

GreyForum 3.1 – Grey Literature and Policy Development: The Pisa Declaration
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OPEN ACCESS TO NUCLEAR INFORMATION

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IAEA

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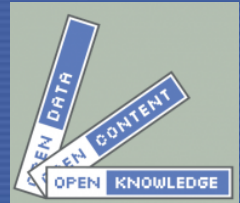


Organizing the world's
nuclear information and
making it universally
accessible

1. 'Open' definition

Knowledge - includes content such as music, films, books, data (scientific, historical, geographic or otherwise), government and other administrative information

Work - denotes the item or piece of knowledge which is being transferred



A work is open if its manner of distribution satisfies the following conditions:

1. **Access:** Work must be available at no cost in a convenient and modifiable form
2. **Redistribution:** Work can be sold or given away by any party on its own or as part of a package
3. **Reuse:** Modifications and derivatives can be distributed under the terms of the original work
4. **Absence of technological restrictions:** Use of an open format (specifications are publicly and freely available without monetary or other restrictions)
5. **Attribution:** Attribution of the contributors and creators may be required
6. **Integrity:** If the work is distributed in modified form, the result should have a different name or version number from the original
7. **No discrimination against persons of groups:** Works should be open to everyone
8. **No discrimination against fields of endeavor:** No restrictions for business use
9. **Distribution of license:** The rights attached to the works must apply to all of its redistributions without the need for an additional license
10. **License must not be specific to a package:** The rights attached to the works must not depend on the data being part of a particular package
11. **License must not restrict the distribution of other works:** No insistence that all other works distributed on the same medium are open

Source: <http://opendefinition.org>

Open data, open government, open educational resources, free and open-source software, open science, etc.

2. Open access

Open access (OA) – unrestricted on-line access to scholarly journal articles, theses, books, chapters, grey literature



Open access can be:

- Gratis OA (free online access)
- Libre OA (free online access plus some additional usage rights often granted through Creative Commons licenses)

Authors can provide open access through:

- Green OA: Self-archiving their journal articles in an OA repository
- Gold OA: Publishing in an open access journal

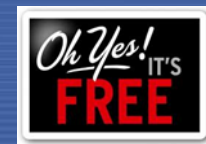
- *Directory of Open Access Journals (DOAJ)*
 - 9,709 registered journals
 - 1,598,913 articles

- *The Directory of Open Access Repositories (OpenDOAR)*
 - Over 2,500 listings

3. Drivers of open access

- Knowledge-based economy
 - A greater reliance on intellectual capabilities than on physical inputs or natural resources
 - Globalization
 - Products and services
 - Research-development-new technology-production
- The knowledge worker
 - Access to information
 - Free use and reuse of information
 - Distribution of knowledge products
- Developments in ICT
 - PCs/laptops/mobile devices
 - Networks
 - ePublishing
- Growth of Internet
 - Worldwide coverage
 - Affordability
 - Popularity
 - Social media
- Outdated scientific publishing model
 - Cost
 - Time
 - Availability

Scientific knowledge spreads and increases faster if there are no restrictions to it!



4. IAEA and Nuclear Information Section (NIS)

■ International Atomic Energy Agency (IAEA)

- The world's leading Agency for cooperation in the nuclear field
- Created in 1957 as part of the United Nations family
- The IAEA works with its 162 Member States and multiple partners worldwide to promote safe, secure and peaceful uses of nuclear technologies
- The IAEA Secretariat is based in Vienna, Austria, with 2300 multi-disciplinary professional and support staff from more than 100 countries



■ Nuclear Information Section (NIS)

- Consists of the *International Nuclear Information System (INIS)*, the *IAEA Library*, and the *System Development and Support Group (SDSG)*
- The objectives are to:
 - foster the exchange of scientific and technical information on the peaceful use of nuclear science and technology (collect, process, preserve and disseminate)
 - Make the INIS Collection of publications **freely available to all Internet users**
 - increase awareness in Member States of the importance of maintaining efficient and effective systems for managing nuclear information resources
 - assist with capacity building and training
 - provide information services and support to Member States & the IAEA



5. Open access at IAEA/NIS

- All **IAEA publications** are freely available on the IAEA website in PDF
- **NUCLEUS** is a common access point to over 130 IAEA scientific, technical and regulatory information resources. This includes databases, websites, applications, publications, safety standards, training material and more. Most of those data resources are open to the public.
 - Database on insect disinfestation and sterilization
 - Mutant varieties database
 - Charged-particle section database
 - Experimental nuclear reaction data
 - Fusion evaluated nuclear data
 - Ion beam analysis nuclear data
 - Nuclear decay data
 - Power reactor information system
 - ZVVIEW interactive plotting of nuclear data

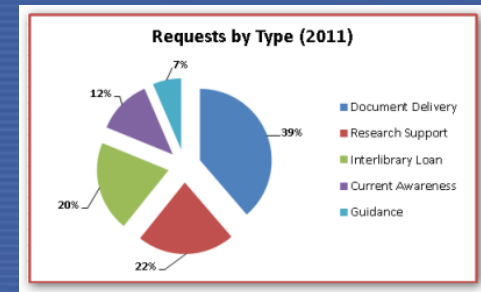


5. Open access at IAEA/NIS (cont.)

- Free, open and unrestricted access to the INIS Collection (3.6 million records and 320,000 full-texts); 152 members
www.iaea.org/inis

