

DOI Outreach Seminar 2018 hosted by KISTI

Introduction to Japan Link Center (JaLC) and its strategy

November 30, 2018

Yusuke Yogoro (yogoro@jst.go.jp)

Department of Databases for Information and Knowledge Infrastructure
Japan Science and Technology Agency (JST)

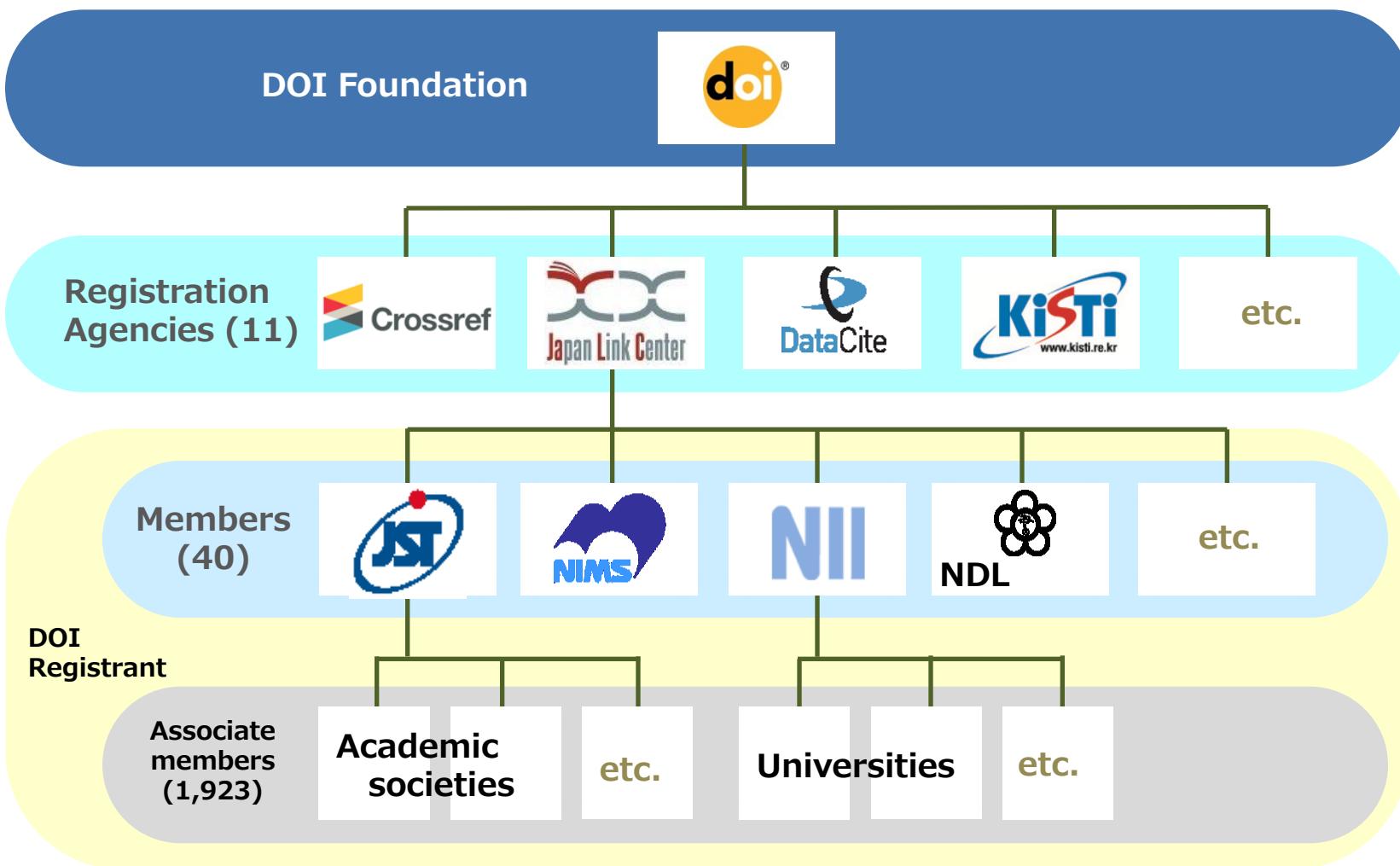


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Organizational structure of DOI Registration



DOI Registration Agencies

 airiti DOI <small>airiti DOI</small>	 Crossref	 EIDR Entertainment Identifier Registry	 中文DOI <small>CHINADOI</small>
Airiti, Inc.	Crossref	EIDR (Entertainment Identifier Registry)	ISTIC (The Institute of Scientific and Technical Information of China)
	 DataCite	 Japan Link Center	 mEDRA
China National Knowledge Infrastructure (CNKI)	DataCite	JaLC (Japan Link Center)	mEDRA (Multilingual European DOI Registration Agency)
 Publications Office OP (Publications Office of the European Union)		 KISTI <small>www.kisti.re.kr</small>	KISTI(Korea Institute of Science and Technology Information)
		 CIIDRA <small>CONSTRUCTION INDUSTRY ID REGISTRATION AGENCY</small>	CIIDRA(Construction Industry ID Registry Agency)

DOI Registration Agencies

Contents
Category

 airiti DOI airiti DOI		 EIDR Entertainment Identifier Registry	 中文DOI CHINADOI
Airiti, Inc.	Books Journal Article	Crossref	EIDR (Entertainment Identifier Registry) Film Entertainment
 CNKI 中國知網 cnki.net	 DataCite	 JaLC (Japan Link Center)	 mEDRA
China National Knowledge Infrastructure (CNKI)	Research Data	DataCite	mEDRA (Multilingual European DOI Registration Agency)
 Publications Office OP (Publications Office of the European Union)		 KISTI www.kisti.re.kr	KISTI(Korea Institute of Science and Technology Information)
		 CIIDRA CONSTRUCTION INDUSTRY ID REGISTRATION AGENCY	CIIDRA(Construction Industry ID Registry Agency)

DOI Registration Agencies

Regional RA

Taiwan



airiti DOI
airiti DOI

[Airiti, Inc.](#)



[Crossref](#)



[EIDR \(Entertainment Identifier Registry\)](#)

China



中文DOI
中文DOI

[ISTIC \(The Institute of Scientific and Technical Information of China\)](#)



[China National Knowledge Infrastructure \(CNKI\)](#)



[DataCite](#)

Japan



[JaLC \(Japan Link Center\)](#)

Europe



[mEDRA \(Multilingual European DOI Registration Agency\)](#)



