



Result of the survey of electronic information resources on the Internet

Electronic Library Development Office

This is an abridged translation of the article of the same title in the NDL Monthly Bulletin No. 484

1 Outline of the Survey

(1) Background—progress of the Internet

As the Internet and other telecommunication and information technologies progress rapidly, online electronic resources such as online magazines are expanding their quality and quantity every day. Such electronic publications are not preserved like former publications in paper form, and after revising, changing and deleting, most of the original information is lost. To use online electronic publications as valuable resources and compile and preserve them—these are big challenges for the library.

(2) Acquisition policy for online electronic publications

Law No. 37, April 7, 2000, revising the National Diet Library Law, became effective on October 1, 2000. In accordance with this revision, we started to acquire offline electronic publications such as CD-ROMs, DVDs and videotapes through the legal deposit system. As for the online electronic publications, we revised “Guidelines for acquisition of materials” (Librarian’s Decision No. 8, September 22, 2000), which prescribes that “the Library will select online electronic publications (texts, images, sounds or programs distributed via telecommunication lines) according to their usefulness for library services and acquire them by means other than the legal deposit system”.

(3) Object and outline of the survey

A questionnaire on electronic resources on the Internet was conducted in order to grasp the present situation of online electronic information resources and clarify the problems related to acquisition and preservation. We also added some questions to ask institutions that are providing electronic resources how they would cooperate with us in acquisition and preservation. We distributed the questionnaire to the institutions below and about 2,300 of them responded.

List of institutions

Kind of institution	Round number	Response rate (%)
Administrative agencies	200	70.9

(central government offices, etc.)		
Research institutes (public and private)	1,600	58.5
Associations and societies	1,200	51.9
Libraries (academic, prefectural and major municipal libraries)	700	86.0
<i>Total</i>	3,700	62.4

2. The present situation of online electronic information resources

(1) Outline

Most institutions of every kind have set up or plan to set up their own web sites. Of the contents of these web sites, public information is the most numerous, but, for example, half of the central government offices provide useful and practical resources such as statistical reports, council and committee papers, white papers, annual reports and survey reports. Of the research institutions, 30% provide survey reports. Over 60% of associations and societies provide or plan to provide in-house magazines online and many libraries, especially academic libraries, are digitizing bulletins and dissertations. The academic value of these web sites cannot be ignored.

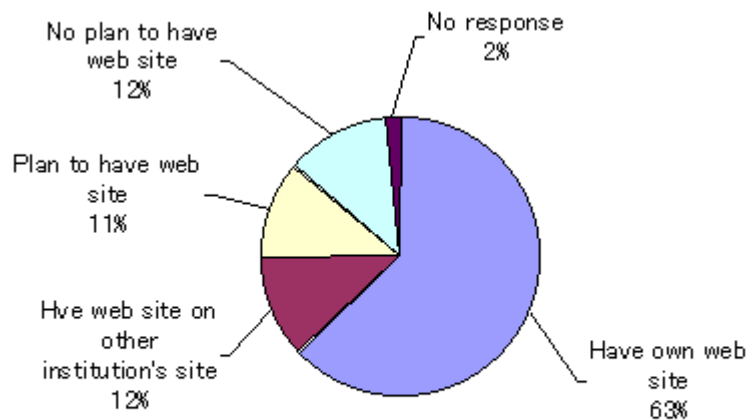


Figure 1: About web site

(2) Organization

To add metadata and organize online electronic resources, it is desirable that basic metadata, such as title and author, equal to the bibliographic data given in the colophon of a book, have been described in the original data. But according to the results of this questionnaire, awareness of or interest in metadata seems to be at quite a low level.

