1962-17

Joint ICTP-IAEA School of Nuclear Knowledge Management

1 - 5 September 2008

General Requirements for Nuclear Knowledge Management Portal

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General Requirements for Nuclear Knowledge Management Portals

A.Pryakhin, IAEA

School of Nuclear Knowledge Management,
1-5 September 2008,
ICTP, Trieste, Italy

IAEA
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http://www.google.com/search?hl=en&q=Nuclear+Knowledge+Management+Portal&btnG=Search

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Nuclear Knowledge Management Portal   [Search]   Advanced Search
                                                    Preferences

                                                                              New! View and manage your web history

Web   Results - 10 of about 1,910,000 for Nuclear Knowledge Management Portal. (0.05 seconds)

[PDF] **Nuclear Knowledge Management**
File Format: PDF/Adobe Acrobat - View as HTML
New tools for. supporting NKM have been developed or initiated, including an IAEA-wide
document **management**. system and a web-based **Nuclear Knowledge Portal**. ...
www.iaea.org/inisnkm/nkm/documents/NKM_Guidance.pdf - Similar pages

[PDF] **NUCLEAR KNOWLEDGE PORTAL**: INFORMATION **MANAGEMENT** MAKING POSSIBLE ...
File Format: PDF/Adobe Acrobat - View as HTML
IAEA-CN-153/2/P/25. **NUCLEAR KNOWLEDGE PORTAL**: INFORMATION **MANAGEMENT**.
MAKING POSSIBLE THE **KNOWLEDGE MANAGEMENT**. F. Braga, N. Orosco, E. Galvão, L.
Sayão ...
www.iaea.org/inisnkm/nkm/documents/nkmCon2007/fulltext/ES/IAEA-CN-153-2-P-25es.pdf -
Similar pages
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International Conference on **Nuclear Knowledge Management** ...
International Conference on **Nuclear Knowledge Management**: Strategies, ... The ACM
Portal is published by the Association for Computing Machinery. ...
portal.acm.org/citation.cfm?id=1275918.1275923&
coll=GUIDE&dl=ACM&CFID=15151515&CFTOKEN=61... - Similar pages

[PDF] **Nuclear knowledge portal** for supporting licensing and controlling ...
Portal for aiding and streamlining the Licensing and **Management** activities of. the CNEN.
Keywords: **knowledge management**; **knowledge**; **nuclear knowledge**. ...
www.inderscience.com/filter.php?aid=7886 - Similar pages

[PDF] **Nuclear knowledge management**: the GRS realisation D. Beraha, T ...
He is writing a dissertation about **Nuclear Knowledge Management** ..... **Management**,
Organisation Handbook, Library and more. A second **portal** has been set up ...
www.inderscience.com/filter.php?aid=8144 - Similar pages
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NUCLEAR KNOWLEDGE MANAGEMENT
Efforts in improvement of **nuclear knowledge** and information **management** in Croatia ... pp
237-243; **Nuclear Knowledge Portal** for Supporting Licensing and ...
www.wonuc.org/hrm/issue-03.htm - 4k - Cached - Similar pages

[PDF] **Nuclear** Information and **Knowledge** No. 1
File Format: PDF/Adobe Acrobat
News from the INIS and **Nuclear Knowledge Management** Section ..... The purpose of the
Nuclear Knowledge Portal is to offer professionals in the **nuclear** field ...
www-pub.iaea.org/MTCD/publications/PDF/Newsletters/NI&K-NL-01.pdf - Similar pages

IngentaConnect **Nuclear knowledge portal** for supporting licensing ...
Therefore, the objective of this paper is to present the construction of a **Nuclear Knowledge**
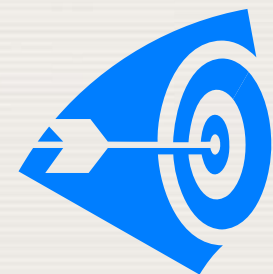**Portal** for aiding and streamlining the Licensing and **Management** ...

