

International Symposium

- Sustainability of Digital Media and Content forever -
- How can we cope with Digital Dilemma? -

NII's Activities on Scholarly Information Archiving



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@ DMC, Keio University

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Outline of today's talk

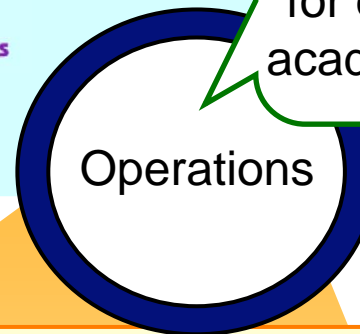
- What is NII?
- CSI : Cyber Science Infrastructure
- E-journal Archive of Japanese materials
- Institutional Repositories
- Light archive of Foreign e-journals
- Digital collections in Humanities
- Dark archive projects in STM e-journals

Missions of NII(National Institute of Informatics)

Missions to advance integrated research and development in the field of Informatics



Promoting the Cyber Science Infrastructure for dissemination of academic information



1) Academic Information Infrastructure (Network)

Operation of SINET3

2) Academic Information Infrastructure

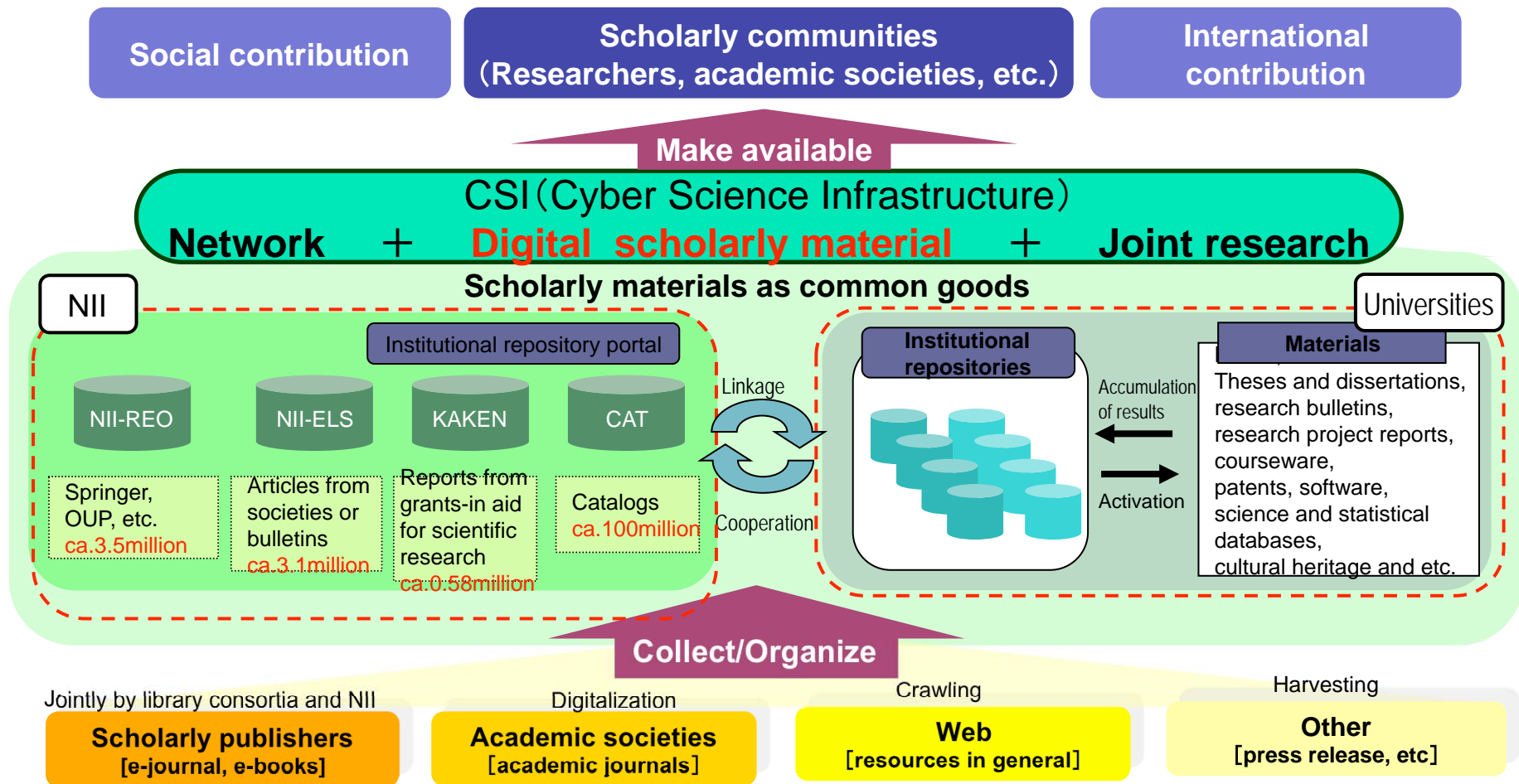
Union catalog databases, Support for construction and collaboration of institutional repositories, Electronic Library Service, International Scholarly Communication Initiative, Scholarly and Academic Information Portal

