Expanding the content categories at JaLC

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Chair, Joint Steering Committee

Japan Link Center (JaLC)

http://japanlinkcenter.org/

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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 915 associate members)
  - National Institute for Materials Science (NIMS)
  - National Institute of Informatics (NII)
    (will have about 1,000 associate members)
  - National Diet Library (NDL)
- Operated by JST
- Membership system
  19 Regular members
  (Academic societies, Publishers, University libraries, etc)
- External coordination
  JaLC is a member of CrossRef and DataCite(Mar. 2014)

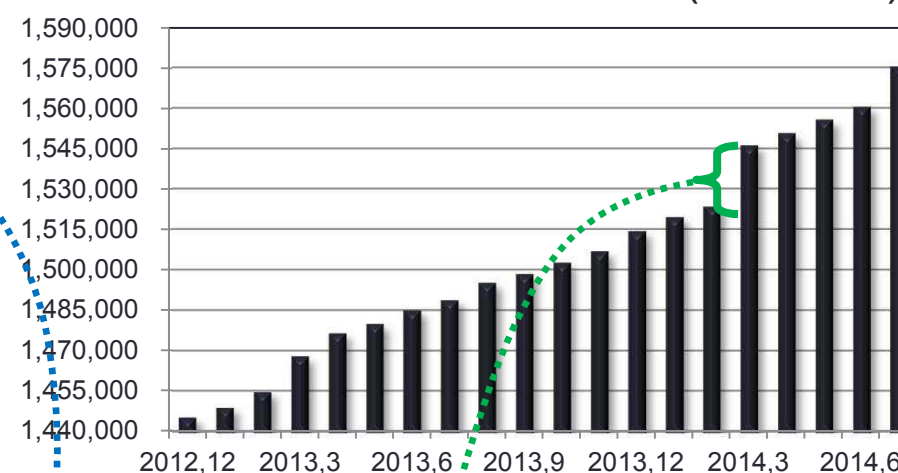# Registration of DOI via JaLC
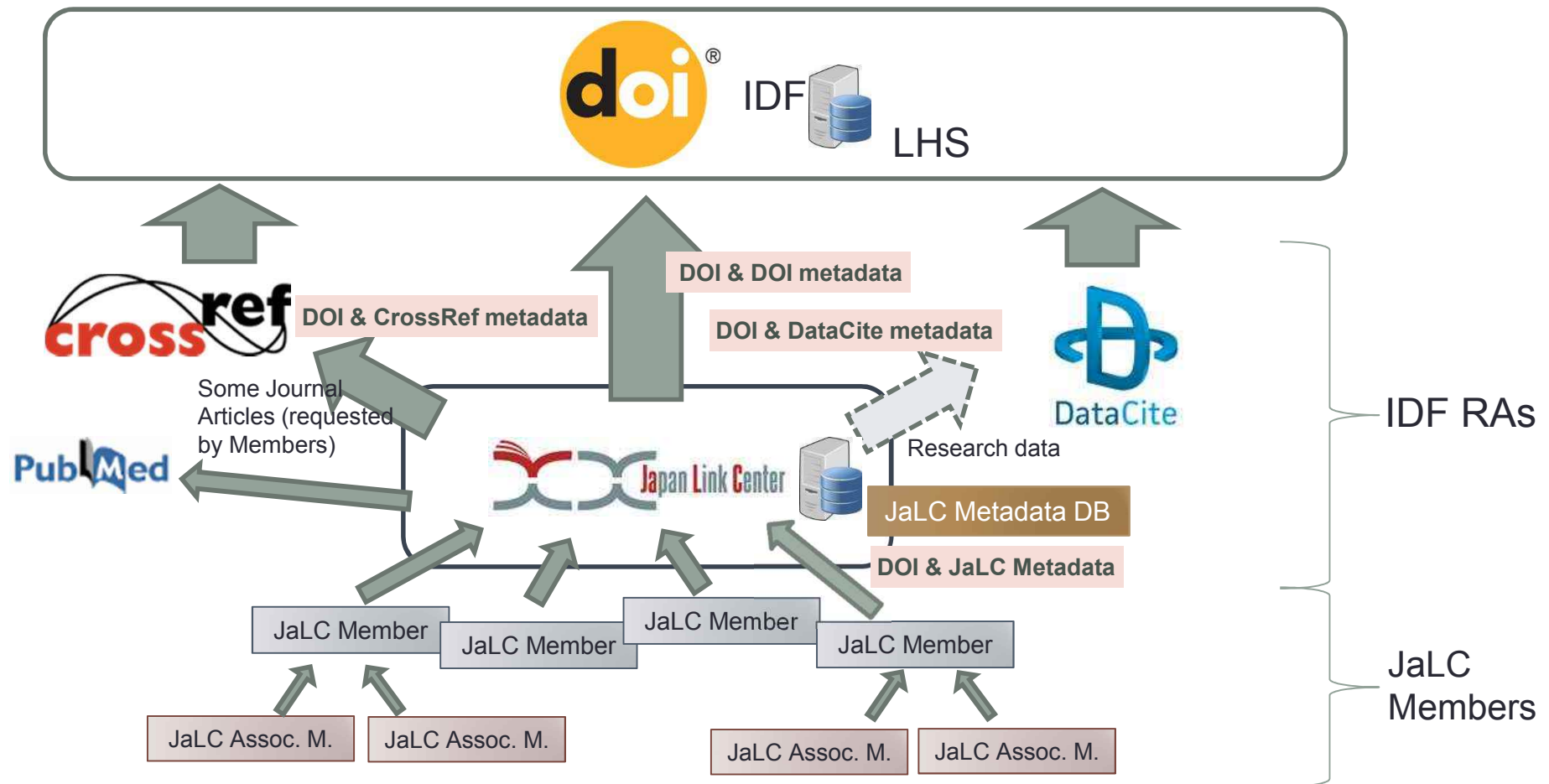
Number of DOIs