Done

Objectives

- **Provide and discuss a concept of Knowledge Portal (K-Portal)**

- **Describe approaches to build K-Portals**

- **Provide examples of K-Portals**

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Why do we need a K-Portal?
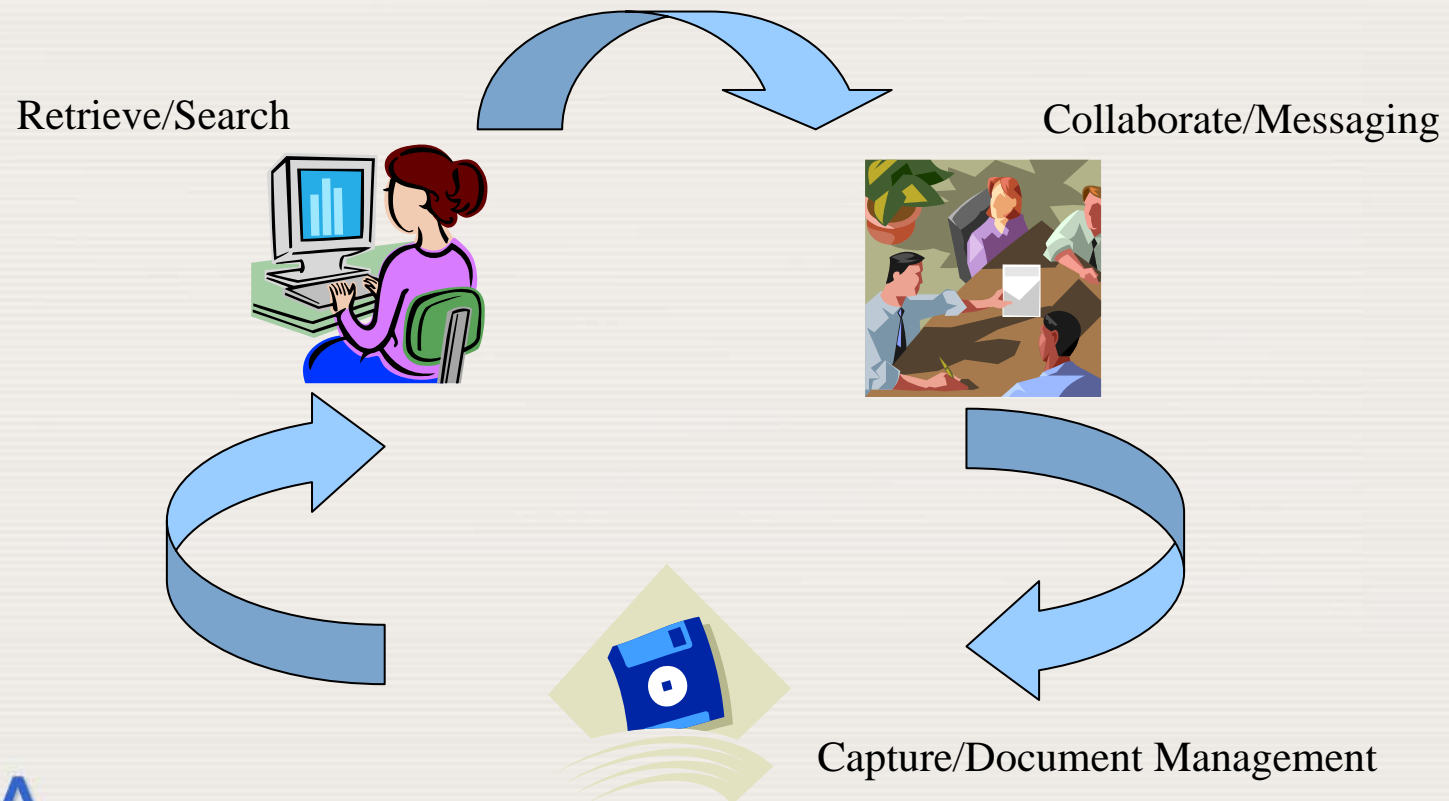
To provide access to everything what is
- 1) implicitly exists (capturing to explicit knowledge, collaboration) and
- 2) explicitly published

within the organization

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From KM Process to KM Technology

- Map technologies onto functionality required to support KM process

Retrieve/Search

Collaborate/Messaging

Capture/Document Management

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Knowledge Portal - Definition

- **Knowledge Portal** (K-Portal) − A comprehensive access structure to the resources which are suitable to support fundamental activities of knowledge management in a given domain in order to communicate, study and do research

- (structured map of knowledge sources)

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Key issues of K-Portal building

- Analysis of Business Needs
  - Driven by day-to-day needs
  - Reflects real business and business processes

- Design and Development
  - Pragmatic (not scientific) approach
  - Requires long-term maintenance, projection, etc.
  - Resources

- Implementation
  - KM: Map – how to organize explicit knowledge in electronic form

- Organizational
  - Project Management
  - Management commitment
  - Involvement of all staff of the organization
  - Qualified both KM and ITC staff
  - Continues improvement

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K-Portal building basics

- Directories / Catalogues

- Search

- Collaboration / Find an expert

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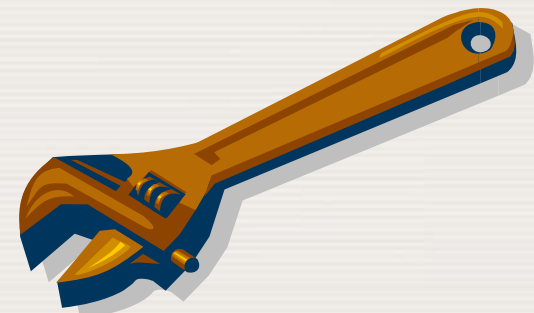
How to achieve a target?