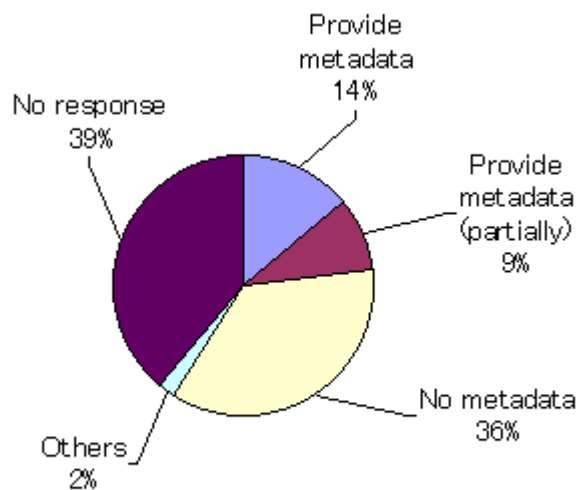


Figure 2: Metadata

(3) Preservation

Even though useful and valuable resources are provided on the Internet, few institutions provide clear-cut guidelines for preserving these resources.

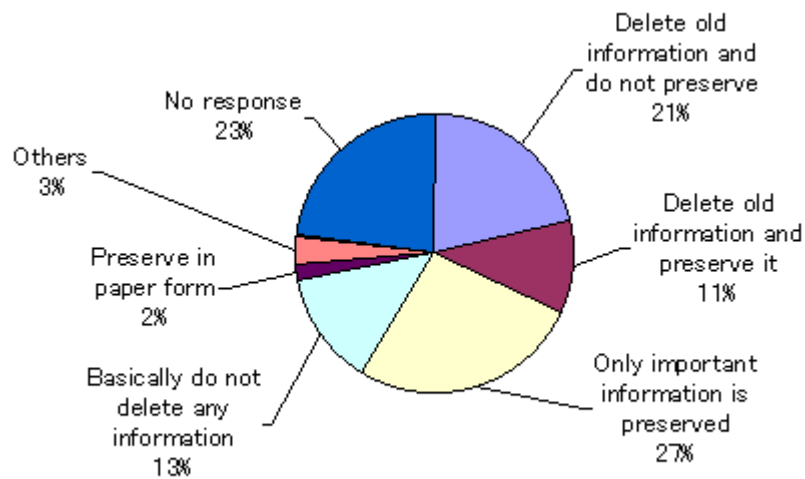


Figure 3: Deletion and preservation

(4) Conclusion

The Internet does not have a long history and careful thought has not yet been given to its organization and preservation. But within the next 10 or 20 years, it should become very important to preserve electronic resources in an organized way, the value of the project to society is also enormous.

3. Problems and strategies of acquisition and preservation

(1) Permission for acquisition and its problems

To acquire online electronic resources, we assume that the permission of the publisher institutions will be offered in advance. We received favorable answers from many institutions. Significant problems showed in these answers are below:

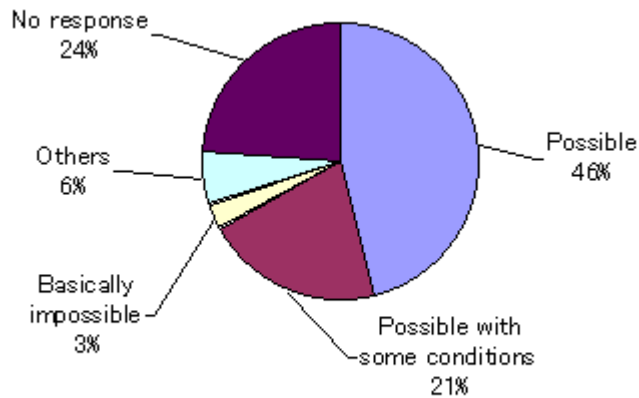


Figure 4: Possibility of acquisition

(i) Complexity of negotiations

To acquire these resources, we assume that separate negotiations are needed with each source of supply. But the problem is that there would be several different parties involved, such as institutions providing resources, institutions discussing the propriety of granting permission, distributors and individual copyright holders.

(ii) Preservation of deleted information

Some institutions answered that after updating, old files should be deleted, or, that they do not want information that the institute itself deletes to be preserved. This is because they are concerned that deleted information that the institute considers as unwanted would be preserved in the library. But it could be said that to preserve deleted information and provide it for both present and future use is an important service that libraries should provide.