3) IT education and training program

Providing and supporting a range of training programs

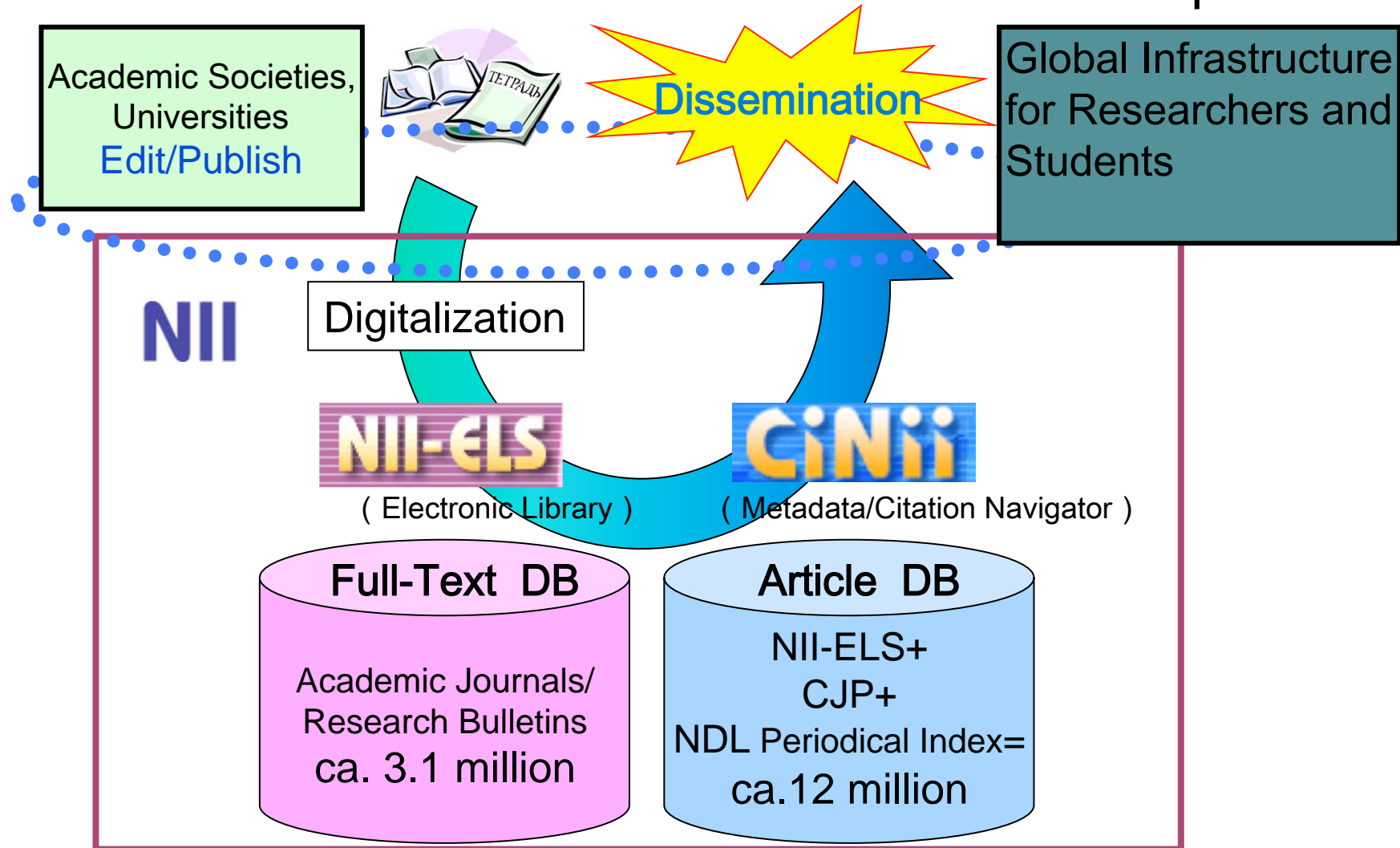
Next Generation Scholarly Information Infrastructure

Over CSI, NII provides various scholarly digital resources such as full-text e-journals, research information, and science DBs which are indispensable for research and education in cooperation with universities and academic societies. In 2005, NII launched a joint-initiative for the promotion of institutional repositories with universities. Currently, 70 universities are engaged in this initiative and NII provides a portal service by harvesting digital resources created by universities.