- Directories – design phase
  - easier to organize, more difficult to find

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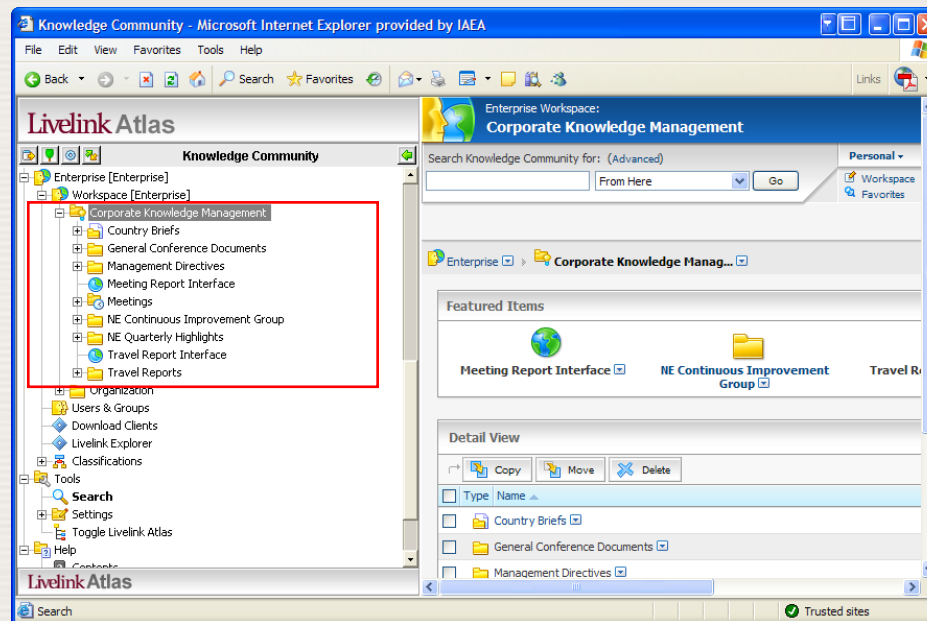
How to achieve a target?

- ## Directories
  - ### anticipate the context of your search
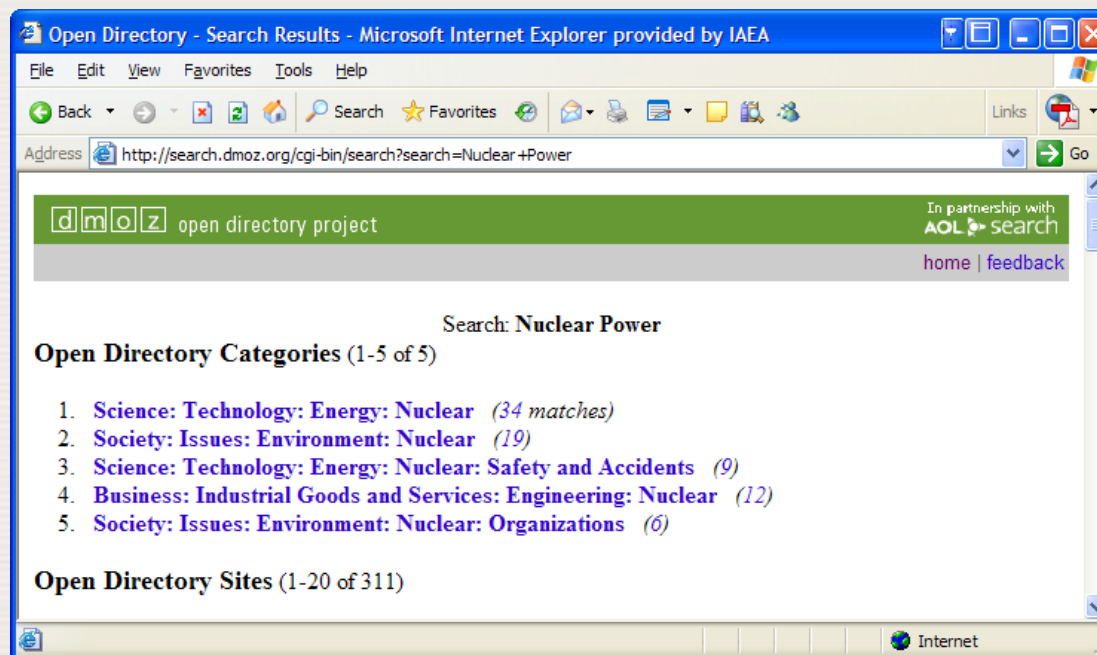
How to achieve a target?

- Directories
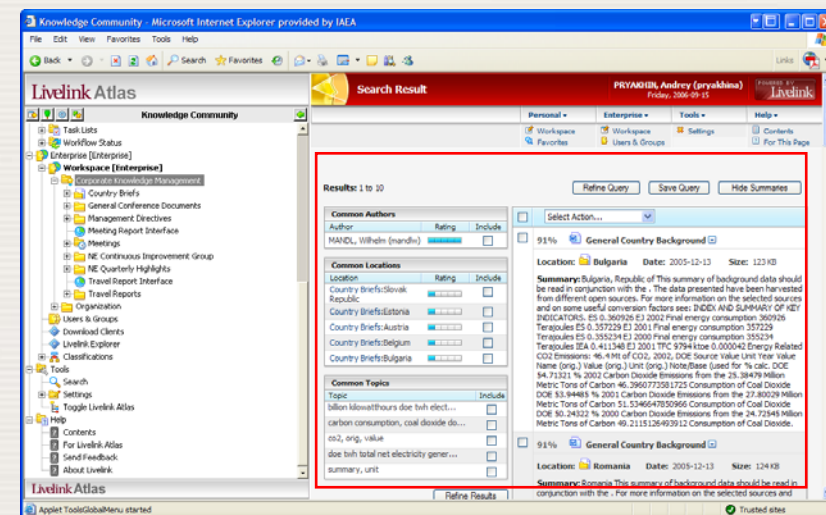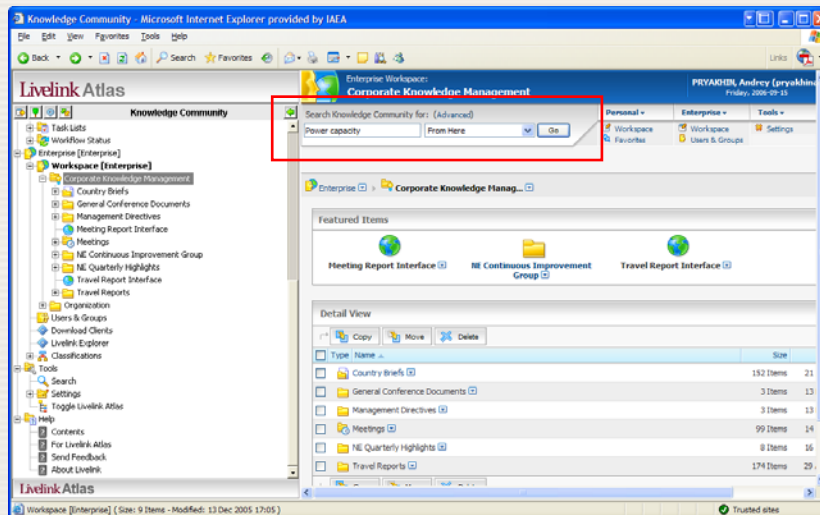 - prompt context dependent areas (similarity in other sub-trees)

