the
abdus salam
international centre for theoretical physics

united nations
educational, scientific
and cultural
organization

international atomic
energy agency

*40*th anniversary 1964 2004

Workshop on
Managing Nuclear Knowledge

8 - 12 November 2004

The International Nuclear Information System

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International Atomic Energy Agency
Capacity Building & Liaison Group
INIS & NKMS
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AUSTRIA
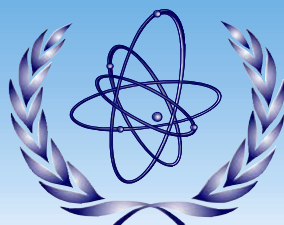
International Atomic Energy Agency

International Nuclear Information System (INIS)

Workshop on Managing Nuclear Knowledge

8-12 November 2004 - Trieste, Italy

Taghrid ATIEH

Leader, Capacity Building & Liaison Group

INIS & NKM Section

Department of Nuclear Energy - IAEA

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International Nuclear Information System

🖎 **What is INIS/Overview**

🖎 **INIS Products and Services**

🖎 **Benefits to Members**

🖎 **Demonstration and hands on:
INIS Database on the Internet**

International Nuclear Information System

1970

The first international computerized system

INIS

The world's leading information system on peaceful uses of nuclear science and technology

INIS Secretariat is located at the HQ of the International Atomic Energy Agency Vienna – Austria

International Nuclear Information System

➤ INIS Mission

To produce and disseminate:

A bibliographic database of the world's nuclear literature, and

Full text of non-conventional literature (NCL)