Publications Office

[OP \(Publications Office of the European Union\)](#)

Korea



[KISTI\(Korea Institute of Science and Technology Information\)](#)



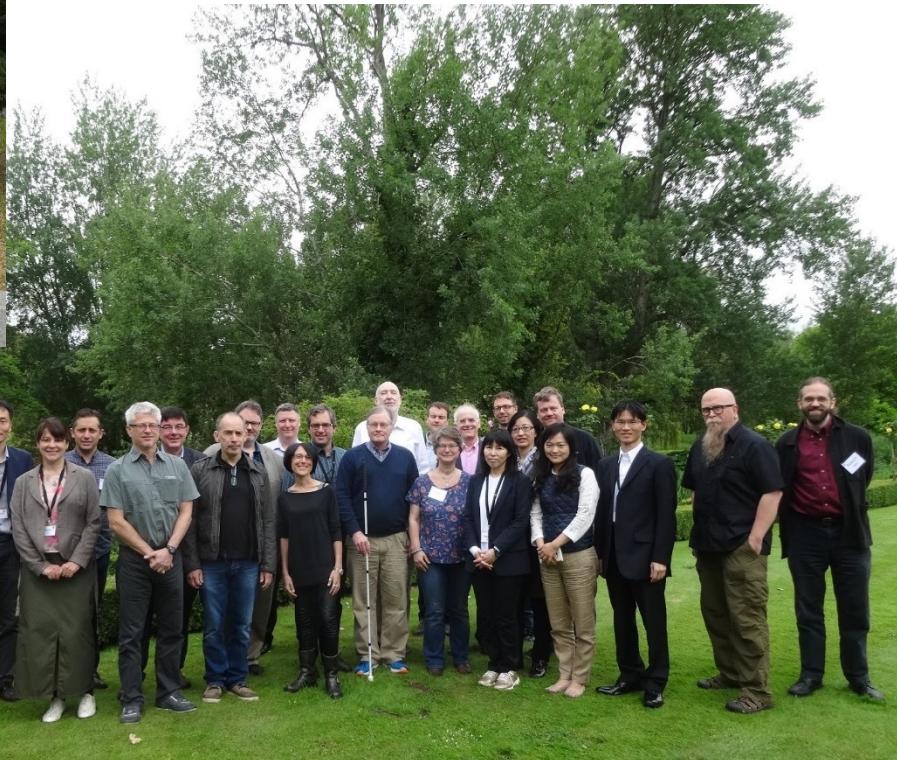
[CIIDRA\(Construction Industry ID Registry Agency\)](#)

DOI Community (DOI strategy meeting)

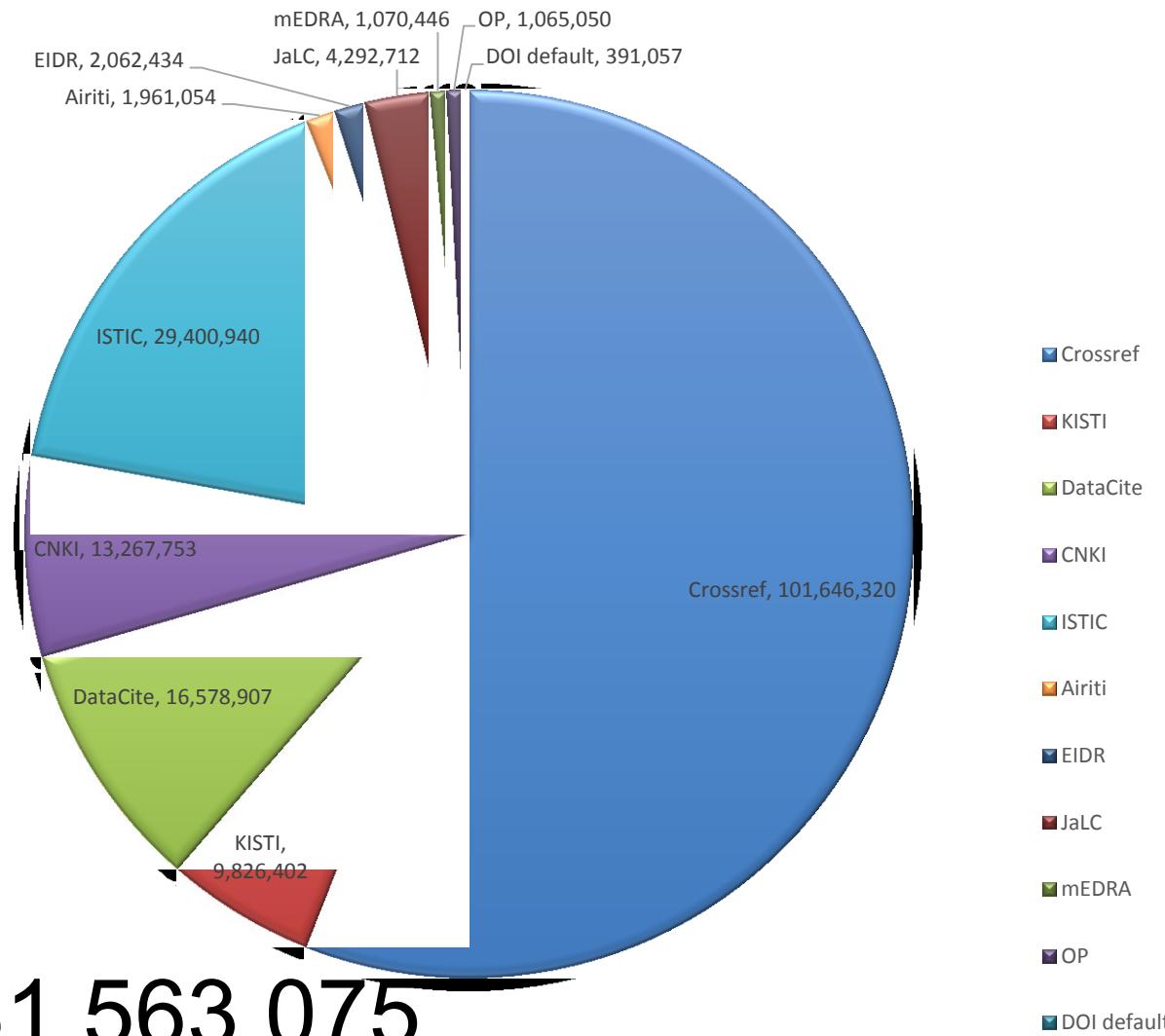


June, 2017 (Korea)

June, 2016 (UK)



Number of DOIs in the world (as of Oct. 30, 2018)



1. Japan Link Center (JaLC) as DOI Registration Agency
2. Current Situations of Japan Link Center (JaLC)
3. Japan Link Center – Strategy 2017-2022

Summary of Japan Link Center (JaLC)



- Founded in March 2012
- Aimed to register DOIs for academic contents produced in Japan or in Japanese, to circulate information in Japan and overseas.
- Controlled by four national organizations:
 - Japan Science and Technology Agency (JST)
 - (has 1,544 associate members)
 - National Institute for Materials Science (NIMS)
 - National Institute of Informatics (NII)
 - National Diet Library (NDL)
- Operated by JST
- Membership system
- 40 Regular members
(Academic societies, Publishers, University libraries, etc)
- External coordination
 - JaLC is a member of Crossref, DataCite, and Ite.