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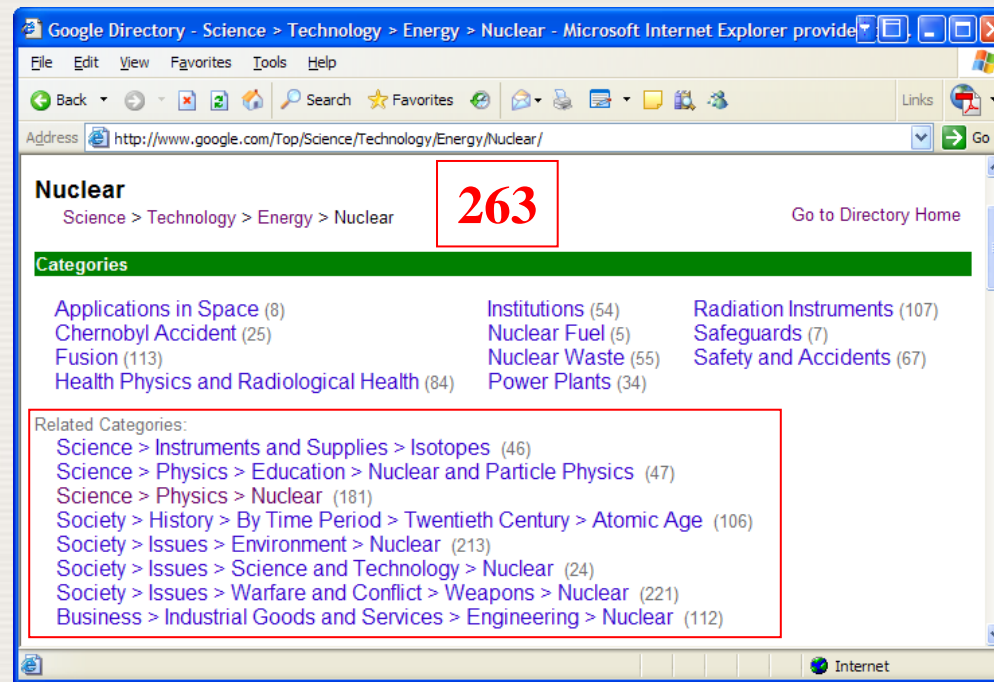
How to achieve a target?

- ## Search engines – run-time phase
  - ### the same terms are used in different areas/talks
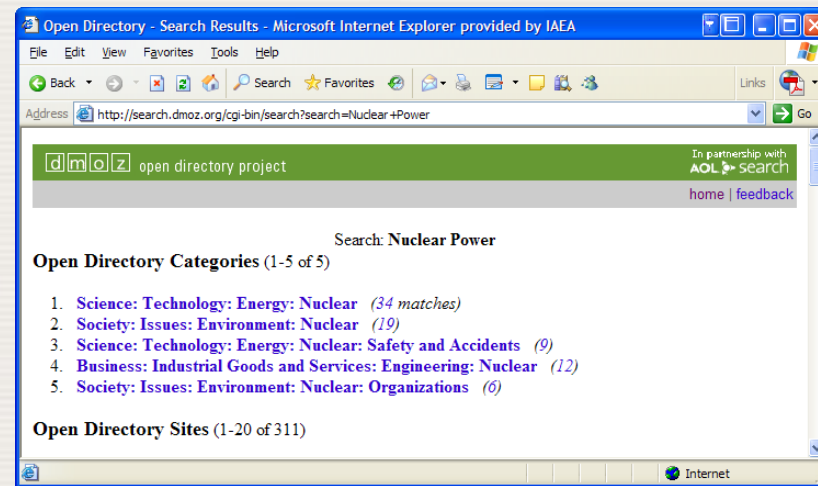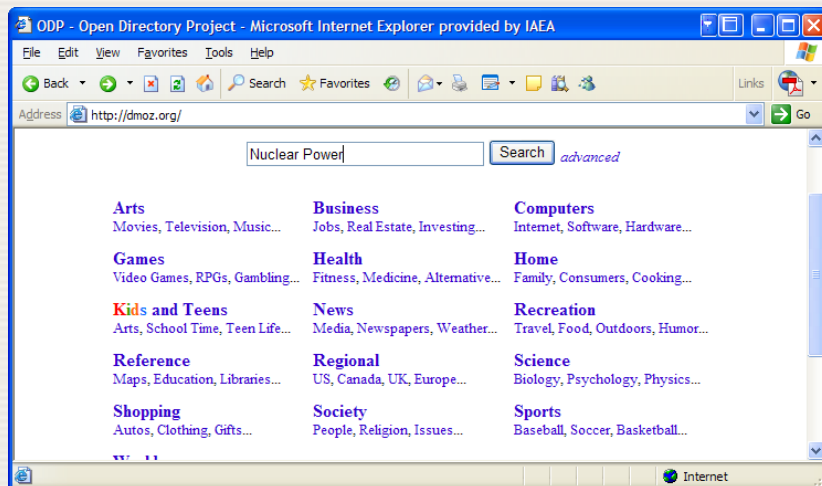
How to achieve a target?