International Nuclear Information System

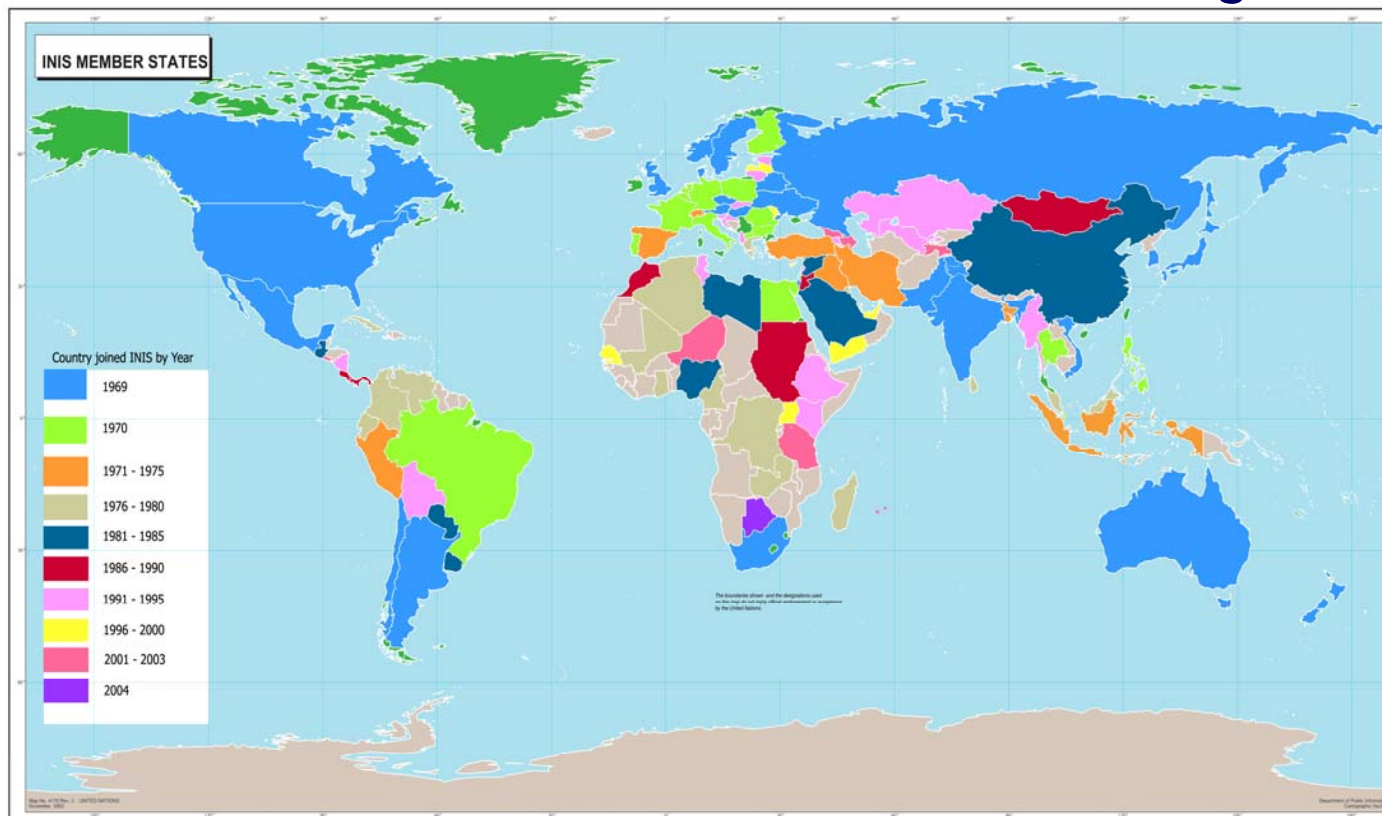➤ **INIS Philosophy**

1. International Co-operation

International Nuclear Information System

INIS Membership:

111 Member States

19 International Organizations

Every INIS Member is represented by a Liaison Officer

International Nuclear Information System

➤ INIS Philosophy

2. Decentralization

INIS central tenet

The decentralized responsibility of most stages of operation

a. Responsibilities of the INIS Liaison Officers

b. Responsibilities of the INIS Secretariat

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➢ INIS Philosophy

2. Decentralization

a. Responsibilities of the INIS Liaison Officers

➥ Collect literature and prepare input

➥ Send full text of NCL

➥ Provide information services

➥ Promote the usage of INIS

➥ Liaise with the INIS Secretariat

International Nuclear Information System
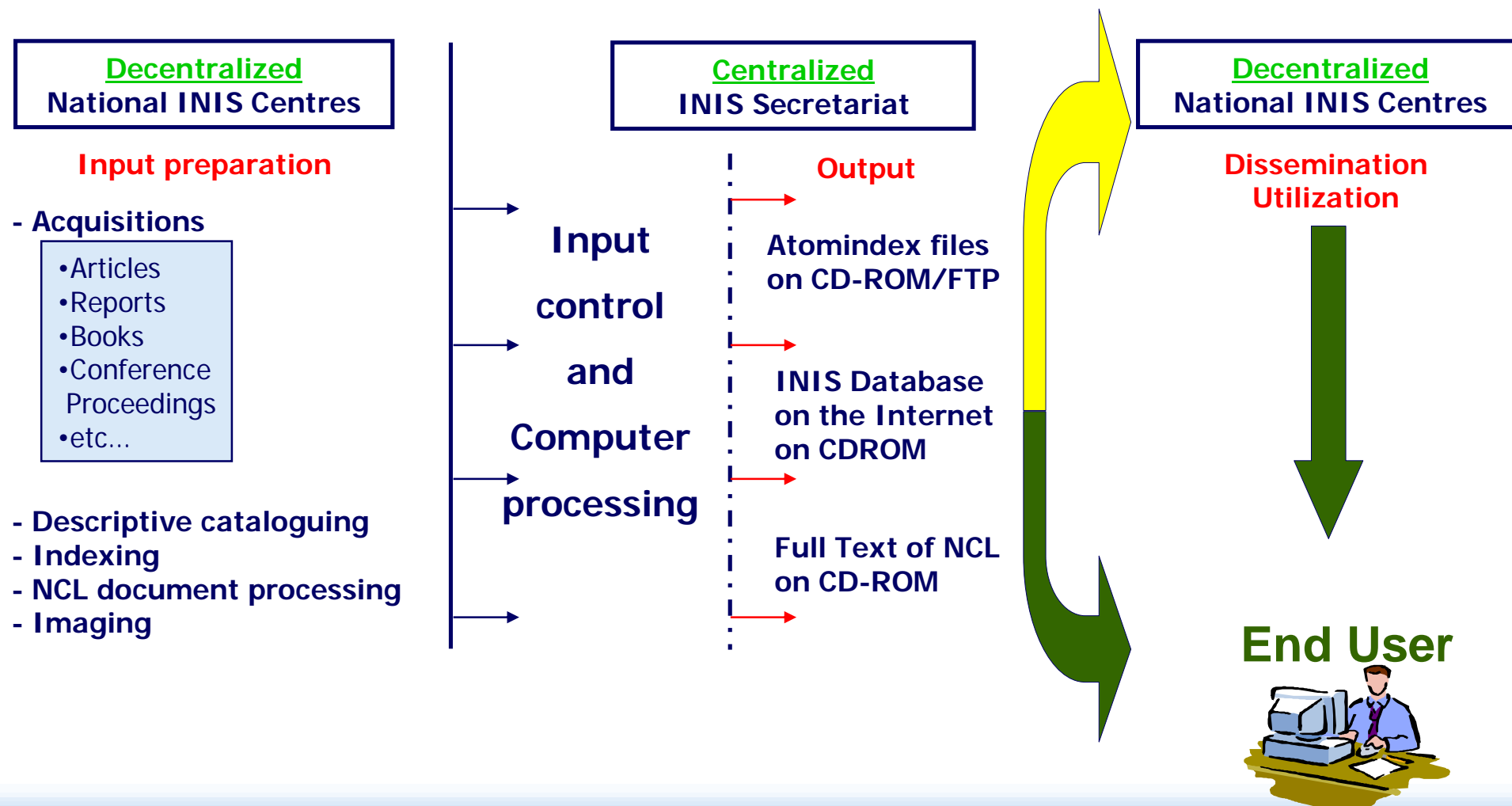
➢ INIS Philosophy

