

# Preservation Strategy Proposals for Licensed Resources of CSDL

## 国家科学数字图书馆 第三方数字资源长期保存政策建议

*Xiaolin Zhang, Ling Wan*

张晓林，宛玲

Chinese National Science Digital Library , CAS  
中国科学院国家科学数字图书馆项目管理中心

## Preservation Strategy Proposals for Licensed Resources of CSDL

- ❖ **1. Introduction前言**
- ❖ **2. Current status for d-resources数字资源状态**
- ❖ **3. Preservation policy needs长期保存政策需求**
- ❖ **4. Suggested policies政策建议**
- ❖ **5. Current actions & issues当前行动与问题**

# 1. Introduction

## ❖ Chinese National Science Digital Library (CSDL)

### ☞ Serving

- ❖ 80+ research institutions in 20+ cities
- ❖ Researchers/students in basic sciences and hi-tech fields

### ☞ Providing

- ❖ A collaborative digital resource system
- ❖ An integrated digital service platform
- ❖ A cooperative information service system

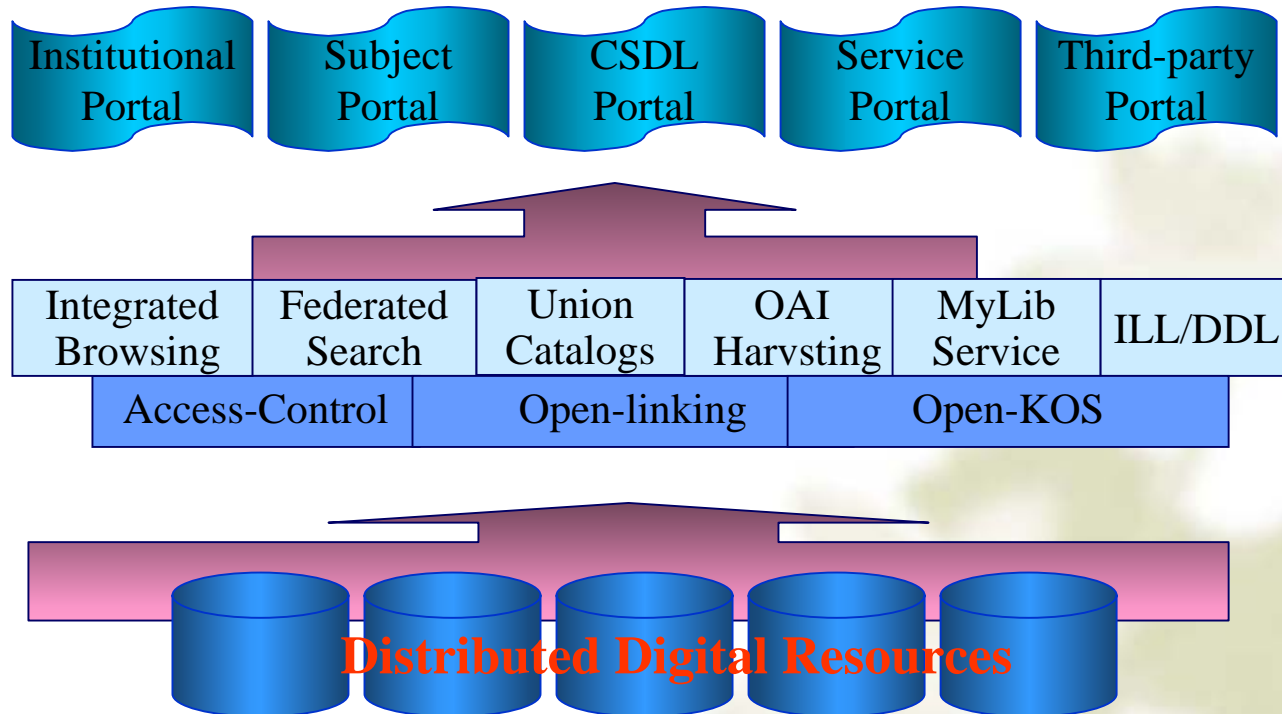
### ☞ Project Implementation

- ❖ From 2001-2005, with plans to extend to 2010
- ❖ Jointly developed by the central lib, 4 regional libs, 80+ institutional libs, and other partners