- ## Search engines – run-time phase
  - ### less reliable in time
  - ### requires more accurate queries

Yellow pages

- Collaboration
  - Experts profiles
  - Yellow pages (find the right person and prevent the wheel from being reinvented)

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Yellow pages (continued)?

Tools to build K-Portals

- OpenText
  - Web Content Management System
  - LiveLink (Document Management System)

- Filenet Content Management System

- Mediawiki / Wikipedia

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Examples of K-Portals – public domain

- Google -
  http://google.com

- Yahoo!
  http://yahoo.com

- LinkPageBuilder (Generate Link Pages from Link Tables in Microsoft Access) -
  http://www.romankoch.ch/capslock/lpb.htm
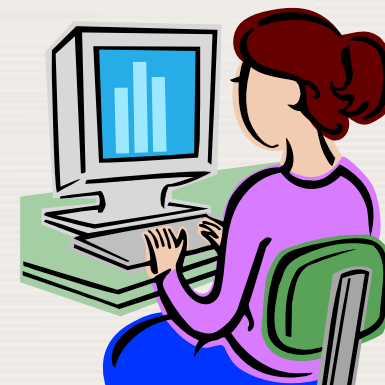
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Examples of K-Portals – IAEA domain

- ***Nucleus*** –
  http://nucleus.iaea.org

- International Nuclear Information System –
  http://www.iaea.org/inisnkm/inis/aboutinis/overview.htm
  http://inisdb.iaea.org/inis/php/index.php

- Power Reactor Information System (PRIS)
  http://www.iaea.or.at/programmes/a2/

- Nuclear Energy Knowledge Portal –
  http://www.iaea.org/inis/aws/index.html

- Electronic Nuclear Training Catalogue (ENTRAC) –
  http://entrac.iaea.org

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Nucleus – IAEA Nuclear Knowledge Portal

- ***Nucleus*** entry point:

  http://nucleus.iaea.org

- Demo

IAEA

Nucleus – needs in

Nuclear Data Services

INIS

PRIS

RRDB

General Public & Media

iaea.org

IAEA Information

www-govatom.iaea.org

isohis.iaea.org

cegdb.iaea.org

dpr.iaea.org

entrac.iaea.org

frdb.iaea.org

tccountryfile.iaea.org

tcpride.iaea.org

maris.iaea.org

oasis

Staff
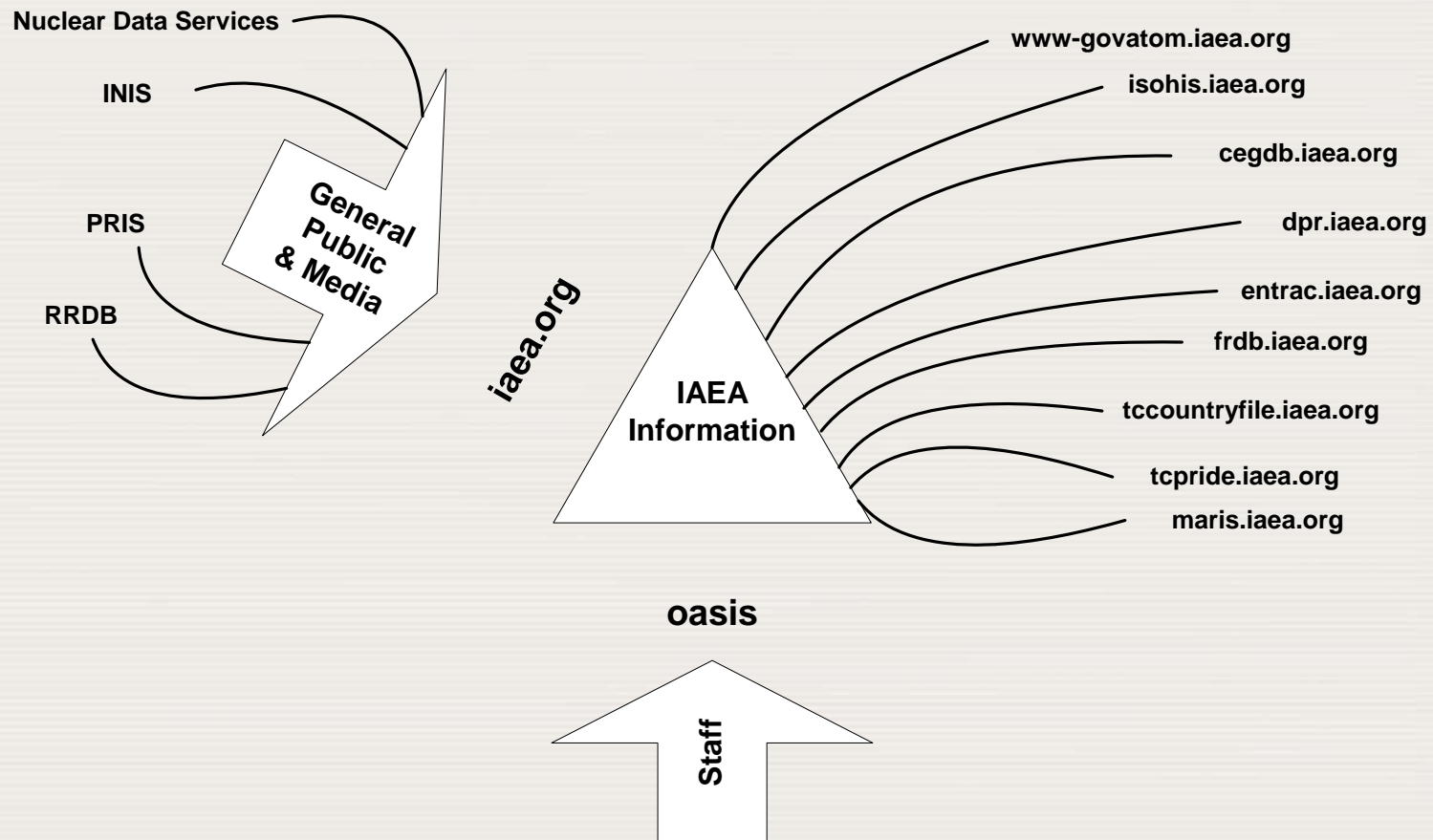
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Nucleus – needs in
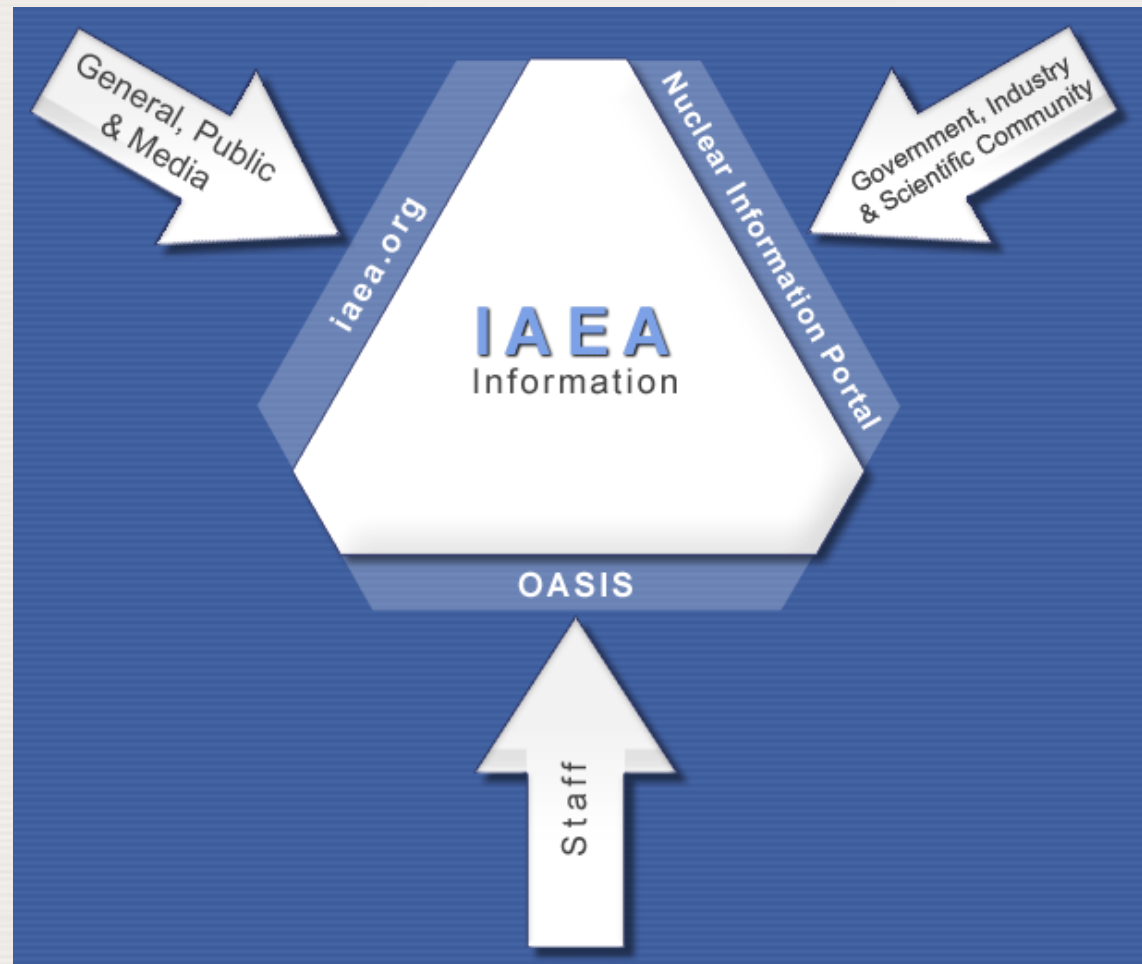
Nucleus – needs in