(2) Methods of acquisition and problems

We assume three ways of acquiring online electronic resources:

(i) Use Web Robot

(ii) Online transfer via NDL web site and e-mail from publisher

(iii) Offline transfer such as floppy disk and CD-R from publisher

Only 10 to 20% of the institutions answered that they would give unconditional permission to acquire resources by the methods of (ii) and (iii). But 54% of them answered that they would allow Web Robot acquisition without conditions. This indicates that they do not feel much resistance toward labor-saving automatic acquisition such as Web Robot. We need to prepare acquisition standards and develop systems based on automatic means.

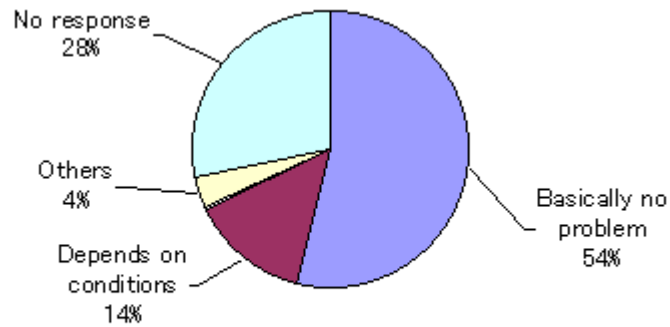


Figure 5: Using Web Robot

(3) Other problems

(i) Links

Hyper links to the information resources on the Internet have already been made by subject gateways of academic libraries and commercial search engines; about 70% of the institutions answered there is no problem in making links.

(ii) Announcement

We asked about the possibility of announcing changes of electronic information such as the opening of new sites, revision and deletion. But only 10% of them indicated this possibility without conditions and most of them seem to be concerned about workload and lack of manpower.

(iii) Databases

When databases exist in the web sites, it is technically impossible to acquire these databases by Web Robot. But 10 to 20 % of the institutions operate databases and the operation rate of central government offices reaches 45%. These contents are mainly white papers and annual reports.

(iv) Access restrictions

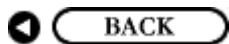
About 10% of the institutions impose restrictions upon those electronic resources which are not expected to be available to the general public. We need to take flexible steps to acquire and provide such resources.

(v) Data conversion

To preserve resources over a long span of time, in some cases it is necessary to convert data into standard formats such as text file. The institutions willing to come to an agreement about data conversion reached 60 to 70%; very few are unwilling.

4. Conclusion

This survey is of great value in discussing problems of electronic information resources on the Internet. To develop the Electronic Library System, we plan to make metadata of the resources and operate experimental acquisition of them in the near future.



Offline electronic publications now available to the public

This is an abridged translation of the article of the same title in the NDL Monthly Bulletin No. 484

October 2000, offline electronic publications became subject to the Legal Deposit System. In order to provide these publications to the public, we installed hardware and set up a legal framework. Now everything is ready and offline electronic publications have been available to the public from July 5, 2001 including printout service. We have provided a number of CD-ROMs acquired through purchase in some of the special material rooms and this is the beginning of the full-scale service.

Outline of the service

(1) Opening of the Electronic Resources Room

The new Electronic Resources Room is in the Special Materials Room (4th floor of the Main Building). We provide some of the deposited offline electronic publications whose contents are mainly texts, in this room in the following:

(i) CD-ROMs in stacks (no printout service)

To use these CD-ROMs, please ask the library staff. You can read them on a stand-alone terminal in the room.

(ii) CD-ROMs available in the CD-ROM changer (10 titles)

You can use these CD-ROMs directly. To printout, please select printout menu, and the data will be output in the Electronic Media Printout Counter in Reading Room 3 (1st floor of the Annex).

The Electronic Resources Room is open on weekdays and also the 3rd Saturday of the month.

(2) Other Special Materials Rooms

Some purchased CD-ROMs and deposited CD-ROMs are available in the special materials rooms below:

Reference Books Room, Official Publications Room, Science and Technology Materials Room, Statutes and Parliamentary Documents Room and Newspaper Reading Room

These CD-ROMs are mainly provided in the way explained in (1)-(ii) above. For details, please see the information for each room.

(3) Visual materials

Deposited visual materials such as videotapes and DVDs are available in the Audiovisual Materials Room (2nd floor of the Main Building, approval required). Library staff will bring materials from the stacks.