JaLC DOI
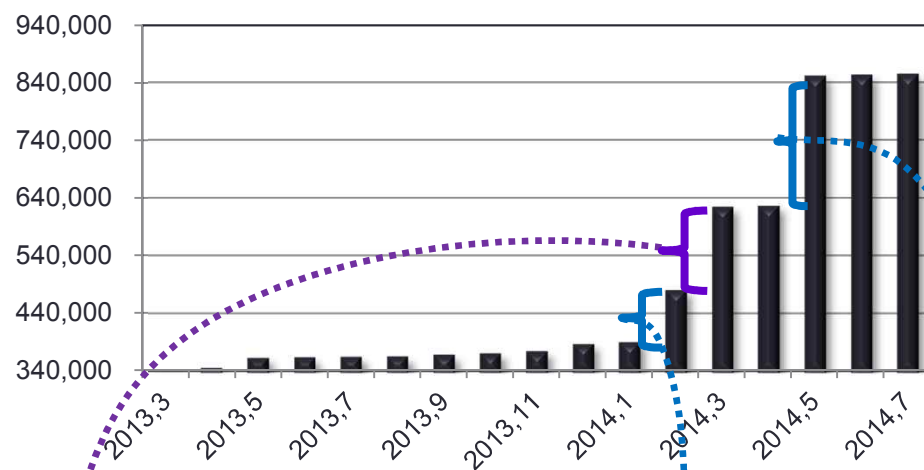
CrossRef DOI (via JaLC)

※ **J-STAGE Article : 90,000+ 200,000 (JaLC DOI)**

+20,000 (CrossRef DOI)

(Collective registration for the articles which had not been registered DOI)

※**National Diet Library's Doctoral Thesis : 140,000**

Total amount of DOIs: 2,427,391 (at the end of July 2014)

Upcoming features

JaLC will release new features in December 2014.

a. ## More content categories

Expanded to research data and books etc. besides journal articles.
JaLC will collaborate with DataCite in registering DOI for research data.

b. ## Edition information

Variation: publication version, author's version, ...
Version : 1.0, 2.1, ...
Format: XML, PDF, …

c. ## Multiple resolution

Identical contents are resolved into original sites, archive sites and distributers' sites.

d. ## Researcher identifiers

ORCID, KAKEN ID, NDL authority ID are included in JaLC's deposit schema.
Ex. of application: Send pairs of ORCID and DOI to ORCID system so that corresponding articles will be suggested as research results on ORCID service.

e. ## Linked data

Metadata are provided as linked data.