# 1. Introduction

## ❖ Chinese National Science Digital Library (CSDL)

### 🔗 Basic Architecture



# 1. Introduction

- ❖ Chinese National Science Digital Library (CSDL)
  - ✧ Digital Resource Development
    - ❖ Licensed Full-text Databases
      - ✧ Journals, books, reference works, dissertations, etc.
    - ❖ Licensed A/I Databases
      - ✧ Journals, conferences, patents, dissertations, citations, etc.
    - ❖ Self-developed Full-text Databases
      - ✧ Special digital resources, CAS dissertations, etc.
    - ❖ Self-developed A/I Databases
      - ✧ Chinese Scientific Literature Abstracts and Citations systems
      - ✧ Union Catalogs, etc.
    - ❖ Subject Portals with their resource navigation systems

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## 2. Current Status of Licensed Digital Resource in CSDL

### ( 1 ) Licensed digital resources

Type of database	Number of database	Number of Titles
Full-text e-journal non-Chinese	10	about 3000
Full-text e-journal in Chinese	1	over 9000
E-book or E-dissertation non-Chinese	4	about 50000
E-book in Chinese	1	over 25000
Factual databases	3	Over 900 volumes
Reference databases (abstracts and index)	11	

## 2. Current Status of Licensed Digital Resource in CSDL

### ❖ ( 2 ) Access arrangements

- ↪ Local CAS mirror sites
- ↪ Remote Chinese mirror sites
- ↪ Remote third-party mirror sites, in the country or outside, contracted by the content providers
- ↪ Remote host sites operated by the content providers



## 2. Current Status of Licensed Digital Resource in CSDL

### ❖ ( 3 ) Challenges to sustainable access

- ✧ To most licensed resources CSDL only purchases the right of access (with some promises about “sustainable access”)
- ✧ When the contract expires, CSDL’s rights to the purchased resources are not reliably guaranteed and supported
  - ❖ Outright unable to access, extra payment needed to access, old system or limited functions, etc.
- ✧ During the course of contract, failures threaten access
  - ❖ natural disasters, disastrous malfunction, business or legal failures, war, political or international problems, etc.

## 2. Current Status of Licensed Digital Resource in CSDL

### ❖ ( 4 ) Current preservation arrangements

- ❧ Contractual requirements policies
- ❧ Contractual promises from most content providers for “sustainable access”
- ❧ Raw data discs for most A/I providers
- ❧ Some supporting systems from some A/I providers

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### 3. Preservation policy needs

#### ❖ ( 1 ) Objectives of CSDL digital preservation policies

- ✧ Ensure sustainable access to the resources and their integral services
- ✧ Ensure the resources reliably become integral parts in the CSDL/CAS information resource system
- ✧ Fulfill CSDL's duty as a National Library of Sciences in the NSTL and contribute to the sustainability of the national S&T information resource system
- ✧ Ensure the legal reliability, cost effectiveness, and operational manageability of CSDL preservation efforts

### 3. Preservation policy needs

#### ❖ ( 2 ) Factors to be considered

##### 🌀 What should be preserved?

- ❖ Use value and Strategic Value of the resources
- ❖ Un-replaceability of the resources or the access channels
- ❖ Legal feasibility

##### 🌀 Who will preserve the resources?

- ❖ Unique purchaser?
- ❖ Collaborative purchasers and collaborative responsibilities?
- ❖ Legal requirements?
- ❖ Competency and reliability?
- ❖ Authorization feasibility?

##### 🌀 How to preserve the resources

- ❖ Content, systems, rights, management, financial support, etc.



### 3. Preservation policy needs

#### ❖ ( 3 ) General guidelines for CSDL

- ✎ CSDL should develop its digital preservation strategy and policies
- ✎ CSDL should integrate its preservation strategy into its overall resource development planning, and into the administration of resource evaluation, contract & rights management, system development, and financial planning
- ✎ CSDL should strive to preserve those strategically important research digital resources even though they have print backups
- ✎ CSDL should target those unique, uniquely accessed, or uniquely acquired digital resources as its preservation priorities
- ✎ CSDL should place its preservation effort on sound legal basis
- ✎ CSDL should support cooperative preservation by NSTL, NLC, CALIS, and should support its own cooperative preservation responsibilities
- ✎ CSDL should encourage publishers and other third- parties to carry out preservation test, but as back-up services for the time-being
- ✎ CSDL should continually refresh or upgrade its digital preservation strategy and related management practices