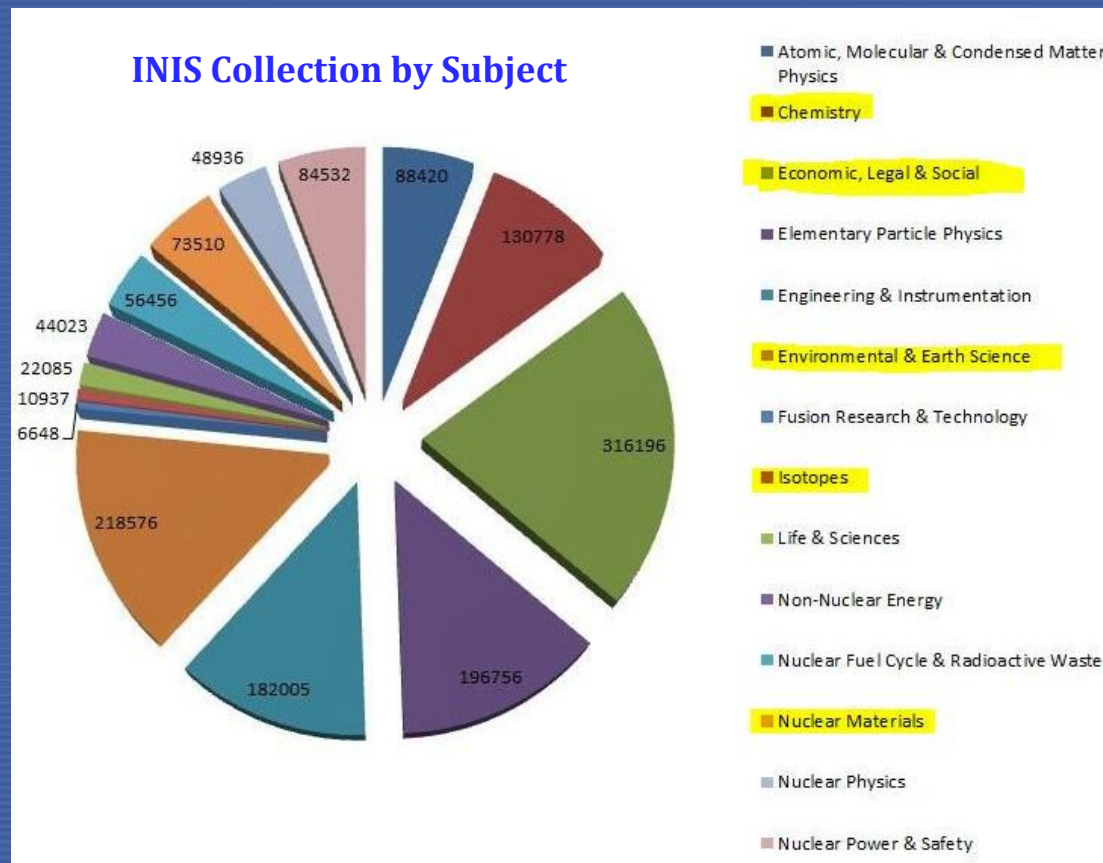


- Free and open cooperation with 50 member libraries of the International Nuclear Library Network (INLN)
- IAEA Library offers free access to its collections and free information services to its users, including visitors to the Vienna International Centre (VIC)