Content categories

Category	
Journal articles	
Journal articles	Dec.2012 -
University bulletins	Sep.2014 -
Conference proceedings	Mar.2012 -
Books	
Books	Jan.2015 -
Doctoral theses	Mar.2014 -
Reports	
Technical reports	Jan.2015 -
Governmental reports	Jan.2015 -
Research data	Jan.2015 -
e-learning resources	Jan.2015 -

Metadata

These properties are unified among the types

Basic metadata:

DOI, URL, title, author 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, title, 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)	

Japan Link Center

JaLC Metadata DB

JaLC Member

JaLC Article Metadata

JaLC Data Metadata

Translation

CrossRef Article Metadata

DataCite Article Metadata

crossref

DataCite

Planned
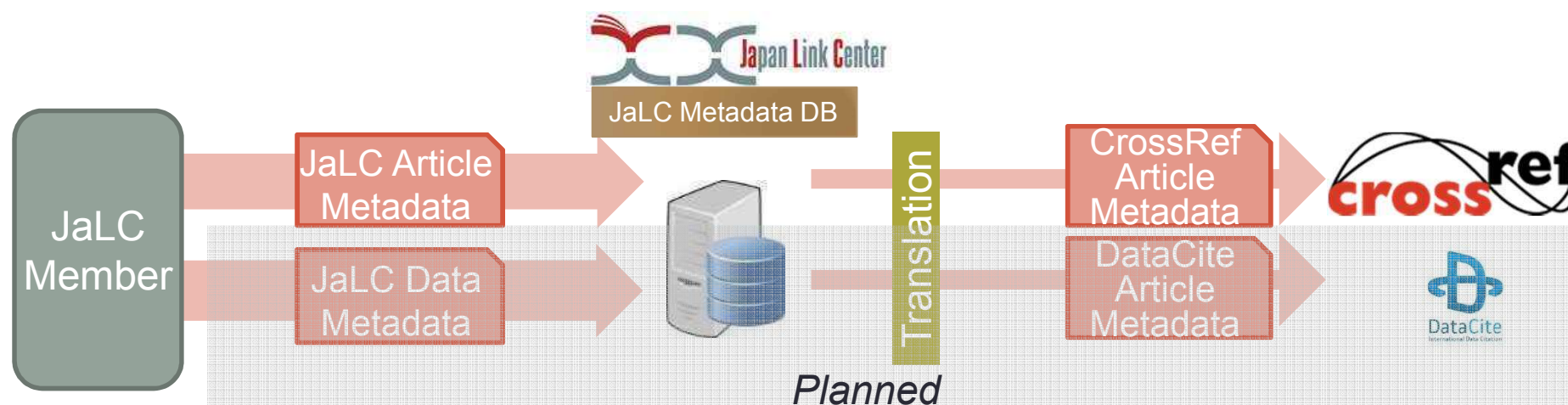
Metadata (common)

#	Field					
1	root				○	1
2	head				○	1
3	error_process				○	1
4	result_method				○	1
5	content_classification				○	1
6	request_kind				○	1
7	body				○	1
8	site_id				○	1
9	content					
10		sequence				
11	doi					
12	url					
13	title_list					
14	titles					
15		lang	ISO639準拠			
16	title					
17	subtitle					
18	creator_list					
19	creator					
20		sequence				
21		type	person / institute			
22	names					
23		lang	ISO639準拠			
24	last_name					
25	first_name					
26	prefix					
27	suffix					
28	affiliation					
29	affiliation_name					
30		sequence				
31		lang	ISO639準拠			
32	researcher_id					
33	id_code					

#	Field					
	type					
35	publication _date				○	1
36	year				○	1
37	month					0-1
38	day					0-1
39	publisher				○	1
40	publisher_name				○	1
41		lang	ISO639準拠			0-1
42	location					0-1
43	edition					0-1
44	variation			△※2	0-1
45	version			△※2	0-1
46	format			△※2	0-1
47	relation_list					0-1
48	related_content				○	1-N
49		type	DOI / URL		○	1
50		relation			○	1
51	alternate_identifier				0-1
52		type			○	1
53	content_language				0-1
54	fund_list				0-1
55	fund				○	1-N
56	funder_name				○	1
57		lang	ISO639準拠	△※1	0-1
58	funder_identifier				0-1
59		type	FundRef		0-1
60	award_number				0-1
61	multiple_resolution_priority				0-1

XML（RDF)