Printout service

(1) For the CD-ROMs that are acquired through the legal deposit system, only one request per day for one item, not exceeding 20 sheets per request, is accepted.

(2) For the CD-ROMs that are acquired through purchase, a maximum of five requests per day, not exceeding 80 sheets per request, is accepted (the same as for other books and periodicals). Some CD-ROMs have restrictions on printout based on agreements with publishers.

(3) Products are available only on A4 paper and in black & white. Photocopy fee is 60yen per sheet tax extra.

(4) Photoduplication service by mail is not available for CD-ROMs.

CD-ROMs available for printout service

Place	Title
Electronic Resources Room	Katei no Igaku
	Zenkoku Hakubutsukan Soran
	Borudo 3rd ed.
	2005-nen no Intanetto Shakai
	Sekai Dai Hyakka Jiten 2nd ed. Professional version
	Un'yusho Keizai Senta Chosa Kenkyu 30-nen
	Heisei 13-nendo Shokuinroku
	'Shufu no Tomo' Kensaku Shisutemu
	Nikkei Intanetto Tekunoroji, CD-ROM shukusatsuban, 2000
	Gijutsu to Nihongo Monogatari
Reference Books Room	Horitsu Hanrei Bunken Joho
	Hon'yaku Toshō Mokuroku 45/92, Soki, Jinbun, Shakai Hen
	Hon'yaku Toshō Mokuroku 45/92, Geijutsu, Bungaku Hen

	Shinpen Kokka Taikan
Science & Technology Materials Room	Chemical Abstracts
	Igaku Chuo Zasshi
	JIS Somokuroku
Statutes and Parliamentary Documents Room	Hanrei Taikei CD-ROM ban
	Rigaru Besu
	Index to the House of Commons Parliamentary Papers
Official Publications Room	Eurocat
	UNESCO Database
	GPO Monthly Catalog
Newspaper Reading Room	Asahi Shinbun Sengo Midashi Detabesu 1945-1999

◀ **BACK**

NEXT ▶



New version of Nippon in the World (Japan in the World)



We started the Electronic Exhibition: Nippon in the World (Japan in the World) on our website <http://www.ndl.go.jp/site_nippon/e/default.html> in August 2000, as digital contents for the Bibliotheca Universalis Project. In June 2001, a new version with added images and functions, such as search function and view function, was opened to the public.

For details of this exhibition, please see "[Digital Exhibition: Nippon in the World](#)" (NDL Newsletter No. 115)

<Added contents>

1. [Scenic Mementos of Japan](#)

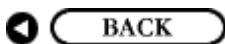
From *Morisada Manko*, a valuable record of customs in the Edo period produced in 1837, three volumes which introduce the amusements and the kabuki of those days with illustrations have been digitized into 140 images. These contents are available only in Japanese.

2. [Vienna International Exposition](#)

Okoku Hakurankai Hikki, volume 1, a description of the exposition by Japanese participants, and 54 whole images and texts of *Oko Nikki*, an account of travels from Japan to Austria, have been digitized. These contents are available only in Japanese.

3. [Modern Japanese Political History Materials](#)

English version with brief commentaries is available. From various materials, 16 images have been added.





Sample version of the Japanese National Bibliography Weekly List on the web is now available

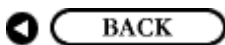
For a long time the National Diet Library has published *the Japanese National Bibliography Weekly List (JNBWL)* in book form to supply prompt and precise information on the Japanese publications newly collected by legal deposit and other acquisition methods.

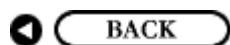
In order to improve our services and provide current data more widely and more promptly, we have decided to distribute *the JNBWL* for free through the Internet on the National Diet Library website from April 2002.

We are now changing *the JNBWL* on the NDL web site (html format) as follows:

- The JNBWL usually contains 2500–3000 titles in a week.
- Each title remains for four weeks in *the JNBWL*, after which it moves onto the OPAC of our website. Further details of the bibliographic data are available on the OPAC. We plan to cumulate and provide back issues in the Electronic Library.
- Although it naturally covers books, serials, and digital publications, we will extend the scope of the records to include maps, musical scores, images, sound recordings, and so on.