Overview of NII Journal Article Information Services

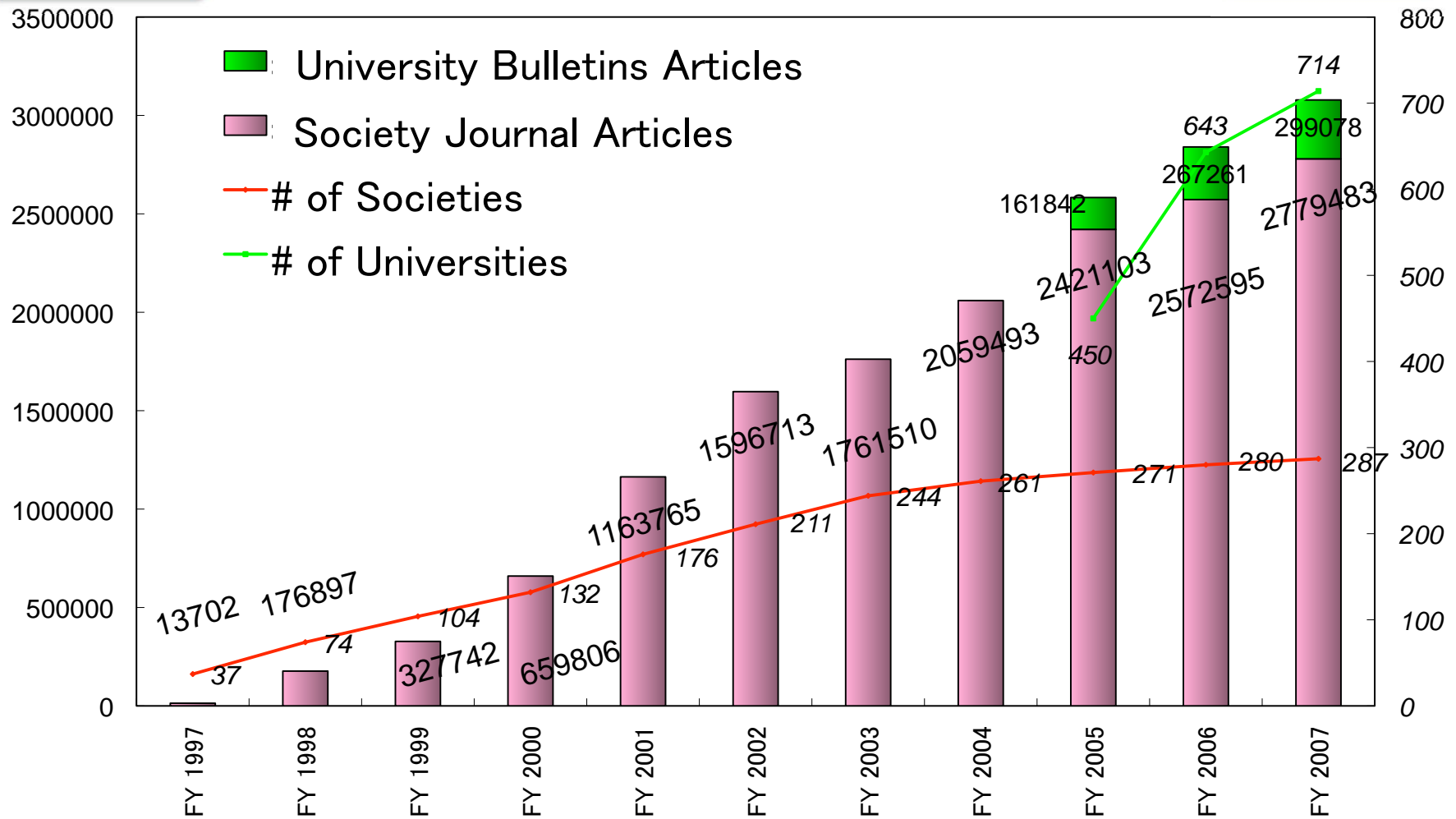
As an Academic Information Infrastructure in Japan