No	Name					mandatory	attribute	
							name	value
1	xml					○		
2	rdf:RDF					○	xmlns:rdf	http://www.w3.org/1999/02/22-rdf-syntax-ns#
3							xmlns:dc	"http://purl.org/dc/elements/1.1/"
4							xmlns:owl	http://www.w3.org/2002/07/owl#
5							xmlns:foaf	"http://xmlns.com/foaf/0.1/"
6							xmlns:prism	"http://prismstandard.org/namespaces/basic/2.0/"
7		rdf:Description				○	rdf:about	"http://dx.doi.org/"+"DOI"
8			prism:doi			○		
9			dc:title					
10			dc:creator					
11				foaf:Person		○		
12					foaf:name			
13					foaf:familyName			
14					foaf:givenName			
15			dc:publisher			○		
16			dc:date			○	rdf:resource	"http://www.w3.org/2001/XMLSchema#date"
17			prism:volume					
18			prism:startingPage					
19			prism:endingPage					
20			dcterms:isPartOf					
21				owl:Class		○	rdf:about	"Journal"
22					prism:issn			
23					owl:sameAs			
24					dc:title			

There's a possibility that this XML will change.

Experiment Project to register DOIs for Research Data

- Goal
  - Establish operation flows to register DOIs for research data and have stable operation

- Objectives
  - Set policies in registering DOIs for research data
  - Establish operation flows to register DOIs for research data with the next version of JaLC system. Ensure that by performing registration tests