Challenge	Portal Solution
Different Look & Feel	IAEA Visual Identity
Many registration procedures	Single registration procedure
Many Userids and Passwords	One IAEA userid and password
Primitive search	Search across documents and databases

- Personalization
- Decentralized content management

IAEA

Nucleus – IAEA Nuclear Knowledge Portal

- Project endorsed by DG (October 2004)
- Single entry point for 1) Scientific, 2) Technical and 3) Regulatory Information
- 4 main objectives
  - IAEA Visual Identity
  - Single sign-on and registration procedure
  - Search across websites and databases
  - Personalization & Customization

IAEA

Nucleus – September 2007

- Single Sign-on infrastructure fully implemented
- Search implemented
- >100 complex and restricted information resources added (from NA, NE and NS)
- Initial Taxonomy implemented
- Find an Expert

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Nucleus

- Sample screens

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NUCLEUS
For Nuclear Knowledge & Information

50   1 9 5 7 - 2 0 0 7
Atoms for Peace: The First Half Century

Home   Information Resources   Knowledge Centre   My Portal   Search

Welcome to Nucleus

Nucleus is the common access point to the IAEA's scientific, technical and regulatory information resources. It incorporates, and facilitates access to more than 100 IAEA databases, scientific and technical publications, as well as safety standards.

What's New?

Food Irradiation Clearances Database

This resource has had a make-over and in the process has been integrated more tightly into Nucleus. It is a database on country approvals of irradiated foods for human consumption. The information includes country name, class of food, specific food product, objective of irradiation, date of approval and recommeded dose limit. It is maintained by the Food and Environmental Subprogramme of the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture. More »

International Nuclear Information System (INIS)

Leading worldwide information source of scientific literature on the peaceful applications of nuclear science and technology, dating back to 1970. Over 2.8 million scientific and technical bibliographic references have been indexed & abstracted in English according to agreed rules and standards. More »

New Catalogue Browser

The new browser for the Nucleus catalogue of information resources enables users to search either by subject, source or type of data, as well as by a combination of these three categories. This functionality will enable the integration of a large number additional information resources in the future, as well as making these resources easily accessible to the users. More »

Services

IAEA Library Catalogue

The IAEA Library Catalogue provides bibliographic information on the location and availability of the Library's collection of books, journals, films and videos, selected technical reports and documents, as well as electronic resources. The catalogue contains more than 90,250 records.

More »

Publications

The IAEA is a leading publisher in the nuclear field. Its scientific and technical publications include proceedings of major international conferences, as well as international guides, codes, and standards. The Publications Search facilitates easy access to these publications.

More »

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Information Resources

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IAEA Programme
Websites

Catalogue of Information Resources

Browse by subject, by source and/or by type of data to view the information resources listed alphabetically.

Browse Nucleus	Minimize

By Subject

| All | ⌄ |

By Source

| All | ⌄ |

By Type of Data

| All | ⌄ |

Submit

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By Subject

All

All
Applied Life Sciences
Atomic and Molecular Physics
Engineering
Environmental Sciences
General and Miscellaneous
Isotopes and Radiation Sources
Management of Radioactive Wastes, and Non-Radioactive Wastes from Nuclear Facilities
Nuclear Fuel Cycle and Fuel Materials
Nuclear Physics and Radiation Physics
Specific Nuclear Reactors and Associated Plants

Search Result

Accelerator Driven Systems Database (ADSDB)

Accelerators, research and development of accelerator driven systems, particularly applications in the partitioning and transmutation of nuclear waste.

Open Information Resource | More Information | Add to My Favourites

ADS Nuclear Data Library (ADS-Lib)

Application Library for Accelerator Driven Systems. Application test library in ACE and MATXS format for ADS neutronics design

Open Information Resource | More Information | Add to My Favourites

ALADDIN (ALADDIN)

fusion, atom, molecule, collision, surface interaction

Open Information Resource | More Information | Add to My Favourites

Analytical Quality Control Services (AQCS)

The initial efforts of AQCS focused on the preparation of environmental RMs containing anthropogenic radionuclides for use by those laboratories employing nuclear analytical

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Browse Nucleus	Minimize

By Subject

All

By Source

All

All
NA - Department of Nuclear Sciences and Applications
NAAL - Agency's Laboratories
NAFA - Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture
NAHU - Division of Human Health
NAML - IAEA Marine Environment Laboratories, Monaco
NAPC - Division of Physical and Chemical Sciences
NE - Department of Nuclear Energy
NE/INIS - International Nuclear Information System
NE/PESS - Planning and Economic Studies Section
NEFW - Division of Nuclear Fuel Cycle and Waste Technology
NENP - Division of Nuclear Power
NS - Department of Nuclear Safety and Security
NSRW - Division of Radiation, Transport and Waste Safety
TCPC - Division of Programme Support and Coordination

Open Information Resource | More Information | Add to My Favourites

ADS Nuclear Data Library (ADS-Lib)

Application Library for Accelerator Driven Systems. Application test library in ACE and MATXS
format for ADS neutronics design
Open Information Resource | More Information | Add to My Favourites

ALADDIN (ALADDIN)

fusion, atom, molecule, collision, surface interaction
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Analytical Quality Control Services (AQCS)

The initial efforts of AQCS focused on the preparation of environmental RMs containing
anthropogenic radionuclides for use by those laboratories employing nuclear analytical

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Search Results 1 - 10 of 17 containing: "knowledge management"

Related Links

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Levels of Integration

The search scope includes all information on Nucleus.
To find information in one of the 130 databases, please go to the specific database.