The Growth of Full-text articles in NII-ELS

Articles

Academic Societies



Journals for Digitization in NII-ELS

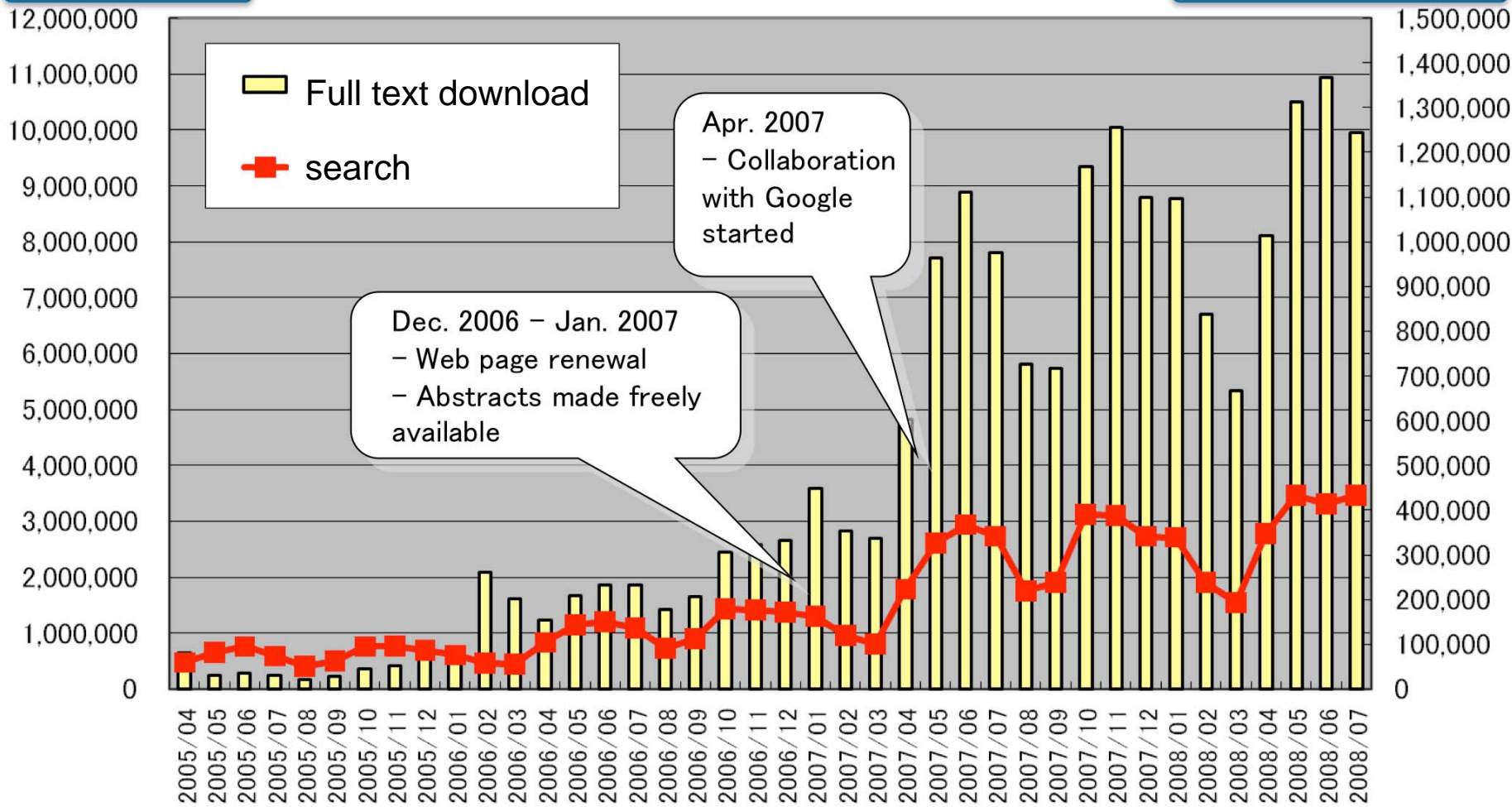
	Number of Journal Titles	Open Access Journals (Number /ratio) (*1)		Retrospective Digitization and Archive (*2)		Open Access Archives (Number/ ratio) (*3)		Number of Technical reports
Humanities	100	46	(46%)	76	(76%)	36	(47%)	19
Law	4	4	(100%)	3	(75%)	3	(100%)	1
Economics	26	17	(65%)	17	(65%)	11	(65%)	3
Science	101	51	(50%)	73	(72%)	36	(49%)	58
Engineering	296	141	(48%)	195	(66%)	110	(56%)	212
Agriculture	72	53	(74%)	53	(74%)	35	(66%)	27
Medicine	115	84	(73%)	77	(67%)	61	(79%)	22
Subtotal	714	396	(55%)	494	(69%)	292	(59%)	342
University Bulletins	5,526	*1: Number and ratio of open access journals *2: Number and ratio of journals which are retrospectively digitized from the first issue. *3: Number and ratio of open access journals which are retrospectively digitized from the first issue.						
Total	6,582							