Project Organization
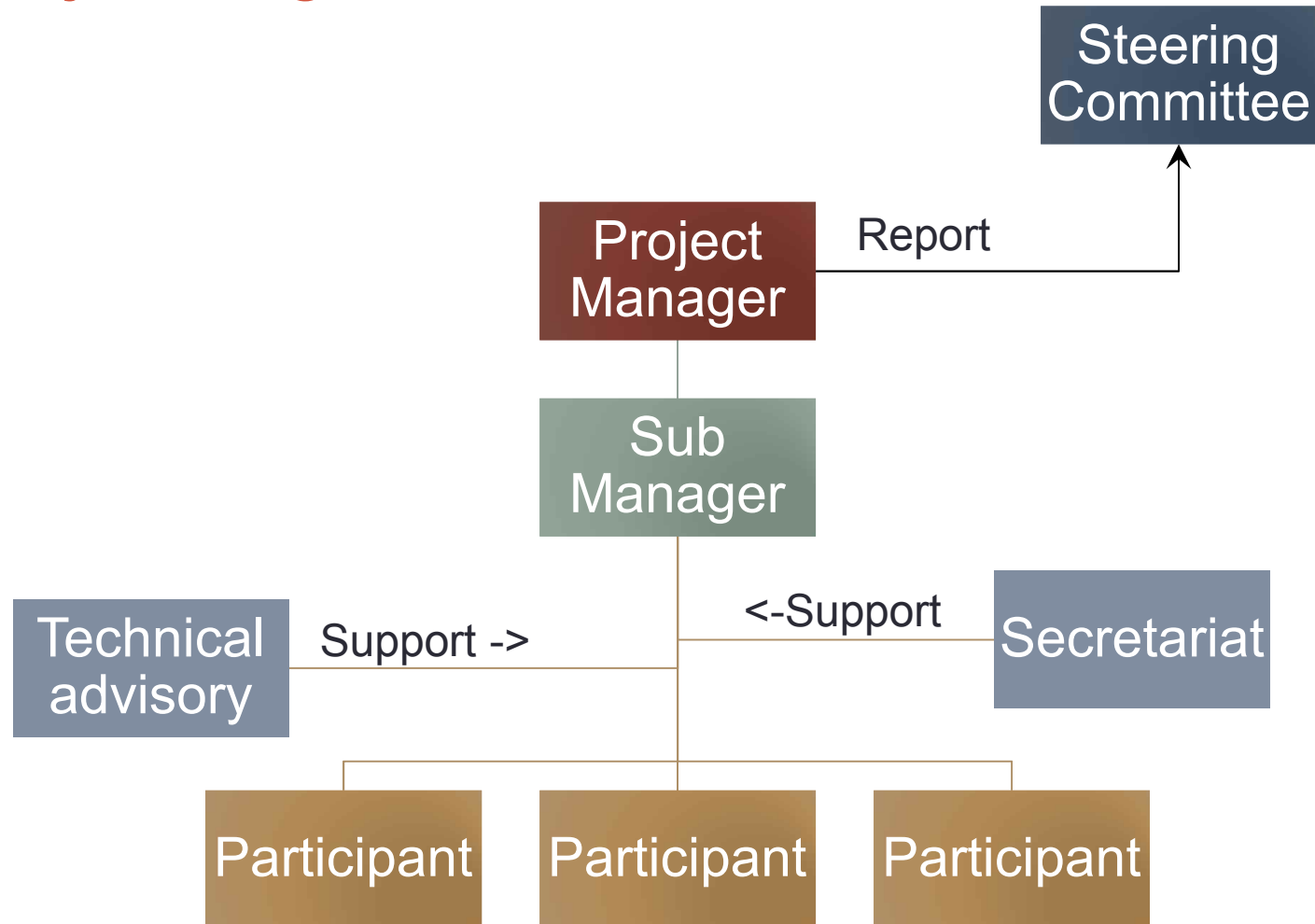
Participants are supposed to be research institutes, universities, etc. and chosen by public invitation.
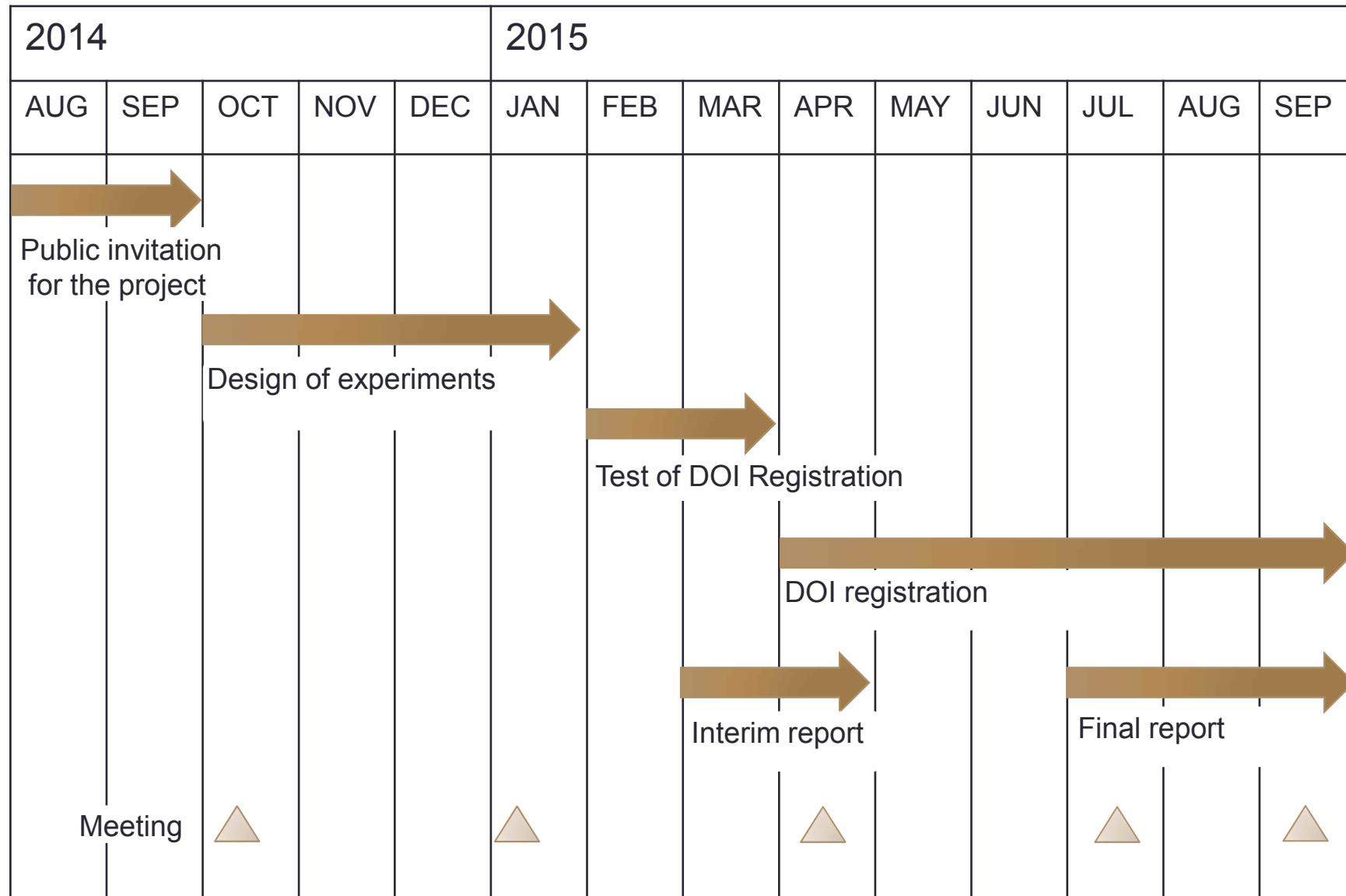
Examples of subjects to be examined

- Flow of operations
  - In case a regular member deposits only its data
  - In case a regular member deposits their data and the associate members' data together
- Persistent access
  - Can time-limited projects participate? Who will ensure the persistency of the data?