Current Situations of JaLC

■ Number of DOIs registration

FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
1,808,203	2,168,180	3,023,504	3,189,377	3,697,027	5,330,029

■ Content categories and the number of DOIs

	FY 2014	FY 2015	FY 2016	FY 2017
Journal articles	2,789,095	2,937,916	3,410,477	4,941,494
Books & Reports	234,409	248,488	263,114	309,559
Research data	-	1,545	21,798	75,875
e-learning resources	-	1,427	1,628	1,891
Other contents	-	1	10	1,210

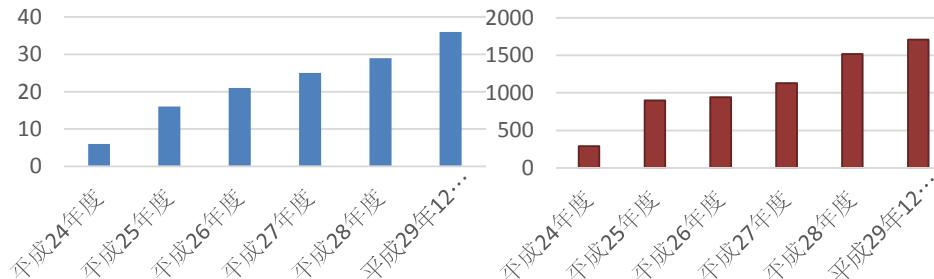
■ Numbers of DOIs in the world

Number of Prefixes	Registration Agency	Deposits since last report (June 28, 2018)	Total DOIs as of Oct 30, 2018
2,023	Airiti	12,267	1,961,054
5,103	CNKI	355,295	13,267,753
12,427	CrossRef	2,817,041	101,646,320
2,454	DataCite	1,681,274	16,578,907
193	DOI Default*	18	391,057
36	EIDR	75,807	2,062,434
1,229	ISTIC	784,070	29,400,940
1,492	JaLC	1,103,684	4,292,712
99,933	KISTI	227,486	9,826,402
4,334	mEDRA	35,709	1,070,446
300	OP	9,021	1,065,050
129,524	TOTAL	7,101,672	181,563,075

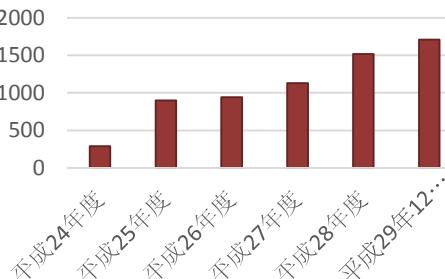
出典 : The international DOI foundation "Directory Manager Status Report"