As of the end of September, 2008 7

The Growth of CiNii/ELS Usage

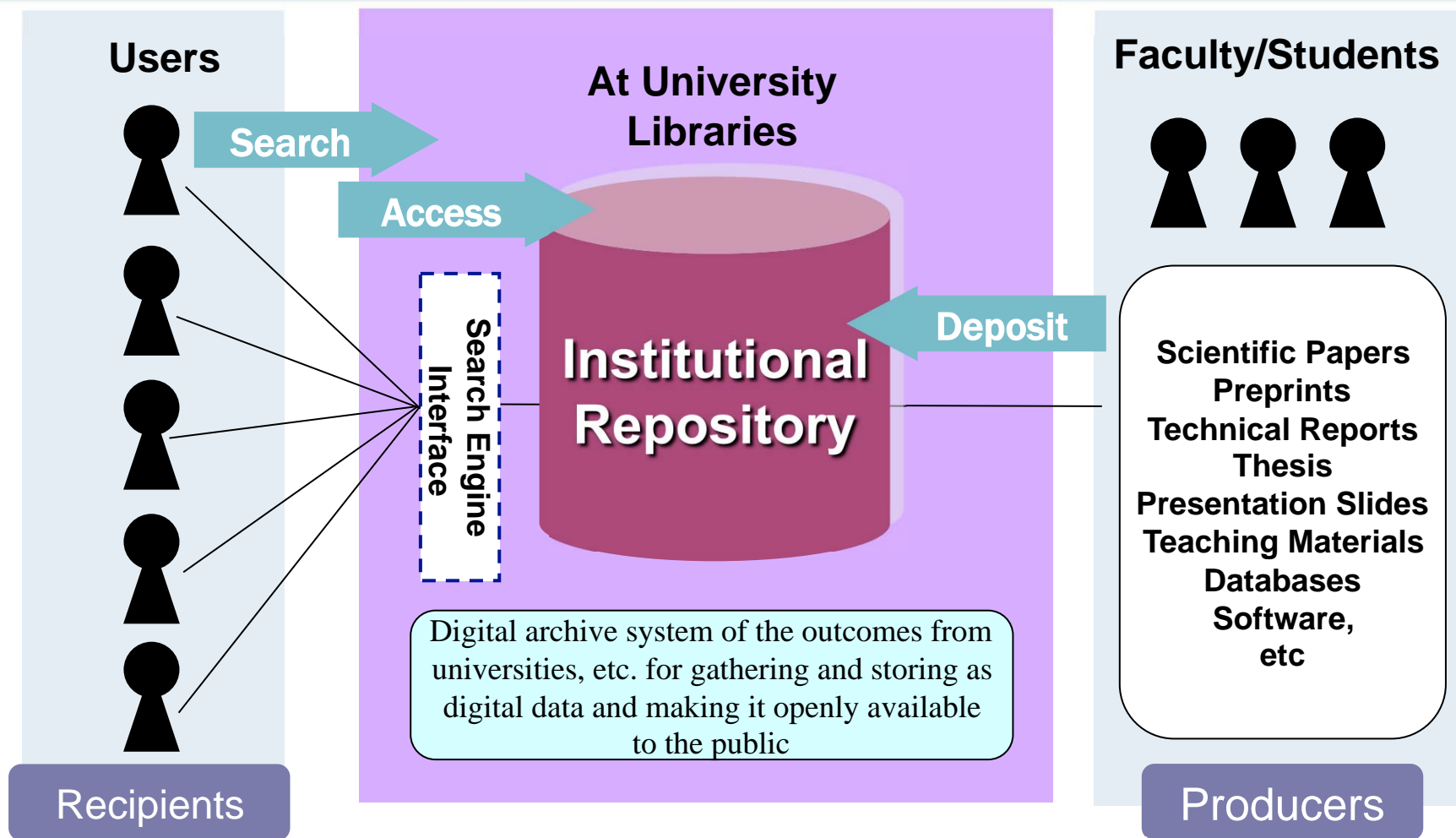
Search

Full text PDF download



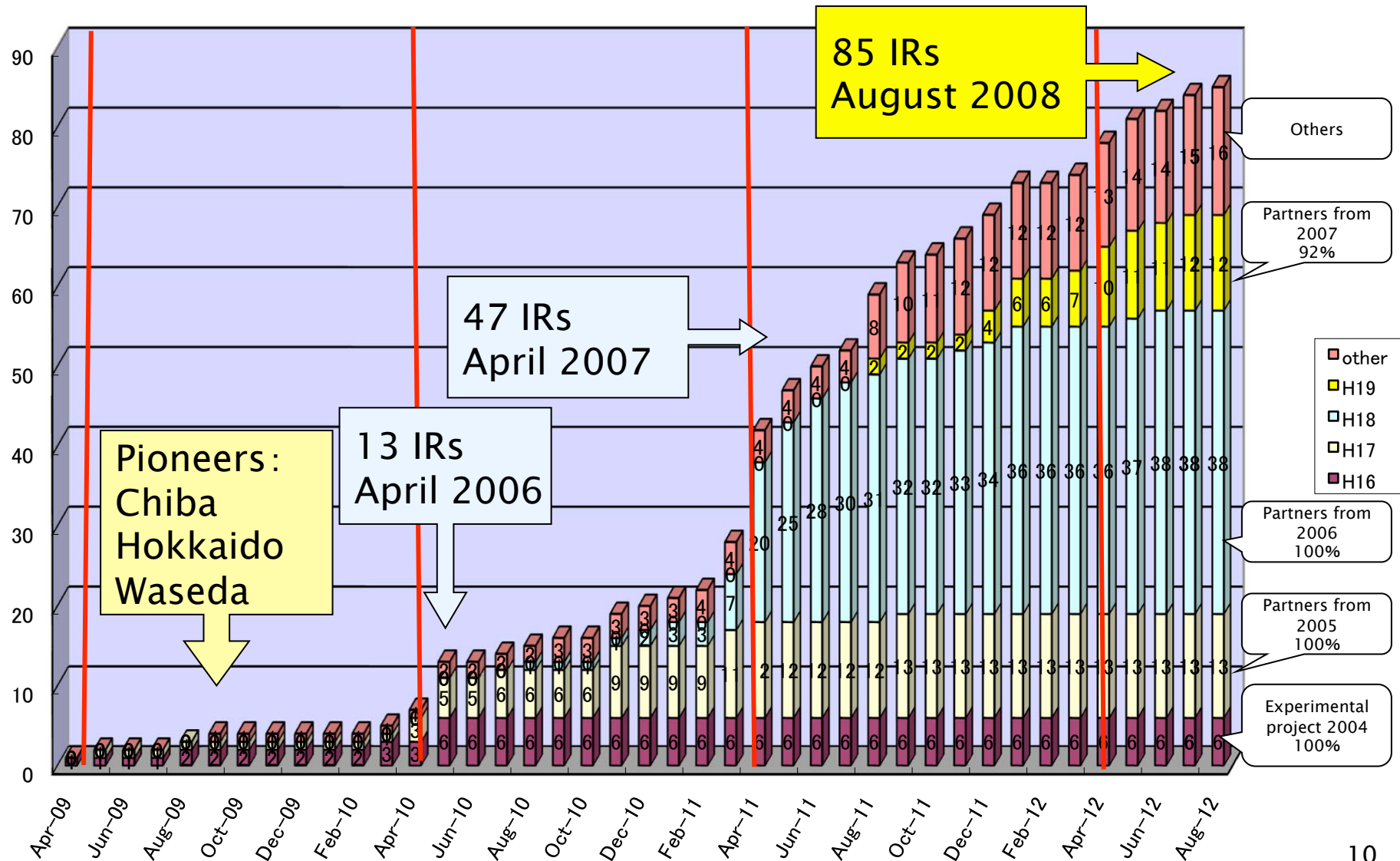
← FY 2005 → | ← FY 2006 → | ← FY 2007 → | ← FY 2008 →