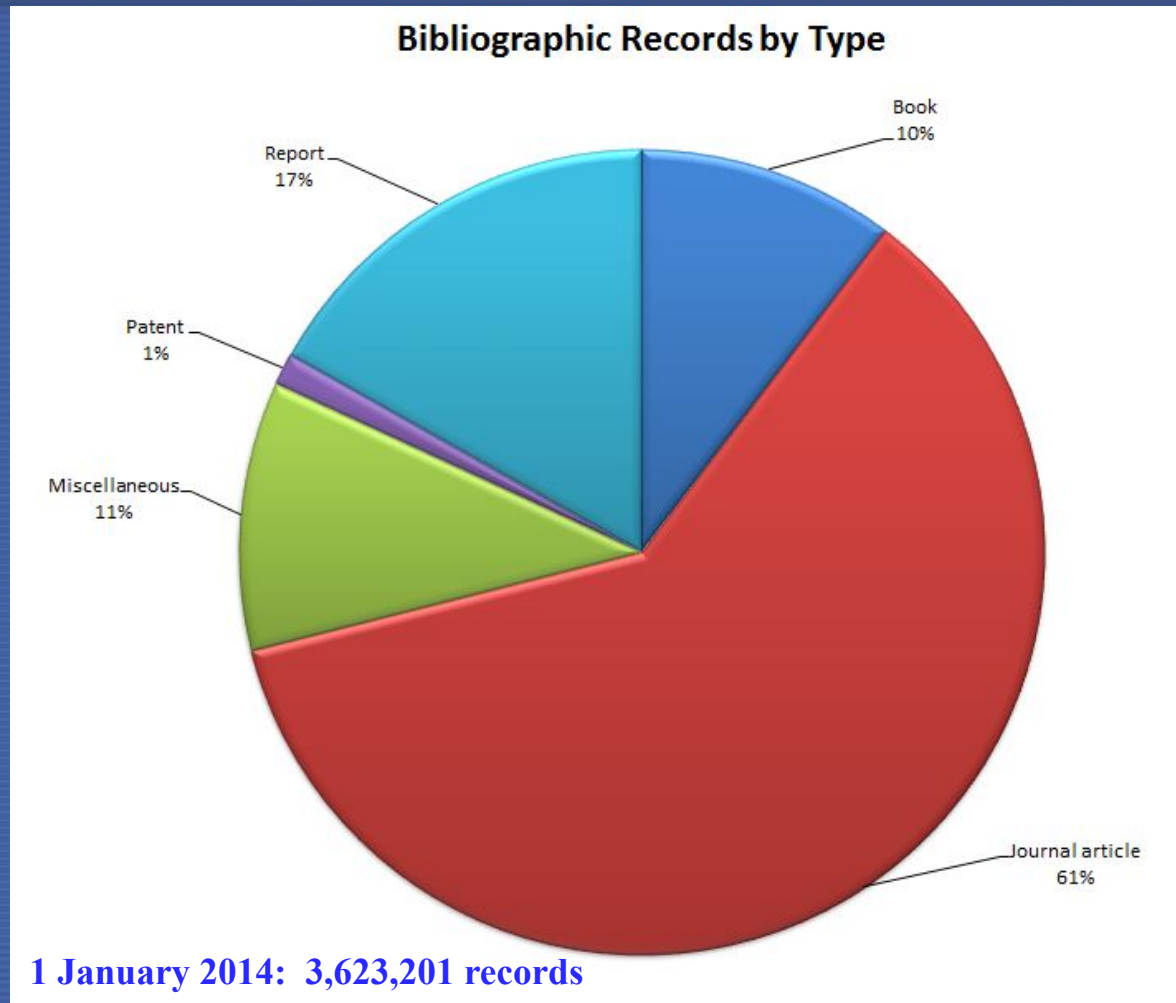


6. INIS Collection

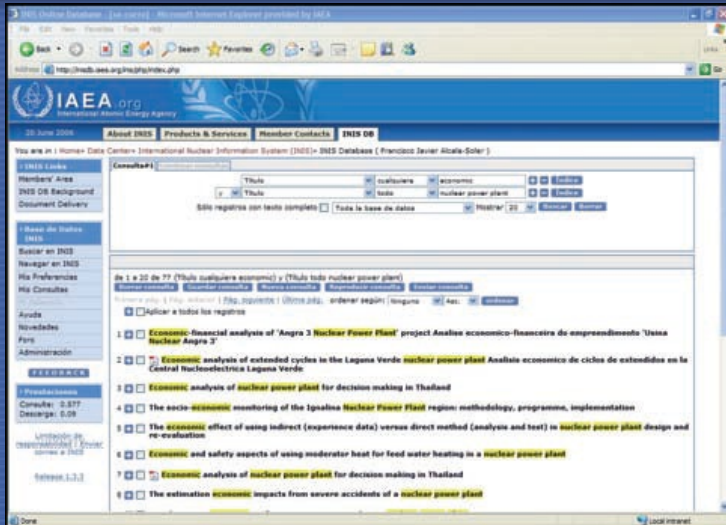
- 120,000+ annual input
- 1 January 2014: - more than 3.6 million bibliographic records
- 482,951 full-text documents (NCL) (13.4%)



6. INIS Collection (cont.)



7. INIS Collection Search



Old Search 1970-2011

- Required 2-step registration
- Cluttered interface made for librarians
- Not easy to use (advanced search only)
- Full-text indexing not implemented
- Limited speed (outdated technology)
- No exports of metadata or user profiling

New Search 2011

- Free and unrestricted access through Internet
- New technology (Google Search Appliance)
- Tremendous speed and scalability
- Uncluttered, easy to use start-up interface
- Advanced options to broaden or tighten search
- Full-text indexing; More relevant results; Faceted/filtered search



Impact of opening access to Google.com and Google Scholar

- 2013: 50,000 searches and 3,000 downloads a month
- 2014: 250,000 searches and 41,000 downloads a month

8. Conclusions

On one hand

- Public sector wants to improve delivery of their products and services
- Tremendous amount of information is available on the Web
- Open access makes information and data discoverable
- Value of information and data is increased through open access
- Empowers people to make more informed and better decisions

On the other hand

- More worry about look-and-feel than about user access ■
- Information needs to be easier to find, access and navigate ■
- We will build and they will come ■
- It takes money to provide open access ■
- Open access is not a project ■
- Open access is a means not an end-in-itself ■
- Open access should lead to quality information and data ■

Being open means lowering barriers to ensure the widest possible use!

Thank you!