■ Number of JaLC Member

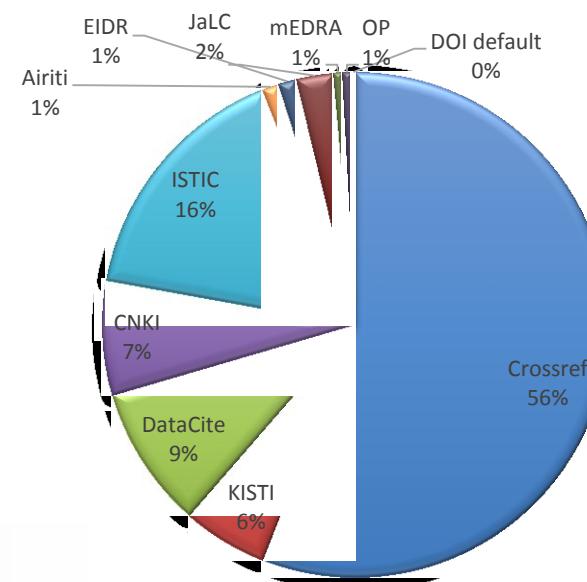
Members



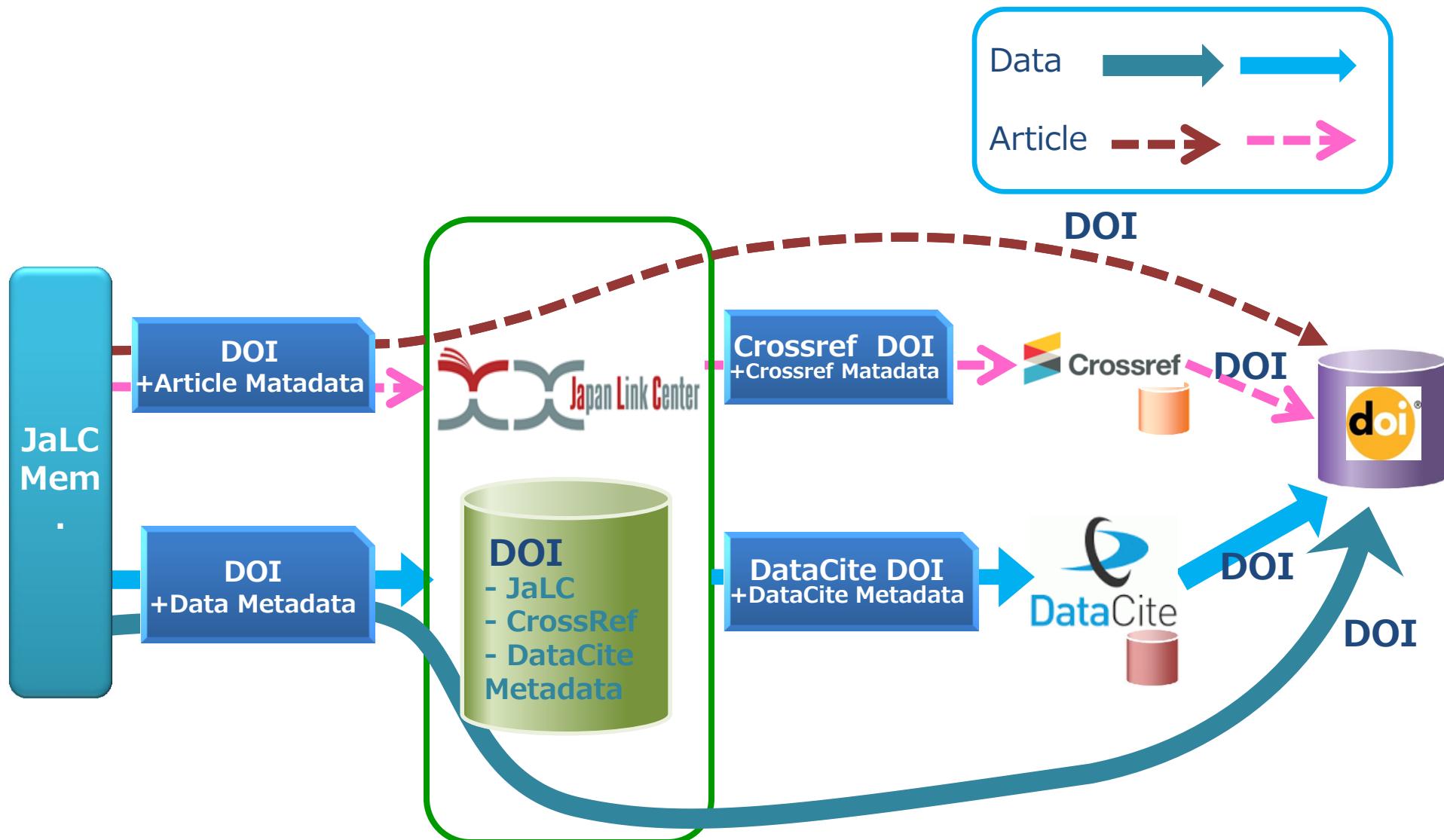
Associate members



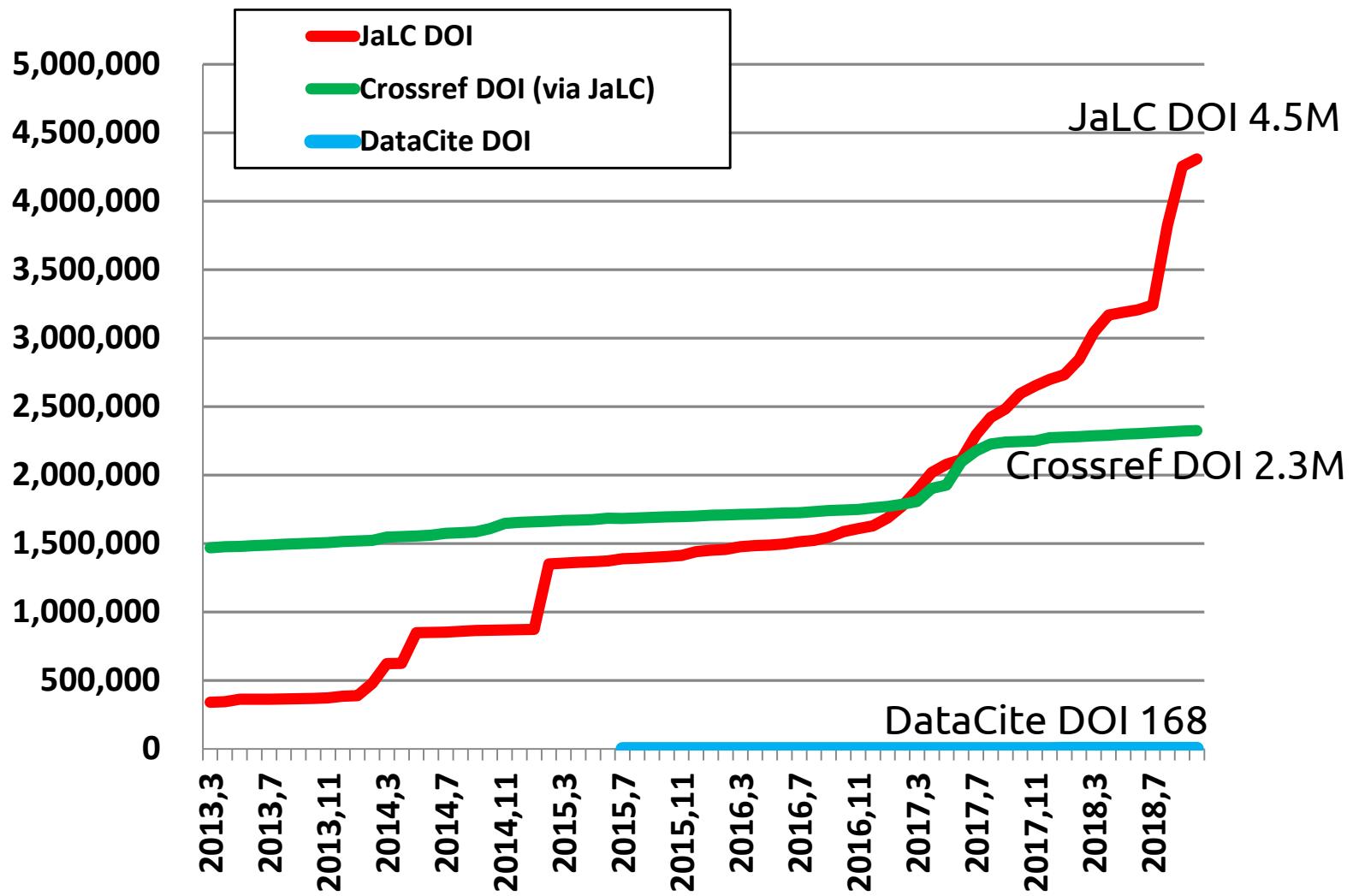
	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Members	6	16	21	25	29	37
Associate members	289	898	944	1,131	1,518	1,765



DOI registration flow



Change in the Number of DOIs (chronological),



Metadata Schema

Basic metadata:

DOI, URL, title, author(creator) information, affiliation, researcher id, publication date, publisher, edition, related contents, funder

No	Contents type	Additional Metadata	External Deposit
1	Journal Article	journal name, ISSN, volume, number, page, etc.	Crossref
2	Book	series title, chapter, ISBN, etc.	Crossref
3	Research Data	size, geolocation, rights, signature, etc.	DataCite
4	E-learning	learning resource type, rights, etc.	
5	Other	(basic metadata only)	