We have just put *the JNBWL* sample version (Japanese only) onto our website <http://www.ndl.go.jp/news/zenkoku.html>, so please check the website or attached sample list. This sample version is open to the public until March 2002.





Cooperative use of library resources: Union Catalog of the National Diet Library

by Fumiko Kodama

Chief, Domestic Cooperation Division

I was in charge of the National Union Catalog Network Project from April 1998 to March 2001. I will report on the union catalog projects in the National Diet Library (NDL), focusing on the Union Catalog Network.

1. Union catalogs in the NDL

The National Diet Library Law article 21 section 4 prescribes: To take measures toward the establishment of a union catalogue of the library resources of Japan and of such other catalogues and lists as may be necessary to effect coordinated usefulness of the library resources of the country. Producing and providing the union catalog has been one of missions of the NDL since the establishment of the Library. We continued to publish union catalogs in book form: *the Zen-Nihon Shuppanbutsu So-mokuroku (Japanese National Bibliography)* from 1948 to 1976, which includes publications that the NDL does not have, and *the Shinshu Yosho Sogo Mokuroku(Union Catalog of Foreign Books)* from 1954 to 1987, that is a union catalog of foreign books in the collections of the major libraries in Japan. But we ceased to publish *the Shinshu Yosho Sogo Mokuroku* at volume 14 (1984 -1987, published in 1990) because the member libraries discontinued the card catalog and changed it into an online catalog, and the NDL also did not have sufficient personnel or budget. The NACSIS-CAT of the National Center for Science Information Systems (now the National Institute of Informatics) serves as a union catalog of foreign books of academic libraries. We also ceased to publish *the Zen-Nihon Shuppanbutsu So-mokuroku* in 1976. To cover its loss, we have expanded *the Nihon Zenkoku Shoshi (Japanese National Bibliography)*.

Here are two examples of recent union catalogs:

(1) *NDL CD-ROM Line: National Union Catalog of Braille & Recorded Books* (revised twice a year)

This is a union catalog of braille and recorded books cataloged by libraries for blind and public libraries. We publish it in CD-ROM form. The book form published from 1982 and ceased in 1998 at No. 34.

(2) *Union Catalog of Periodicals and Newspapers on South Asia* (published in June 1996)

This is a union catalog of periodicals and newspapers of South Asia owned by the NDL, the Institute of Developing Economies, The Toyo Bunko (Oriental Library), The Institute of Oriental Culture, University of Tokyo, and Tokyo University of Foreign Studies.

2. From book form to network

The union catalog used to be in book form or card catalog. The value of the union catalog was keenly recognized but it was a time consuming task and forced to cease publication. On the other hand, library automation, bibliographic database, library networking and library cooperation have been strengthened under the progress of information technology. The National Diet Library has also been planning to provide union catalogs on the network taking advantage of the opening of the Kansai-kan and the International Library of Children's Literature (ILCL). The union catalogs below are not in book form but on the network open to the public through discussion and experiments.

National Union Catalog Network Project

This is a union catalog of public libraries. I will introduce its details later.

International Library of Children's Literature Union Catalog of Children's Books

This was built as a service infrastructure of the ILCL. This union catalog consists of bibliographic data of 190,000 books and 5,000 periodicals of the NDL, the ILCL, the International Institute of Children's Literature, Osaka, Kanagawa Museum of Modern Literature and the Children's Room of the Tokyo Metropolitan Hibiya Library. The database is available on our web site (<<http://www.kodomo.go.jp/function/somoku.html>>, Japanese only). We plan to add book reviews and information about prizewinners to expand this union catalog as a special bibliography.

Union Catalog of Newspapers in Japan Database

This is based on *the Union List of Reduced, Microfilmed and Reprinted Newspapers in Japan*, which was published every five years in book form. The database also includes bibliographic data and holdings of original newspapers; there are about 17,500 data of 1,300 institutes such as public libraries, academic libraries, special information institutes, and newspaper and broadcasting companies. The database, as a national union catalog of newspapers, will serve as basic data for cooperative preservation and media conversion projects of newspapers. Now the database is under evaluation and will be available on the internet in the near future.

