and information centres increasingly face the challenge of providing the best possible client services while being confronted with a zero growth or diminishing budget. The International Nuclear Library Network (INLN) is nuclear libraries' response to today's challenge of "doing more with less". In this network libraries engage in strategic partnerships to enhance the information pool and services available to library clients without generating additional costs to their parent organizations.

The underlying strategy is twofold: first, whenever a new partner joins the network, the shared information base is enlarged; and second, the larger the information base becomes, the more attractive the network becomes.

The success of INLN is based on its democratic structure: all participating libraries are equal partners, valued according to what they bring as practitioners in terms of information and their willingness to share, rather than on predetermined hierarchical or status levels. The work of the network focuses on concrete actions, bringing the *right* information in the *right* format at the *right* time to the *right* place. Participation is entirely voluntary and mutually beneficial.

Partners and Activities

The International Nuclear Library Network was founded by the IAEA Library and AECL Library Services, Canada, in 2005. At present, six nuclear libraries participate in the network, which is coordinated by the IAEA Library:

- **Comision Nacional de Energia Atomica (CNEA), Argentina**
- **Australian Nuclear Science and Technology Organization (ANSTO), Australia**
- **Atomic Energy of Canada Ltd. (AECL), Canada**
- **Turkish Atomic Energy Authority (TAEC), Turkey**
- **Uzbekistan Academy of Sciences, Institute of Nuclear Physics, Uzbekistan**
- **International Atomic Energy Agency (IAEA)**

The web site **http://inln.iaea.org** provides password-protected access to an online "Ask a Librarian" reference service, current awareness service, interlibrary loans and document delivery.

The INLN links not only bibliographic information to full-text and audiovisual information, it also links librarians, library clients and researchers to the information. Ultimately, the network links nuclear information workers to each other, forming a strong community of practice, sharing knowledge, best practices and lessons learned.

Nuclear libraries worldwide that are interested in joining the network are invited to contact **Ms. R. Hahn-Weinert,** at **IAEA.Library@iaea.org**.

WEB NUCLEAR

New Latin American Bulletin Disseminates Nuclear Information

RRIAN, the Latin American Network on Nuclear Information, has launched a monthly electronic bulletin, WEB NUCLEAR, that focuses on nuclear content available on the Web.

The bulletin offers a vast pool of information and links to new publications, electronic journals, upcoming conferences and other Internet resources in the nuclear field. Most of them can be accessed for free, such as links to RRIAN's INIS Services, Meetings on Atomic Energy, the IAEA's Internet Directory of Nuclear Resources and IAEA's Nuclear Energy Knowledge Portal.

RRIAN (*Red Regional de Información en el Área Nuclear*) is a cooperative network of 16 Latin American countries, established with support from the IAEA. It aims at improving the availability of nuclear information in Latin America and the Caribbean region. The network is coordinated by Brazil through the Nuclear Information Centre of the National Nuclear Energy Commission, which also serves as **national INIS Member**.

Visit WEB NUCLEAR **at http://cin.cnen.gov.br/rrian/web-nuclear.htm** and request your free subscription to the bulletin from **cin@cnen.gov.br.**

Recent Publications

from the INIS and Nuclear Knowledge Management Section

***IAEA publications can be ordered and/or downloaded at* http://www.iaea.org/Publications/index.html**

Computer-Assisted Indexing for the INIS Database

Nevyjel, A. 2007. *Information and Innovation*, No. 3, pp15–20.

This article was published in the journal of the International Centre for Scientific and Technical Information (ICSTI). INIS has identified Computer-Assisted Indexing (CAI) as an area where information technology could best assist in maintaining database quality and indexing consistency, while containing production costs. Subject analysis is a very important but also expensive process in the production of the INIS database. In processing a continuously increasing number of records,including subject analysis, the INIS Secretariat and INIS Member need to improve in their processing efficiency. Computer-Assisted Indexing is a promising way to achieve this.

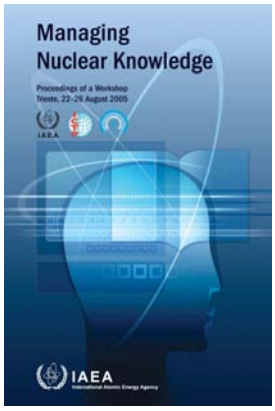
ETDE/INIS Joint Thesaurus (Revision 2)

ETDE/INIS Joint Reference Series No. 1 (Rev. 2)
Part I + Part II (A-Z), October 2006

The Joint Thesaurus contains the controlled terminology for indexing all information within the subject scope of the INIS Database and the Energy Technology Data Exchange (ETDE). The terminology is used in subject descriptions for input to, or retrieval of, information in these systems (see p. 15).

Managing Nuclear Knowledge
Proceedings of a Workshop, Trieste, Italy, 22–26 August 2005

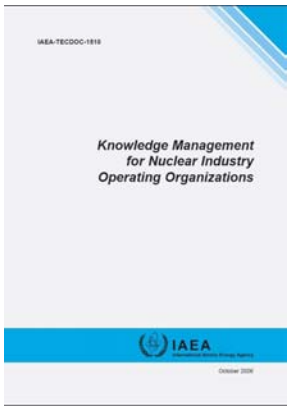
IAEA Proceedings Series; STI/PUB/1266, ISBN 92-0-109406-X; ISSN 0074-1884; includes CD-ROM with presentations material, 2006



This publication summarizes the main points emerging from the presentations, panel discussions and practical exercises conducted during a workshop on "Managing Nuclear Knowledge", jointly organized by the IAEA, the Abdus Salam International Center for Theoretical Physics (ICTP) and the World Nuclear University (WNU) in Trieste, Italy, in August 2005. The workshop aimed at increasing awareness in Member States for the challenges of nuclear knowledge management, shared best practices and provided a forum for exchange of information among nuclear professionals. The book contains most of the presented papers. All presentations are included on a CD-ROM that comes with the publication.