Institutional Repositories



NII supports construction of IRs and promotes collaboration among universities since 2005.

Increase in Number of IRs in JAPAN



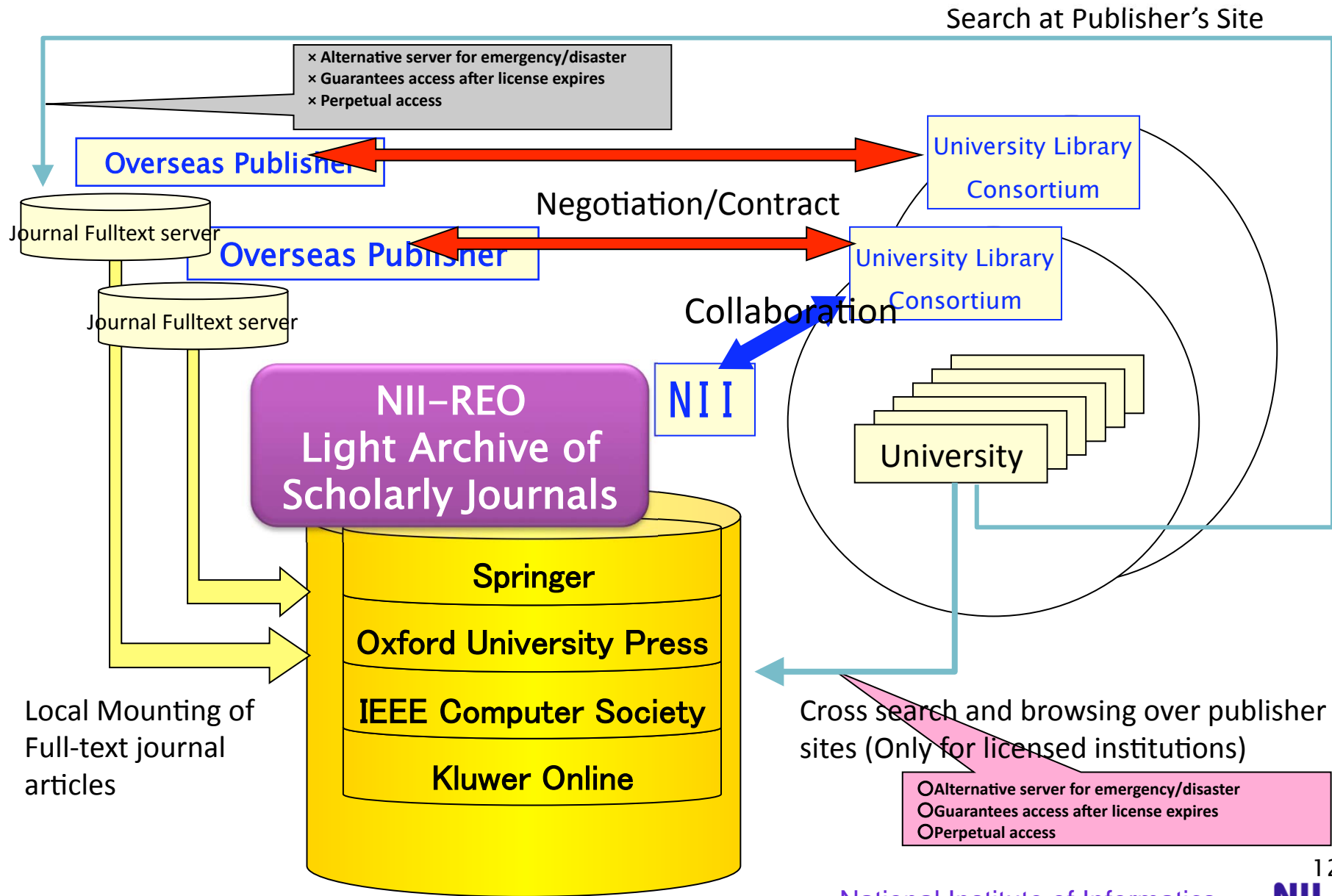
IR contents:Ratio of Full text

Type	Number of records	Ratio of Full text
Journal Article	173,283	30.6%
Thesis or Dissertation	28,632	65.9%
Departmental Bulletin Paper	187,394	74.2%
Conference Paper	35,328	10.2%
Presentation	1,106	63.7%
Book	13,954	35.5%
Technical Report	1,964	18.5%