Example of DOI registration: Journal Articles

■ J-STAGE: an electronic journal platform for science and technology information in Japan

<https://doi.org/10.1241/johkanri.60.447>

J-STAGE Browse ▾ About J-STAGE ▾ Support & News ▾

Sign in Cart EN ▾

Journal of Information Processing and Management

Online ISSN : 1347-1597
Print ISSN : 0021-7298

Journal home Journal issue About the journal

J-STAGE home / Journal of Information Process ... / Volume 60 (2017-2018) Issue 6 / Article overview

Meeting
DOI Outreach Seminar in Korea
Yusuke YOGORO, Kenichi SUMIMOTO

+ Author information

JOURNALS **FREE ACCESS** **FULL-TEXT HTML**

2017 Volume 60 Issue 6 Pages 447-449

DOI <https://doi.org/10.1241/johkanri.60.447>

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- Received: -
- Released on J-STAGE: September 01, 2017
- Accepted: -
- [Advance Publication] Released: -
- Revised: -

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Contact us

集合報告 韓国DOIアウトリーチセミナー

韓国DOIアウトリーチセミナー

日 時 2017年6月15日(木)
場 所 The Korea Chamber of Commerce & Industry(韓国・ソウル)
主 催 国際DOI財団

情報管理 2017.9. vol. 60. no. 6. p. 447-449 doi: <http://doi.org/10.1241/photon.60.447>

1.はじめに
国際DOI財団 (International DOI Foundation IDF) では、DOI (Digital Object Identifier) 普及のため、世界各地でアワードナーのイベントを開催している。2013年にはAirtelと中国科学技術情報研究所 (ISTI) のホストにより台湾と中国で、2014年にはIILERA (multilingual European DOI Registration Agency) のホストによりイタリアで¹、2015年にはJaLC (Japan Link Center) のホストにより日本で開催している²。この度、2016年1月1日に韓国科学技術情報研究所 (KISTI) がDOI登録機関となり、Korea DOI Centerのサービスを開始したことを契機に、KISTIは、韓国内の学術コミュニティへのDOIの広報を目的として、DOI Outreach Seminar in Korea (図1) を開催した。
韓国の学会などから300名を超える参加があり、担当者の予想を大きく上回る大盛況であった(図2)。

2.外国のDOI登録機関等からのプレゼンテーション
IDFのManaging AgentであるJonathan Clark氏からのDOI全般に関する説明に続いて、DQNAのChristophe Bianchini氏、DataCiteのMartin Fenner氏、CrossrefのEd Pentz氏、ISTICのGuo Xiaofeng氏からそれぞれ15分ずつ、各機関の取り組みについて説明があった。以下では、その要旨 (DOIのシステムの一般論と紙面の都合上、他の機会に譲る) を簡潔にまとめた。

IDFから、DOIの最も重要な特徴である持続性は、データベース、プロキシ等の技術的インフラと、DOI登録機関による義務の履行等の社会的インフラとから成り立っているとの説明があった。DOIの持続性はシステムによってだけでなく人によって支えられている、というこのメッセージは印象的だった。

DataCiteは、メタデータの露出を高めることにより、データセンタードータを引用する研究者とのギャップを埋めることに注力している。そのため、DataCiteではメタデータ検索機能の充実を図っている。また、CrossrefとDataCiteとでEvent Dataというサービスを行っており、論文と研究データとの引用関係の収集に力を入れている。具体的には、DataCiteメタデータの中の論文へのリンク情報を

情報管理 2017.9. vol. 60 no. 6 447

図1 DOI Outreach Seminar in Koreaの書板

図2 会場の様子

Example of DOI registration: Doctoral Thesis



■ Institutional Repository: Chiba University Repository

<https://doi.org/10.20776/104550>

CHIBA UNIVERSITY REPOSITORY
for Access to Outcomes from Research

ログイン English

千葉大学学術成果リポジトリ ブラウズ ランキング 附属図書館 HP 千葉大学 HP

検索結果に戻る 前のレコード 次のレコード

本文ファイル
TLA_0277 pdf 2.72 MB 30 本文 = dissertation

基本情報	
タイトル	ホログラフィを用いた映像投影システムの画質改善および計測システムの検出精度向上に関する研究
作成者	根尾, 敦
作成者の別表記	NEO, Atsushi
内容	研究科: 千葉大学大学院工学研究科 (人工システム科学専攻) 学位記番号: 千大院工博甲第277号
ハンドルURL	http://opac.ll.chiba-u.jp/da/curator/104550/
フルテキストへのリンク	http://opac.ll.chiba-u.jp/da/curator/104550/TLA_0277.pdf
NII資源タイプ	学位論文
刊行年月	2017-09-30
selfDOI	10.20776/104550
著者版フラグ	ETD

Example of DOI registration: Classical Documents

■ Digital Collection: National Diet Library

<https://doi.org/10.11501/1287166>

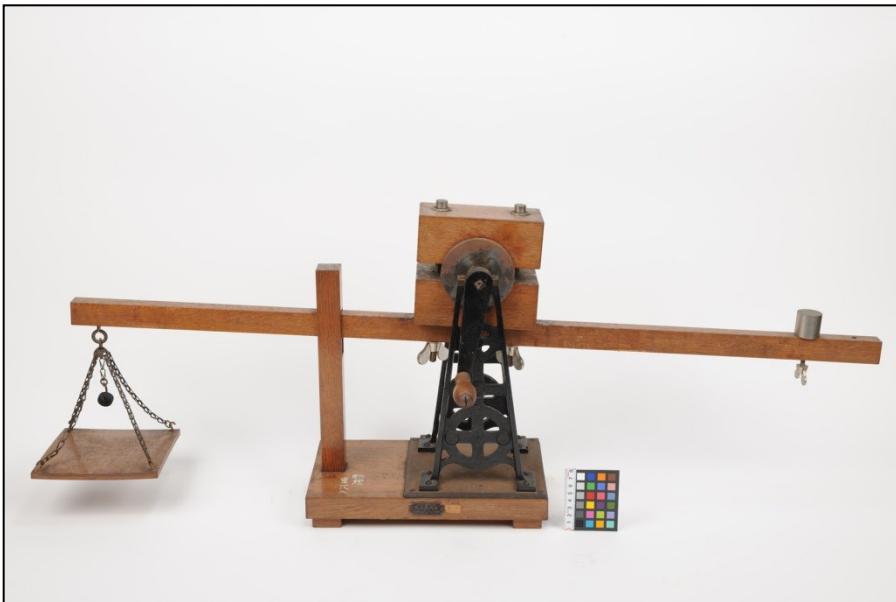


DOIs are registered so that everyone can stably reach the image of the work that is the basis of the thesis of the humanities.