Knowledge Management for Nuclear Industry Operating Organizations

IAEA TECDOC Series No. 1510, English, 15.00 Euro. November 2006.



This document identifies the fundamental elements needed for an effective knowledge management system, shares lessons learned from within and outside the nuclear industry and provides guidance concerning methods for implementing knowledge management. The document also provides practical information based on the experiences of operating organizations in Member States and other related industries. This report is intended for senior and middle-level managers of nuclear industry operating organizations.

Risk Management of Knowledge Loss in Nuclear Industry Organizations

STI/PUB/1248, 31 pp.; 1 figure; 2006, ISBN 92-0-105406-8, English, 18.00 Euro. September 2006.

Maintaining nuclear competencies in the nuclear industry and nuclear regulatory authorities is a critical challenge. As many nuclear experts around the world are retiring, they are taking with them a substantial amount of knowledge and corporate memory. The loss of such employees, who hold knowledge critical to either operations or safety, poses a clear threat to the safe and reliable operation of nuclear facilities.

This report is based on actual experiences of Member State operating organizations, and is intended to increase awareness of the need to develop a strategic approach and action plans to address the potential loss of critical knowledge and skills in nuclear industry organizations.

International Conference on Managing Nuclear Knowledge: Strategies and Human Resources Development

Summary of an International Conference held in Saclay, France, 7-10 September 2004

IAEA Proceedings Series, 2006, STI/PUB/1235, ISBN 92-0-110005-1, English, 80.00 Euro. 2006.

This conference provided a forum for professionals and decision makers in the nuclear sector, comprised of industry, government and academia, and professionals in the knowledge management and information technology sectors.

The goals of the conference were to exchange information and share experiences on nuclear knowledge management, comprising strategies, information management and human resource development; to identify lessons learned; and to embark on the development of new initiatives and concepts for nuclear knowledge management in IAEA Member States.

Forthcoming Meetings in 2007

Meeting Title	Date	Location	Country	Scientific Secretary
Technical Meeting (TM) to Evaluate and Develop Curricula for the World Nuclear University	19–23 March	IAEA, Vienna	Austria	Y. Yanev
TM to Develop a Technical Document on Knowledge Management in Nuclear Waste Facilities	7–10 May	IAEA, Vienna	Austria	M. Ruyssen P. Gowin
TM to Develop the Publication "Nuclear Knowledge Management – Basic Principles and Objectives"	15–17 May	IAEA, Vienna	Austria	P. Gowin
TM on the Development of New Nuclear Information Resources and their Integration	4–7 June	IAEA, Vienna	Austria	Y. Yanev R. Anghelache
International Conference on Knowledge Management in Nuclear Facilities	18–21 June	IAEA, Vienna	Austria	Y. Yanev P. Gowin C. Viktorsson
School of Nuclear Knowledge Management	24–28 Sept.	ICTP, Trieste	Italy	Y. Yanev A. Kosilov
13th Joint INIS/ETDE Technical Committee Meeting	6–8 Nov.	IAEA, Vienna	Austria	A. Tolstenkov

Inside the Section

New Members of our Team

Marie-Laure Ruyssen, Leader

Knowledge Maintenance Group, NKM Unit (January 2007)

Marie-Laure is in charge of developing technical documents, coordinated research projects and other knowledge maintenance activities. Marie Laure worked as Knowledge Manager at the Belgian Nuclear Research Centre (SCK-CEN) where she was responsible for defining and implementing the Knowledge Management strategy. She holds Master's degrees in History, Business Administration, and Information and Library Sciences from Belgian Universities.

Romeo Anghelache

Knowledge Management Specialist, NKM Unit (October 2006)

Romeo is responsible for implementing activities in the area of maintenance and preservation of knowledge in nuclear science and technology. Romeo worked as a research programmer at the Max-Planck Institute for Gravitational Physics in Postsdam, Germany, and as a research associate at the Carnegie Mellon University, Pittsburgh, USA. He holds a PhD in Condensed Matter Physcis from Al. I. Cuza University, Romania.

Domenico Pistillo

Systems Engineer, Systems and Development Group (Dec. 2006)

Domenico became a member of the Section in December 2006. He is responsible for the administration of the Section's computer server capacity, and developing and maintaining server-based software applications and tools. He holds an advanced university degree in electrical engineering with a focus on ICT. Domenico gained his work experience in the ICT field working for large enterprises and international organizations, including CTBTO.

Elena Marinova, Information Management Clerk, NKM Unit

Elena holds a Master's degree in Law from the University of Vienna, and has academic education in business administration and social sciences. Prior to joining the Section in Sept. 2006, she worked in the IAEA TC Department.

Eva Aldover Flesch, Clerk

Capacity Building and Liaison Group

Eva has rejoined the CBL Group in January 2007, coming from the IAEA Office of Procurement Services. She holds a Master's Degree in Business Administration from Webster University, Vienna.

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