2. Decentralization

a. Responsibilities of the INIS Secretariat

- ➡ Management of INIS

- ➡ Input control and computer processing

- ➡ Development and maintenance of standards

- ➡ Products

- ➡ Assistance... Capacity Building

International Nuclear Information System

Overview of INIS Operation

Decentralized National INIS Centres	Centralized INIS Secretariat	Decentralized National INIS Centres

Input preparation

- **Acquisitions**
  - Articles
  - Reports
  - Books
  - Conference Proceedings
  - etc...

- **Descriptive cataloguing**
- **Indexing**
- **NCL document processing**
- **Imaging**

Input control and Computer processing

Output

Atomindex files on CD-ROM/FTP

INIS Database on the Internet on CDROM

Full Text of NCL on CD-ROM

Dissemination Utilization

End User

Taghrid ATIEH

International Atomic Energy Agency

International Nuclear Information System

➢ Subject Scope

INIS reports the world literature on all aspects of the peaceful applications of nuclear science and technology thereby

reflecting the activities and interests of the IAEA Member States

International Nuclear Information System

➢ Subject Scope

Nuclear engineering and technology

including fission reactors, nuclear power plants, fusion technology, nuclear fuel cycle and radioactive waste management.

Nuclear safety and radiation protection

dealing with the safe operation and maintenance of nuclear power plants, protection of the public from accidental and chronic exposure, safe transport and storage of radioactive wastes as well as monitoring and protection of the environment.

Application of nuclear and isotopic techniques

in Medicine, food and agriculture, water resource management, industrial applications and similar development activities.

International Nuclear Information System

➢ Subject Scope (Cont...)

Sciences relevant to nuclear research and other applications

such as effects of radiation and radioisotopes in biology, chemistry and material sciences, physics and earth sciences.

Physics:

Nuclear physics
Plasma physics
Condensed matter (nuclear aspects)
Elementary Particles
Atomic and Molecular Physics

Chemistry:

Radiochemistry
Radiation Chemistry
Analytical Chemistry
Nuclear Chemistry

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➢ Subject Scope (Cont...)

Legal aspects

Safeguards and non-Proliferation

Environmental and Economic aspects of nuclear & non-nuclear energy sources

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→ **Products and Services**

1. INIS Database

   ✦ From 1970 to the present

   ✦ Peaceful uses of nuclear science and technology

   ✦ Over 2.5 million indexed references

   ✦ English abstract +

   ✦ Over 80,000 references/year

International Nuclear Information System

⇨ **Products and Services**

1. INIS Database

WWW

Abundance, volatile, not controlled

INIS

Reliable source, selected, evaluated, value added

High Quality, Structured Database

International Nuclear Information System

→ **Products and Services**

   1. **INIS Database**

      Types of Literature:

- ✦ Journal Articles
- ✦ Technical Reports
- ✦ Conference Papers
- ✦ Books

- ✦ Patents
- ✦ Laws & legislations
- ✦ Theses
- ✦ others

International Nuclear Information System

⇨ **Products and Services**

1. INIS Database

   1.1. On the Internet

   1.2. On CD-ROM

   Free to INIS Centres and its organisation

International Nuclear Information System

⇨ ## Products and Services   (Cont...)

2. **INIS Non-Conventional literature (NCL):**

Definition: scientific and technical reports, conference papers, theses and patent documents, laws and legislations,etc which are not easily available through commercial channels

✦ **Over 600 000 full texts (reports, conference proceedings, etc..)**

Member States' knowledge in the peaceful applications of nuclear science and technology for over 30 years

✦ **Over 200 000 full texts in electronic form**

✦ **IAEA TECDOCs available online through the INIS Database**

57 National Document Delivery Centres

International Nuclear Information System

Target Groups/Users

INIS Members only

➥ National atomic authorities, National INIS Centres

➥ Research Centres

➥ Commercial companies

➥ Universities and academic institutions

International Nuclear Information System

Universities and academic institutions   **Free**

✓ **Proactive to reach universities & research institutes**

✓   **Response to this Initiative:**

     ↳   **395 universities requests received/processed**

     ↳   **238 requests fulfilled**

International Nuclear Information System

INIS Database on Internet - Universities/Academic Institutes (Status at 22 October 2004)