All of these databases are constructed as an integrated database of the member libraries. It is the NDL that maintains the database and provides it through the network. *The National Union Catalog of Braille & Recorded Books in Japan*, previously published in book form and CD-ROM, has already become a database and been provided to the prefectural and major municipal libraries and several libraries for the blind through an online system called *the National Diet Library Online Information Retrieval Network System (NOREN)*. We plan to provide it on the internet by 2002.

3. National Union Catalog Network Project

History:

1993 - 1994 Experiment as the National Union Catalog Pilot Project

1994 - 1997 Cooperative experiment as the Pilot Electronic Library Project with the Information-Technology Promotion Agency, Japan (IPA)

1998.4 - ; Operating as a project of the NDL

Now 68 of 71 prefectural and major municipal libraries are participating and 35 libraries provide bibliographic data. In FY2001, 443 city, ward, town and village libraries will participate in this network.

The objects of this project are to strengthen library resource sharing within the public library, to promote standardization and utilization of the bibliographic service in the public library and to support interlibrary loan among public libraries throughout the country. The database provides the interlibrary loan-related information of each library so that users can take simple steps to borrow from another library, from searching the bibliography to requesting the loan by e-mail, all on one system. The interlibrary loan supporting function is a major characteristic of this union catalog database.

To construct the system, we tried to reduce the trouble to the member libraries and the system requires little manual work. According to the National Union Catalog format, the extensive format of the JAPAN/MARC, each library selects and sends data automatically. The system in the NDL also automatically identifies and integrates the bibliographic data.

This database is the first national union catalog database of public libraries. There is NACSIS-CAT, union catalog by the National Center for Science Information Systems, now the National Institute of Informatics, but most of the member libraries are academic libraries and few public libraries are participating.

As a result of the National Union Catalog Network Project, interlibrary loan among public libraries has been promoted all over the country. Some libraries reported that the number of interlibrary loans from/to outside the prefecture increased four times. To keep up with this change, the National Council of Public Libraries made "A Guide for Interlibrary Loan of Public Libraries" in 1999. With the expansion of interlibrary loan, the role of the NDL as the support library has been realized and the notion that each library has every different function is created.

A tendency to make a union catalog for a local area is appearing. The increase of library cooperation and interlibrary loan beyond prefectural borders is caused by the change of the times; no single library can any longer fulfill the various high level demands of library users. The National Union Catalog Network Project is a significant project that made it possible to build a system to fulfill these demands.

4. Union catalog in future and function of the NDL

Each union catalog is coming to be regarded as a useful tool to strengthen library services. For example, the National Union Catalog Network Project works as a tool of interlibrary loan and reference work and becomes a basis of library cooperation; the Union Catalog of Children's Books is a basis of cooperation and research among the related institutes; the Union Catalog of Newspapers in Japan Database is a basis of the newspaper microfilming cooperative project.

The first object of making and providing a union catalog is to provide the library resources of Japan, as the NDL Law prescribes. But the function as a basis to support library services with a library network seems to be getting more and more important.

After the opening of the Kansai-kan, we will expand the National Union Catalog Network Project and *the National Union Catalog of Braille & Recorded Books* in the Kansai-kan as a basis of library cooperation services.





Selections from NDL Collection

Documents relating to Ito Hirobumi (Ito Hirobumi Kankei Monjo)

by Hisae Murayama

Modern Japanese Political Documents Division

Ito Hirobumi (1841–1909) was a famous politician in the Meiji era. He served as the first Prime Minister, president of the Privy Council and president of the House of Peers. He helped draft the constitution of the Empire of Great Japan (promulgated in 1889), and played a crucial role in the building of modern Japan. He formed cabinet four times. At the end of the Sino-Japanese War (1894–1895), he became ambassador plenipotentiary in making peace. He founded the Rikken Seiyukai (Friends of Constitutional Government Party) in 1900 and became president. In 1905, he became the first resident general in Korea and finally he was assassinated by a Korean, An Chung-gun, in Harbin, Manchuria, China, in 1909.