Type	Number of records	Ratio of Full text
Research Paper	8,337	57.6%
Article	20,514	77.9%
Preprint	145	89.7%
Learning Material	2,897	16.1%
Data or Dataset	450	89.3%
Software	6	0.0%
Others	53,845	80.5%
Total	527,855	54.1%

- ✓ NII Institutional Repositories DataBase Contents Analysis
http://irdb.nii.ac.jp/analysis/index_e.php (Last accessed:2008/08/31)

NII-REO: The Archive of Publisher Journals



The Content of NII-REO

Collections	Number of Articles	Remarks	Licensed Universities (July, 2007)
Springer Online Journal Archive	2 M	1847-1996, ~800 titles	132
Oxford University Press	800 k 130 k	1849-1995, ~140 titles 1998-2003 test use	106 (NSL)
Kluwer Online	350 k	1996-2005, ~500 titles	60
IEEE Computer Society	200 k	1988-present, ~25 titles	3
Sum	3.48 M		211

Collaborative Acquisition of Digital Collections in Humanities

- Expansion of NII-REO model
 - From E-Journals to Large Digital Collections
 - From STM to Humanities
- To realize a good/big bargain in cooperation with many libraries at a time
- To locally mount at NII server and to provide service for domestic institutions

Examples of Humanity Collections

- **House of Commons Parliamentary Papers Online (HCPP)** : the UK parliamentary documents in the 18th and 19th centuries. HCPP will be introduced in FY 2009.
- **Eighteenth Century Collections Online (ECCO)** : Collection of the 18th century English publications by British Library.
- **Early English Books Online (EEBO)** : English publications before 1700.

Worldwide Archives of E-Journals

- Koninklijke Bibliotheek (National Library of the Netherlands)
 - Contracts with Elsevier, etc
 - To finally archive 9M articles
 - **Dark Archive** (Only accessible in failure at publisher's site)
 - But walk-in users of the library can access at any time
- LOCKSS (Lots of Copies Keep Stuff Safe)
 - Stanford University's initiative
 - Distributed archiving over multiple libraries(200 libraries and 200 publishers participate.)
 - Libraries crawls and caches the licensed materials.
 - **Dark Archive**