Example of DOI registration: Historical Material

- Re*poN (Academic Repository Network)

<https://doi.org/10.18876/00000167>



Example of DOI registration: Research Data

■ DIAS

<https://doi.org/10.20783/DIAS.523>

DIAS データ俯瞰・検索システム
Dataset Search and Discovery

日本語

Home How to use About

S14 global meteorological forcing dataset

Data File Download with DIAS data download system

HTML PDF XML

The citation for this dataset is:

Toshichika Iizumi. (2017). S14 global meteorological forcing dataset [Data set]. Data Integration and Analysis System (DIAS). <https://doi.org/10.20783/DIAS.523>

Select citation format: APA ▾

IDENTIFICATION INFORMATION

Name	S14 global meteorological forcing dataset
DOI	doi:10.20783/DIAS.523
Metadata Identifier	S14FD20180508151040-DIAS20170725102541-en

CONTACT

CONTACT on DATASET

Keywords

Keywords on Dataset

biological forcing dataset (S14FD) offers daily data of 11 climatic variables over the globe from the sea and Antarctica are not bias-corrected (i.e., the raw data of the JRA-55 reanalysis were the land are bias-corrected. Variables include daily mean 2m air temperature (tave2m, °C), daily max (tmax2m, °C), daily minimum 2m air temperature (tmin2m, °C), daily total precipitation (prcptot, mm day⁻¹), daily downward shortwave radiation flux (dswrfsfc, W m⁻²), daily mean downward longwave radiation (dlwrfsc, W m⁻²), daily mean 2m relative humidity (rh2m, %), daily mean 2m specific humidity (spfh2m, kg kg⁻¹), daily mean 2m wind speed (wind2m, m s⁻¹), daily mean 10m wind speed (wind10m, m s⁻¹) and daily mean surface pressure (sp2m, hPa).

phere

8-01-01

3-12-31

y

Example of DOI registration: e-learning materials

■ Database Center for Life Science (DBCLS)

<https://doi.org/10.7875/togotv.2016.068>



The screenshot shows the TOGO TV website interface. On the left, there is a sidebar with a list of search categories. The main content area displays a video thumbnail for a tutorial titled "How to use RefEx: Reference Expression Dataset". The thumbnail image shows a computer screen displaying the RefEx dataset interface, which includes a search bar and various tissue icons. A blue callout box overlaid on the thumbnail provides instructions: "When you move the mouse cursor to the tissue icon of the top page, you can see that each tissue of 40 classifications. Then choose the tissue you want to examine." Below the thumbnail, there is a note in Japanese: "YouTube版を視聴できない方はオリジナル版ファイル(mov形式)をダウンロードして、ご覧ください。"

Example of DOI registration: Presentations

■ Humanities research Data Repository

<https://doi.org/10.20676/00000314>



The screenshot shows a digital repository interface for a presentation. At the top, there is a navigation bar with 'インデックス' (Index) and a question mark icon. Below it, a breadcrumb trail shows 'CODHセミナー' and '第4回CODHセミナー'. A red box highlights the 'Permalink' link: <http://doi.org/10.20676/00000314>. The main content area has a title '慶應義塾大学メディアセンターでのIIIFへの取組み' and a '利用統計を見る' (View Usage Statistics) link. Below this, there is a table with two columns: 'File / Name' and 'License'. The file name is 'IIIF_DH' and the license is 'Creative Commons BY'. A red box highlights the 'JaLC DOI' field: info:doi/10.20676/00000314. The table also contains other fields: 'アイテムタイプ' (Item Type: 会議発表用資料 / Presentation), '言語' (Language: 日本語), '著者' (Author: 入江 伸 / イリエ シン (CiNii ID: 9000004447600)), and '関連サイト' (Related Site: 慶應義塾大学メディアセンターデジタルコレクション).

File / Name	License
IIIF_DH IIIF DH (24.18MB) [170 downloads]	 Creative Commons : 表示

JaLC DOI	info:doi/10.20676/00000314
アイテムタイプ	会議発表用資料 / Presentation
言語	日本語
著者	入江 伸 / イリエ シン (CiNii ID: 9000004447600)
関連サイト	慶應義塾大学メディアセンターデジタルコレクション

JaLC Community

JaLC has developed DOI community in Japan and always co-creating new services with JaLC members.



1. Japan Link Center (JaLC) as DOI Registration Agency
2. Current Situations of Japan Link Center (JaLC)
3. Japan Link Center – Strategy 2017-2022

Japan Link Center – Strategy 2017-2022

- JaLC has developed strategy in 2016.

https://japanlinkcenter.org/top/doc/JaLC_strategy2017en.pdf

Japan Link Center – Strategy 2017-2022



Japan Link Center

Connecting Japan
~Lasting Access~

Providing open, sustainable access to academic information together with researchers, research institutes, librarians, libraries, publishers, educators, educational bodies, IT engineers, information service providers, research funding agencies, academic groups and others.

Japan Link Center 5 Strategies

- Promote open use of DOI and metadata.
- Develop an environment for registering DOI which while retaining international coordination makes full use of a diversity of Japanese academic resources, academic environment, and language.
- Build an environment for assigning IDs to a variety of resources needed in academia.
- Promote the use of research data and contribute to implementing Open Science.
- Contribute to fostering communities.

Five steps to realizing the Japan Link Center strategy

1. Enabling DOI registration in diverse resources used by researchers.
It is intended to add research resources as needed, including real resources such as experiment samples, to the present DOI information resources with its registration of publications, papers, research data, e-learning teaching resources, and other information resources. In this way, real resources can be referred to in papers, and a contribution made to improve the wider use of research results.
As a first step toward this, research is being done into what resources are needed by researchers, and guidelines are being made for registering DOI in them.