1. Portrait of Ito Hirobumi

From "Ito Hirobumi den" (A biography of Ito Hirobumi) Vol. 1, Shunpo-ko tsuisho-kai, 1941

The National Diet Library has many documents about Ito Hirobumi. We would like to introduce some documents here.

The Modern Japanese Political History Materials Room (Kensei Shiryo Shitsu) of the NDL has the biggest collection of documents relating to Ito Hirobumi (For Modern Japanese Political History Materials, please see the article "[Tsurumi Yusuke Monjo](#)" in NDL Newsletter No. 115). This collection is divided into four parts according to their acquisition history.

	Purchase year	Letters	Papers
Documents from the Ito family	1950	5,500	450
Documents previously owned by Furusawa Masaomi	1952	95	4
Other documents	1962–1980	27	2
Ito Hirobumi Kankei Monjo, Part 2	1999	114	19

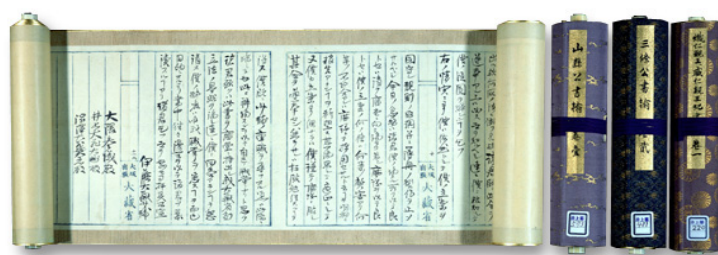
All of these documents are searchable by a provisional index "Ito Hirobumi Kankei Monjo" in

the Modern Japanese Political History Materials Room.

Letters written by Ito Hirobumi are found in over 60 other collections. These are searchable by sender index. The major collections are below:

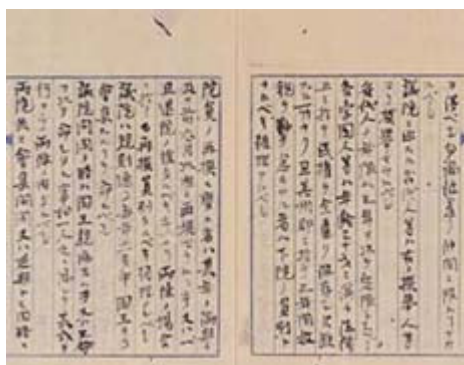
Collection name	Number of letters
Ito Miyoji Kankei Monjo (Ito Miyoji papers)	217
Matsukata Masayoshi Kankei Monjo (Matsukata Masayoshi papers)	147
Sanjo-ke Monjo (The Sanjo papers)	114

Kensei Shiryo Shitsu Shushu Monjo (Documents acquired by the Modern Japanese Political History Materials Room) also has 51 letters to Ito and 28 letters from Ito himself.



2. Written Opinion by Ito Hirobumi, August 2, 1871 ("Inoue Kaoru Kankei Monjo" 308-1)

This written opinion is about restructuring the Ministry of Finance. Addressees are Okuma Shigenobu (1838-1922, a statesman who twice served as prime minister), Inoue Kaoru (1835-1915, a member of the oligarchy that ruled Japan during the Meiji period) and Shibusawa Eiich (1840-1931, a government official who helped establish the reforms that put Japan on a firm financial footing in the Meiji period).



3. Notes by Ito Hirobumi ("Ito Hirobumi Kankei Monjo", Part 2, Papers 1)

From 1871 to 1873, Ito was dispatched to Europe and America as deputy head of the Iwakura Mission. He wrote down his experiences in Prussia. A description titled "Regime and government" in an article of March 13, 1873, is significant because it shows his early interest in parliamentary systems including constitution and election system.