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## 4 Suggested Policies

### ❖ ( 1 ) General Policies for preservation modes

#### 🌀 Preserving the intergraded usage environment

- ❖ Preserve the data (bit stream)
- ❖ Preserve the information for effective use of the data (i.e., formats, processing info)
- ❖ Preserve the use environment (i.e., software, linking mechanism, running systems)
- ❖ Try to preserve management info of data and use environment (i.e., authentication, rights management, KOS)

#### 🌀 Preserving the integrated application system

- ❖ Require dark archive (only pre-formatted data) for all
- ❖ Require Semi-Dark Archive (data with usability and integrity checking) for all
- ❖ Light Archive (data and application systems) for A/I databases

## 4 Suggested Policies

### ❖ ( 2 ) Acquisition policies for preservation

- 🔗 Providers fully recognize CSDL's rights for sustainable access
- 🔗 Providers timely provide perpetual copies, or grant preservation rights for the data in CAS local mirror sites
- 🔗 Providers timely provide full info on data format, database structure, indexing and retrieval methods, as well as technical processing methods needed for normal services
- 🔗 **When a contract terminates, the providers permit CSDL's continual usage of the purchased resources including related services**
- 🔗 **When market failure occurs, CSDL automatically assumes the rights to provide online access using the perpetual copies within the specified range of the original contract**
- 🔗 **CSDL promises to protect the appropriate legal rights of the providers**
- 🔗 **CSDL must realize those requirements through legally binding documents**

## 4 Suggested Policies

### ❖ ( 3 ) Technological policies for preservation

- ✎ CSDL should develop its own digital preservation technology systems based on collaborative effort with other major partners
- ✎ CSDL must adopt open standards for constructing preservation systems and for managing preservation processes
- ✎ CSDL should secure its rights and abilities to preserve necessary software for data management, retrieval, and related services
- ✎ CSDL should establish a sound rights management mechanism for preservation of digital resources
- ✎ CSDL should conduct research on distributed preservation mechanisms

## 4 Suggested Policies

### ❖ ( 4 ) Management policies for preservation

- ✎ Establish a normative process for selecting, appraising, authorizing, and re-evaluating trusted repository operators
- ✎ Establish back-up mechanisms for preservation based on crisis-management approach
- ✎ Specify, in details and in legal terms, the responsibilities, obligations, and rights of those involved in the whole preservation life cycle
- ✎ Establish active and reliable cooperation mechanisms for digital preservation

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## 5 Current actions & issues

### ❖ ( 1 ) Current actions

- ✎ CSDL has signed an agreement with a domestic fulltext database provider for granting CSDL rights for perpetual usage of the data in the CAS local mirror sites
- ✎ CSDL has put into the contract with most A/I database providers for them to supply the backup data by CD-ROM which can be used when contract terminates
- ✎ CSDL has agreements with some A/I providers to provide raw retrospective data in CD-ROM while subscribing its web database
- ✎ CSDL has agreement with one A/I provider for its provision of an intranet-based parallel service system
- ✎ Most full-text providers agree on the needs and rights of CSDL for sustainable access, but hesitate on concrete means

## 5 Current actions & issues

### ❖ (2) Urgent issues

- ✎ Systematic strategy, action plans, and management mechanisms are not yet in place
- ✎ Technological know-how is in urgent need and technical systems are to be built
- ✎ Effective cooperative preservation strategies and reliable responsibility systems remains to be established
- ✎ Effective strategies and mechanisms for preserving self-developed and web resources are to be worked out
- ✎ Reliable and effective mechanisms and process management are needed for verification, preservation, and service provision of already owned perpetual copies
- ✎ Some providers are still evading their responsibilities to support preservation and sustainable access

## 5 Current actions & issues

### ❖ ( 3 ) Open call for cooperation

- ❧ A Chinese strategy group to investigate a national strategy for preserving S&T digital resources, especially the licensed ones
- ❧ A Chinese round table to share and coordinate the policies, best practices, and issues in preserving the licensed digital resources
- ❧ An international cooperation mechanism to exchange knowledge and information, and to provide advanced training and advices, in digital preservation
- ❧ CSDL and LCAS is open to ideas and actions!



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# Thanks!