    (ex.)
    - ✓ The representative institute takes over all of the data
    - ✓ Registering DOIs only for data managed by real organizations among the members of the project
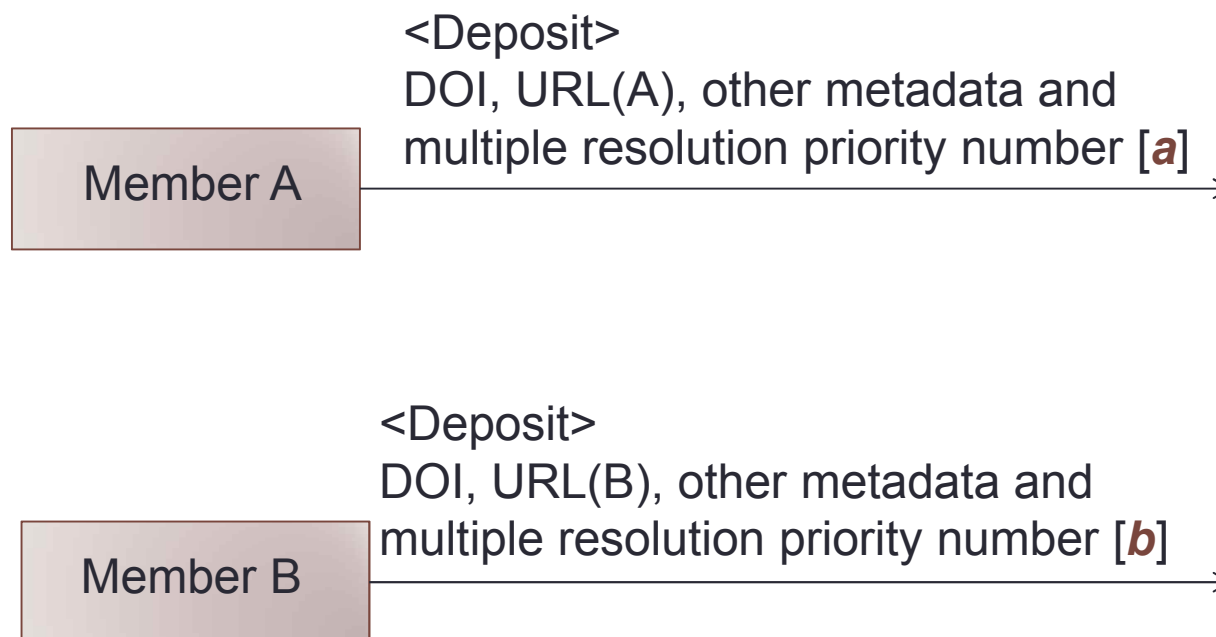- Granularity of registration

Examples of subjects to be examined (cont'd)

- Landing page
  - Metadata description page/file/…
  - For open/closed data

- Other operations
  - Adding data after registration of DOI
  - Registering DOI for a large amount of data

- Application
  - Citing DOIs for research data
  - Developing other applications

Schedule

2014					2015								
AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

Public invitation for the project

Design of experiments

Test of DOI Registration

DOI registration

Interim report

Final report

Meeting

Multiple resolution

Member A

<Deposit>
DOI, URL(A), other metadata and
multiple resolution priority number [*a*]

Member B

<Deposit>
DOI, URL(B), other metadata and
multiple resolution priority number [*b*]

JaLC

When JaLC detects the same DOIs deposited with multiple resolution priority number by different members, the multiple resolution function works.

JaLC multiple resolution works only among JaLC DOIs. CrossRef's DOIs are out of coverage.

Summary

- JaLC is established to enhance scientific communication with DOI

  - Ideally support all activities by researchers

- JaLC started service for journal articles, then will extend it for books, e-learning, and data.

- Need of knowledge and experience about data registration

  - Start the experiment in Fall.

  - Need for collaboration and coordination with DataCite

Thank you!

http://japanlinkcenter.org/