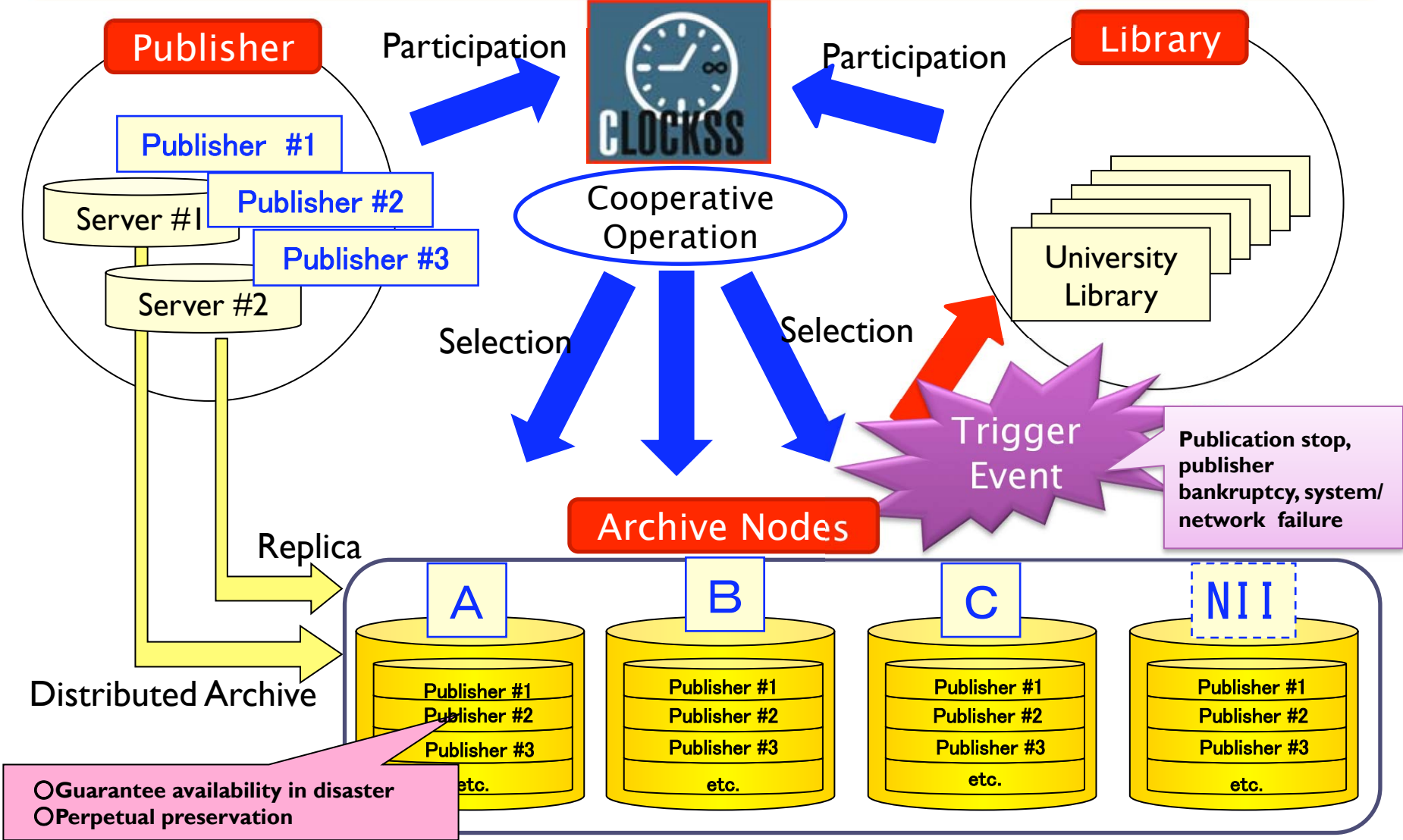
NII's Participation in CLOCKSS

■ CLOCKSS (Controlled LOCKSS)

- A large-scale archiving project employing LOCKSS technology
- Two years trial since 2006, and formal operation from 2008
- Starts with 7 libraries and 11 publishers
- To plan to deploy 12 to 14 archive nodes in the world
- **Dark archive** distributed internationally and geographically
- A sample of trigger event
 - CLOCKSS archive accepted access when SAGE Publications stopped publishing "Graft" in January, 2008.

■ NII has announced its participation in CLOCKSS as the first Asian node and will deploy an archive in January, 2009.

CLOCKSS: Conceptual Diagram



Cultural Heritage Online

Trial since April 27, 2004.

Open service since April, 2008 <http://bunka.nii.ac.jp/>

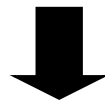


● **Cultural Heritage Online**: Promoted by the Agency for Cultural Affairs, MEXT and MIC.

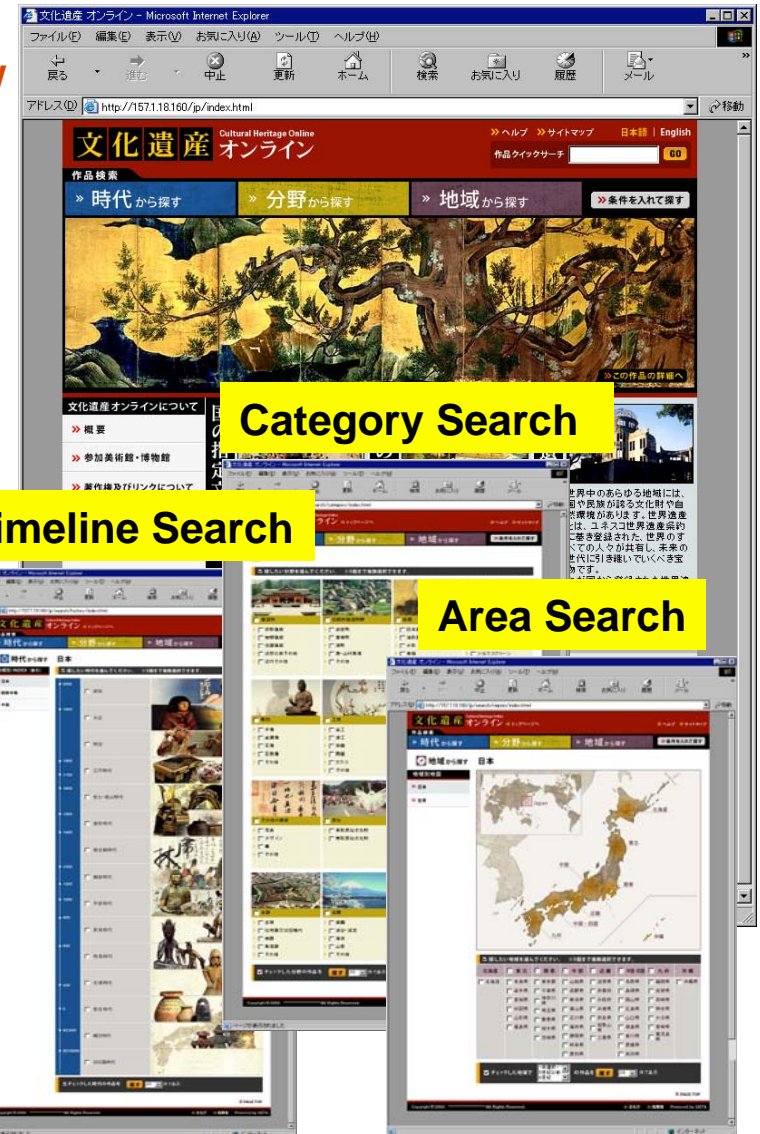
● The **National Portal** for all museums and cultural heritage in Japan.

● NII provides the technical support for constructing the effective information service.

Participants in FY2004: 30 museums



Participants in future: 1000 museums



Summings-up

- Dark archive vs. Light/gray archive
- National activities vs. Consortia activities
- Institutional repositories supplement various e-journal services as archives of digital contents.
- For STM e-journals, many retrospective digitization projects are undertaken.
- For Books, there is a move towards e-books in text books. Retrospective digitization is a hot issue.