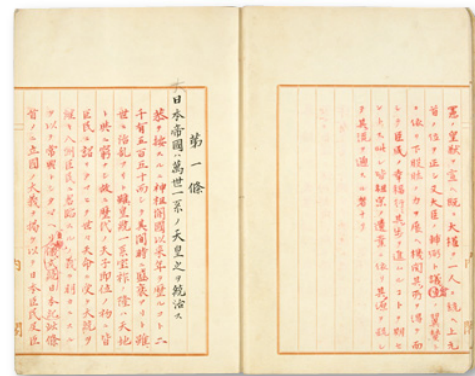


4. Imperial Letter on Dispatch of a Special Envoy to Europe to research Constitutional Government, March 3, 1882 ("Ito Hirobumi Kankei Monjo", Papers 209)

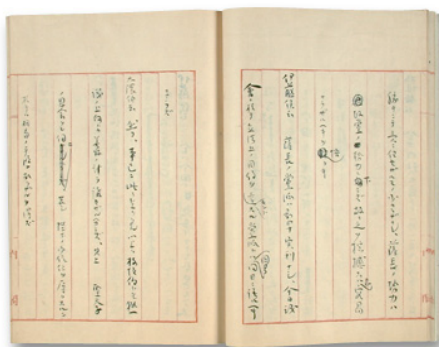
In 1881, the Meiji government promulgated a mandamus that the Diet should be established in 1890 and started to prepare for the establishment of a constitution. In 1882, Ito was dispatched to Europe to study various constitutional systems.

5. Draft of the Constitution of the Empire of Great Japan, March 1888 ("Ito Hirobumi Kankei Monjo", Papers 233)

This is the final draft of the Constitution of the Empire of Great Japan. It is assumed that Ito brought this draft when he attended constitutional assembly in the Privy Council. His signature, Hirobumi, is written at the lower right-hand corner of cover sheet and there are notes by him in the text (on this page, he rewrote "Japan" as "Great Japan").



6. Record of the meeting of Ito Hirobumi, Okuma Shigenobu and Itagaki Taisuke, June 25, 1898 ("Ito Miyoji Kankei Monjo" Papers 350)



On June 22, 1898, the Jiyuto (Liberal Party) and the Shimpoto (Progressive Party) united to form the Kenseito (Constitutional Party). Ito Hirobumi was prime minister then and recommended Okuma Shigenobu and Itagaki Taisuke (1837-1919; founder of Japan's first political party, the Jiyuto) of the Kenseito to succeed him as premiers and asked them to organize cabinet. As a

result, the first party cabinet in Japan came into being. Okuma became prime minister and foreign minister, and Itagaki became interior minister. This material is minutes of tripartite meeting written down by Ito Miyoji (1857-1934), a close associate of Ito Hirobumi.

To see other images, click [here](#).

7. Album of Ito's assassination ("Shichijo Kiyomi Kankei Monjo", 76)

This album contains photographs related to Ito's assassination such as snapshots before and after the assassination, and the judgement.

7-1. This is a snapshot of Ito's arrival at Harbin station, Manchuria, on October 26, 1909, for a meeting with Russian finance minister Kokovtsov. Just after this, he was shot and killed by a Korean, An Chung-gun (1879-1910).



7-2. After the assassination, Ito was taken away in a horse-drawn carriage.

◀ BACK

NEXT ▶

National Diet Library Newsletter

No. 121, September 2001



Selected list of articles from NDL periodicals (Text in Japanese)

National Diet Library Monthly Bulletin

(Kokuritsu Kokkai Toshokan Geppo)

No.485, August 2001

- Present and future of libraries linked by a network: Bibliotheca Universalis workshop and the library situation in the U.S.A., *by Hiroyuki Taya*
- Conference with directors of prefectural and major municipal libraries in fiscal 2001

Aiming at systematization of acquisition of electronic publications: Attempts of national libraries of France, Germany, Italy, the Netherlands and the United Kingdom, *by Jun Ashida*

No.484, July 2001

- [Participating in the 9th Conference of Directors of National Libraries in Asia and Oceania \(CDNLAO\) and e-tlas: Emerging Trends in Library and Archival Services](#), *by Noriyoshi Tsuchiya*
- Participating in the Council on East Asian Libraries (CEAL) 2001 Annual Meeting *by Machiko Nakai*
- [Result of Survey of electronic information resources on the Internet](#), *by Electronic Library Development Office, Planning Division, Administrative Department*
- [Offline electronic publications now available to the public](#)
- Acquisition and provision of electronic resources in the National Library Board of Singapore
- Cooperation with former branch libraries which are now independent administrative entities