#	Country	Requests processed	Requests fulfilled	#	Country	Requests processed	Requests fulfilled
1	Argentina	14	14	32	Mauritius	2	1
2	Armenia	1		33	Mexico	8	3
3	Australia	13	13	34	Morocco	10	4
4	Austria	11	3	35	Netherlands	18	4
5	Belarus	1	1	36	Peru	2	
6	Bulgaria	5	4	37	Philippines	2	2
7	Canada	6	5	38	Poland	16	13
8	Chile	1	1	39	Portugal	1	1
9	China	4	2	40	Qatar	1	1
10	Colombia	5	1	41	Romania	7	6
11	Croatia	12	9	42	Russia	13	8
12	Cuba	1	1	43	Serbia and Montenegro	2	2
13	Czech Republic	3	3	44	Slovakia	1	1
14	Ecuador	3	3	45	Slovenia	10	7
15	Egypt	6	3	46	Sri Lanka	1	
16	El Salvador	1		47	Sweden	4	3
17	Estonia	3	3	48	Switzerland	2	1
18	Finland	1	1	49	Syrian Arab Rep	7	2
19	France	10	3	50	Thailand	6	3
20	Hungary	7	4	51	The FYR Macedonia	5	4
21	India	12	7	52	Turkey	40	10
22	Indonesia	7	1	53	Ukraine	4	3
23	Iran	4	1	54	United Arab Emirates	1	
24	Ireland	5	4	55	United Kingdom	5	5
25	Israel	6	4	56	United States of America	14	9
26	Italy	8	2	57	Uruguay	2	2
27	Japan	44	42	58	Uzbekistan	4	3
28	Kazakhstan	4		59	Venezuela	1	1
29	Kenya	1		60	Vietnam	1	
30	Lebanon	2	2	61	Zambia	2	
31	Lithuania	2	2		TOTAL:	395	238

International Atomic Energy Agency

International Nuclear Information System

Future:

➱ **Multi-lingual interface**

➱ **Direct link from the INIS Database on the internet to the collection of INIS NCL**

➱ **Retrospective enlargement of INIS Information Resources prior to 1970:**
Historical information;
i.e Fundamental Researches & Developments in the nuclear field

➱ **Nuclear Science Abstracts (NSA)**

➱ **Referativnyj Zhurnal (RZ)**

International Nuclear Information System

⇨ **Products and Services**

3. **Subject oriented product on CD-ROM:**
full-text NCL documents and INIS references

To support :   IAEA programs

Members States

Knowledge Preservation

➪ Products and Services

4. INIS Thesaurus

"*A thesaurus is a terminological control device used in translating from the natural language of documents, indexers, or users into a more constrained system language (document language, information language). It is a controlled and dynamic vocabulary of semantically and generically related terms which covers a specific domain of knowledge*".

(UNESCO Guidelines)

⇨ **Products and Services** (Cont...)

4. Multilingual Thesaurus

5. INIS Web Services

A database of commented links to information resources of nuclear relevance available on the Internet

International Nuclear Information System

→ ## Products and Services (Cont...)

6. **OECD/NEA Data Bank Computer Program Services**

NEA Data Bank operates a computer program service related to **nuclear energy applications.**

Collects programs, compiles and verifies them in an appropriate computer environment

Over than 2000 documented packages

NEA Data Bank

Co-operative arrangement between IAEA and OECD/NEA

How to Participate in this Services ?

http://www.nea.fr/html/dbprog/

International Nuclear Information System

Capacity Building

1. **Training**   Staff at the national INIS centres

   ⇨ Classroom training

   ⇨ E-Learning on the Internet/on CDROM

2. **Technical assistance to Member States through the Department of Technical Co-operation, IAEA**

International Nuclear Information System

What can INIS do for you?

✓ **Answer questions about nuclear science & technology**

Wealth of Member States' knowledge (over 30 years)

✓ **SDI/Alert Service**

✓ **Provide INIS full text documents**

✓ **Locate colleagues and institutes**

✓ **Worldwide visibility of national literature**

Excellent mechanism for preserving Knowledge of MS in the fields

International Nuclear Information System

INIS Products & Services

- DB On CD-ROM
- DB On The Internet
- Full Text Collection
- INIS Web Site
- INIS E-Learning
- INIS Web Services
- Thesaurus

- NCL full Text
- Database
- Document Delivery
- Topical sets
- Marketing
- Training Courses
- TC Assistance
- OECD / NEA Data Bank