NUCLEUS - Nuclear Reactors Knowledge Base
... Knowledge Bases by Reactor Type. ... Nuclear Fuel Cycle and Materials. ... Waste Management. ... Nuclear Power. ...
http://nucleus.iaea.org/NUCLEUS/nucleus/Content/Knowledge_Centre/Nuclear_Reactors_Knowledge_Base/index.jsp?nav_method=nrkb&module=knowledge
- 15k

FAQ
... causes; (b) The identification of management practices, technologies and policies that ... the case study draws upon the
knowledge, innovations and practices of ...
http://www-infocris.iaea.org/EN/w3.exe$FAQSearch?ID=21 -

NEWMDB WEBSITE
... to make NEWMDB the premier international nuclear waste knowledge base. ... Atomic Energy Agency's (IAEA) Net
Enabled Waste Management Database (NEWMDB) contains: ...
http://www-newmdb.iaea.org/start.asp - 11k

NUCLEUS - Project Objectives
... across multiple knowledge and information resources; Improve user experience via customization and personalization
features. Content management responsibility ...
http://nucleus.iaea.org/NUCLEUS/nucleus/Content/Help/Objectives.jsp?nav_method=objectives&module=knowledge - 13k

Radiation protection in Nuclear Medicine
... be appointed by the hospital?s senior management and should be composed of clinical ... and persons who have special
knowledge of the hazards of radiation and ...
http://rpop.iaea.org/RPoP/RPoP/Content/Documents/TrainingNuclearMedicine/Notes/RPNM_Part13_organization.doc -

Radiation protection in Nuclear Medicine
... radiation have up-to-date knowledge. In some places special training ... ORGANIZATION FOR STANDARDIZATION.
Quality management and quality assurance standards ...
http://rpop.iaea.org/RPoP/RPoP/Content/Documents/TrainingNuclearMedicine/Notes/RPNM_Part09_QA.doc -

IAEA Training Material on Radiation Protection in Radiotherapy
... BSS: Education is part of Management Requirements: Qualified radiation safety experts: ... shall include appropriate
academic knowledge and professional experience. ...
http://rpop.iaea.org/RPoP/RPoP/Content/Documents/TrainingRadiotherapy/Lectures/RT18_RS_programme_WEB.ppt -

NEWMDB WEBSITE PROTOTYPE

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Vision

Find an Expert

INIS operates the largest and most comprehensive bibliographic database in the nuclear field.
Search by author in the INIS database of scientific publications to identify experts who are
active in a given subject in the nuclear field.

The query will return the names and affiliations of experts, together with the titles of recent
publications.

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Select a sub category *

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Keywords or phrases (one per line)

knowledge management   *

Connect keywords using boolean ⦿ And ○ Or operators

* - Mandatory fields.   Submit   Clear

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Find an Expert - Search Results

93 different authors who have recently published in the specified field have been identified:

Result Page: **1** 2 3 4 ... End

1. Beraha, D.

- [2006] *Preservation of competence within the framework of knowledge management of GRS*
  Beraha, D.; Erven, U.; Puhr-Westerheide, P. (Gesellschaft fuer Anlagen- und Reaktorsicherheit (GRS) mbH, Forschungsinstitute, Garching bei Muenchen (Germany))
- [2004] *Nuclear knowledge management: The GRS realisation*
  Beraha, D. (Gesellschaft fuer Anlagen- und Reaktorsicherheit (GRS) mbH (Germany)). E-mail: bea@grs.de Heigl, T.; Westerheide, P. (Gesellschaft fuer Anlagen- und Reaktorsicherheit (GRS) mbH (DE))

2. Sekimura, Naoto

- [2006] *Roadmap on research and development plans for the safety of nuclear power generation*
  Sawada, Takashi (Mitsubishi Heavy Industries Ltd., Tokyo (Japan)); Okamoto, Koji; Terai, Takayuki; Sekimura, Naoto (Tokyo Univ., Tokyo (Japan)); Kimura, Itsuro (Kyoto Univ., Kyoto, Kyoto (Japan)); Maeda, Noriyoshi (Japan Nuclear Energy Safety Organization, Tokyo (Japan))
- [2006] *Systematization of knowledge preservation on engineering systems. Toward next generation LWRs from current LWRs*
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3. Astegiano, J.C.

- [2005] *Status of the French knowledge preservation project for the sodium technology*
  Astegiano, J.C. (French Atomic Energy Commission, Nuclear Energy Division, Cadarache Centre (France)). E-mail: jean-claude.astegiano@cea.fr
- [2005] *Status of knowledge preservation activities on sodium cooled fast reactors in CEA*
  Astegiano, J.C.; Rodriguez, G.; Baque, F. (CEA Cadarache CEA/DEN/CAD, St Paul lez Durance (France)). E-mail: jean-claude.astegiano@cea.fr; gilles.rodriguez@cea.fr; francois.baque@cea.fr

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LIVE DEMO (7-10 min)

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Nuclear Knowledge Portals

- Conclusions

- Questions and answers

- Good bye

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