2. Working at providing coordination with external agency metadata, enhancement of metadata search function, and informing the level of DOI use.
This involves creating an environment enabling the use of JaLC metadata for various services, and contributing to promoting the circulation of contents. Also, data is being provided relating to the level of DOI use.
The search function for metadata is being enhanced by commencing a search service allowing general users to utilize the search function for DOI and metadata. Also, JaLC will open its metadata to the general public in batch files, and will provide an opportunity to use JaLC metadata in various forms.
In order to inform the level of DOI use, a method will be provided to JaLC members allowing them to find out usage statistics for registered DOI and the level of citation.
3. Strengthening coordination with other ID services involved in research, as global research IT infrastructure.
We will contribute to developing a better research infrastructure by continuing DOI related services as mainstays and through coordination with other document ID, researcher ID, and institution ID services.
As a first step, coordination with ORCID will be strengthened for JaLC DOI registered contents.
4. Constructing a flexible service development system responsive to changes in the research environment.
A service is being developed together with the stakeholders, capable of swift adaption to changes in the research environment. JaLC will take responsibility for development of the central section of the system to create the service, and the application and development section will be constructed around a system capable of development in cooperation with the stakeholders, using a proposal style model.
5. Aiming at fostering a wide community including researchers, research institutes, librarians, libraries, publishers, educators, educational bodies, IT engineers, information service providers, research funding agencies, academic groups and others.
We will encourage communication to spread DOI throughout Japan, and will promote spontaneous research activity through fostering a community.
With that purpose an annual meeting for discussion and support will be held. Also, in order to discuss research information within a wider framework, we will enhance a research data use conference and aim at forming a nucleus for Open Science in Japan.

Japan Link Center – Strategy 2017-2022

Connecting Japan
~ Lasting Access ~

<Japan Link Center 5 Strategies>

1. Promote open use of DOI and metadata.
2. Develop an environment for registering DOI which while retaining international coordination makes full use of a diversity of Japanese academic resources, academic environment, and language.
3. Build an environment for assigning IDs to a variety of resources needed in academia.
4. Promote the use of research data and contribute to implementing Open Science.
5. Contribute to fostering communities.

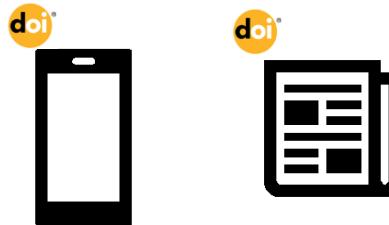
Five Actions to realizing the Japan Link Center strategy

- I. Enabling DOI registration in diverse resources used by researchers.
- II. Working at providing coordination with external agency metadata, enhancement of metadata search function, and informing the level of DOI use.
- III. Strengthening coordination with other ID services involved in research, as global research IT infrastructure.
- IV. Constructing a flexible service development system responsive to changes in the research environment.
- V. Aiming at fostering a wide community including researchers, research institutes, librarians, libraries, publishers, educators, educational bodies, IT engineers, information service providers, research funding agencies, academic groups and others.

Action 1

1. Enabling DOI registration in diverse resources used by researchers.

- e-book, government publication



- Digital contents, research data



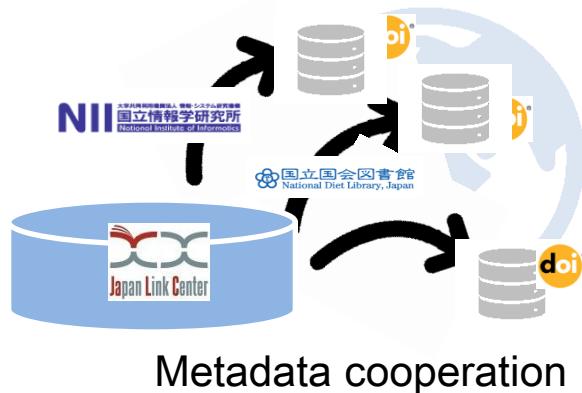
- Physical objects(laboratory instrument, research sample, software)



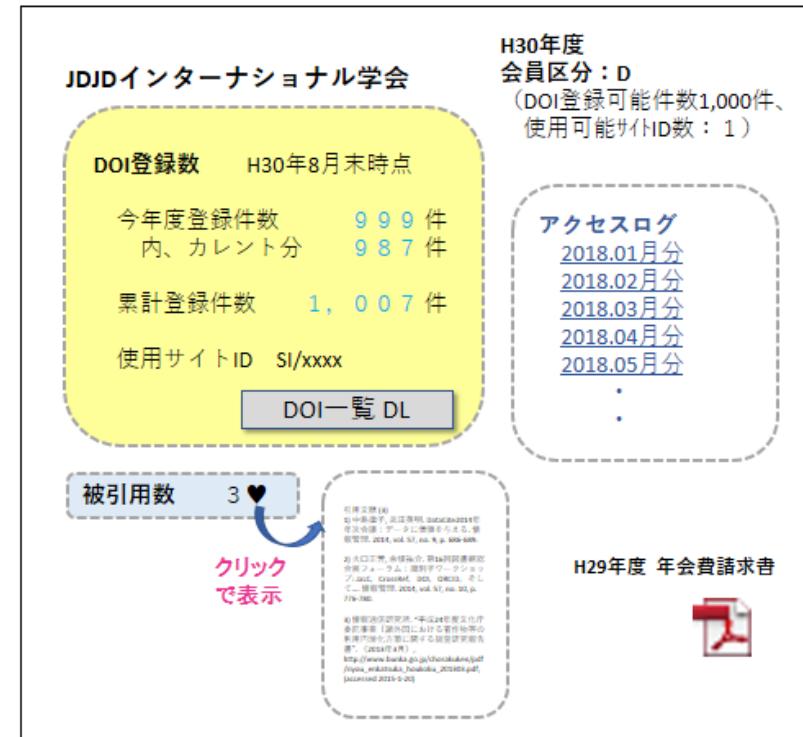
Action 2

2. Working at providing coordination with external agency metadata, enhancement of metadata search function, and informing the level of DOI use.

coordination with external agency



Dashboard for JaLC member

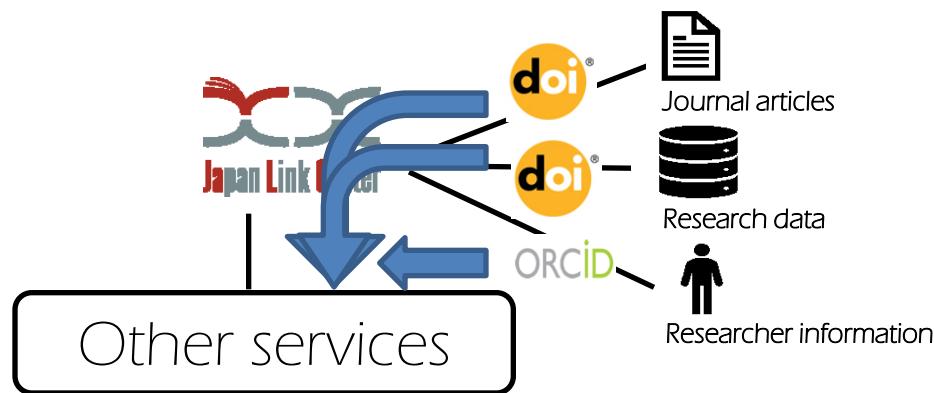


The dashboard displays the following information:

- JDJDインターナショナル学会** (JDJD International Society)
- H30年度 会員区分 : D** (H30 Year Member Category: D)
 - (DOI登録可能件数1,000件、使用可能サイトID数 : 1)
- DOI登録数 H30年8月末時点** (DOI Registration Statistics as of August 31, H30)
 - 今年度登録件数 999 件 (Annual registration count: 999 items)
 - 内、カレント分 987 件 (Current: 987 items)
 - 累計登録件数 1,007 件 (Cumulative registration count: 1,007 items)
 - 使用サイトID SI/xxxx
 - DOI一覧 DL** (DOI List Download)
- アクセスログ** (Access Log)
 - 2018.01月分
 - 2018.02月分
 - 2018.03月分
 - 2018.04月分
 - 2018.05月分
 - :
- 被引用数** (Citation Count): 3
 - クリックで表示 (Click to view)
 - 引用文献 (4)
 - 1) 中澤道子, 佐藤英樹, 等.国際開発援助
技術の実現とその社会的意義. 第1回国際開発
技術セミナー, 2014, vol.57, no.8, p.489-509.
 - 2) 佐々木智, 佐藤英樹, 等.国際開発援助
技術の実現とその社会的意義. 第1回国際開発
技術セミナー, 2014, vol.57, no.8, p.489-509.
 - 3) 佐々木智, 佐藤英樹, 等.国際開発援助
技術の実現とその社会的意義. 第1回国際開発
技術セミナー, 2014, vol.57, no.8, p.489-509.
 - 4) 国立情報学研究所, 「平成30年度文化庁
支援事業実績報告書」(2018.01.17)に記載の
新規開拓事業「国際開発援助技術の実現と
その社会的意義」. (最終稿件)
- H29年度 年会費請求書** (H29 Annual Membership Fee Bill)

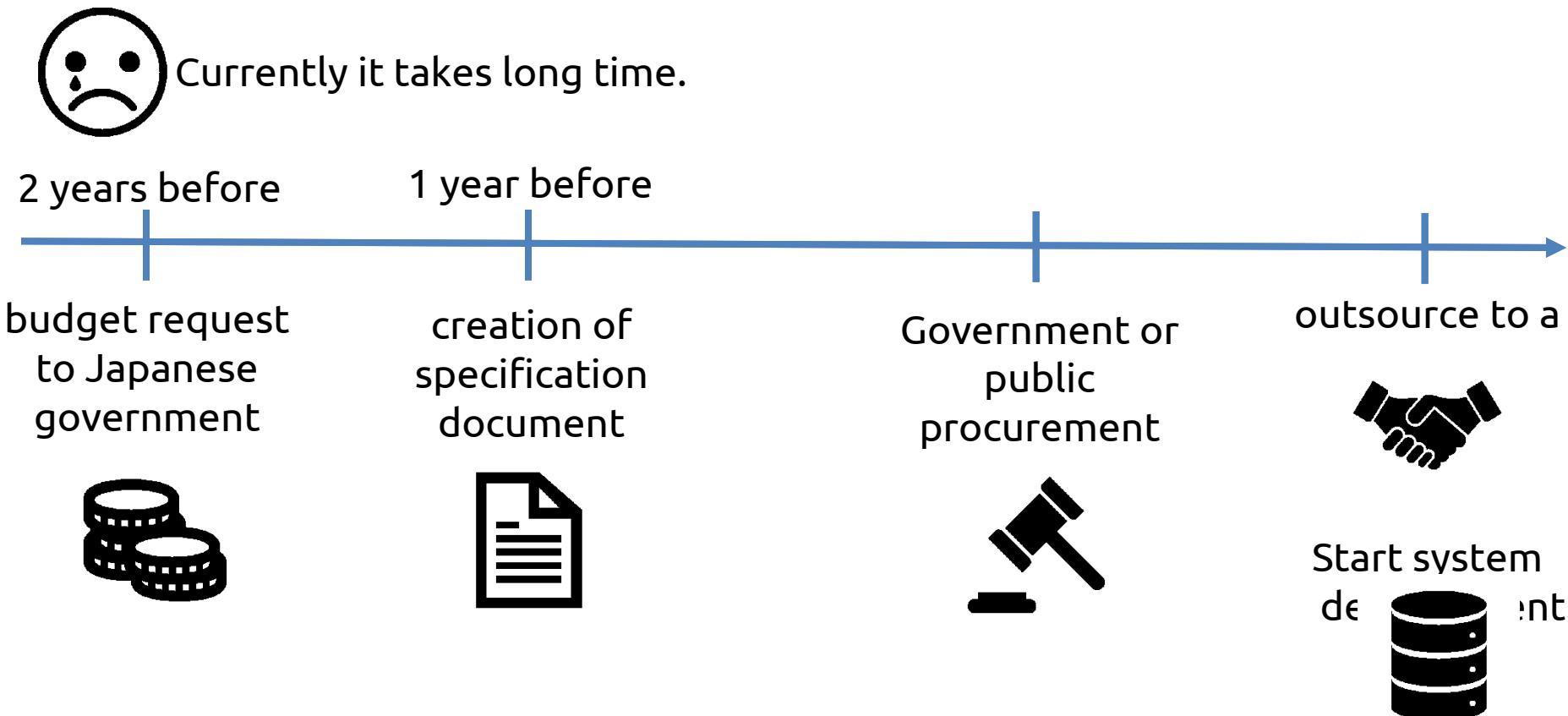
Action 3

3. Strengthening coordination with other ID services involved in research, as global research IT infrastructure.



Action 4

4. Constructing a flexible service development system responsive to changes in the research environment.



Actions 5

5. Aiming at fostering a wide community including researchers, research institutes, librarians, libraries, publishers, educators, educational bodies, IT engineers, information service providers, research funding agencies, academic groups and others.



<JaLC community>
Information exchange beyond the boundaries of research fields



감사합니다.
Thank you very much.

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info@japanlinkcenter.org