

Expanding the content categories at JaLC

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Chair, Joint Steering Committee

Japan Link Center (JaLC)

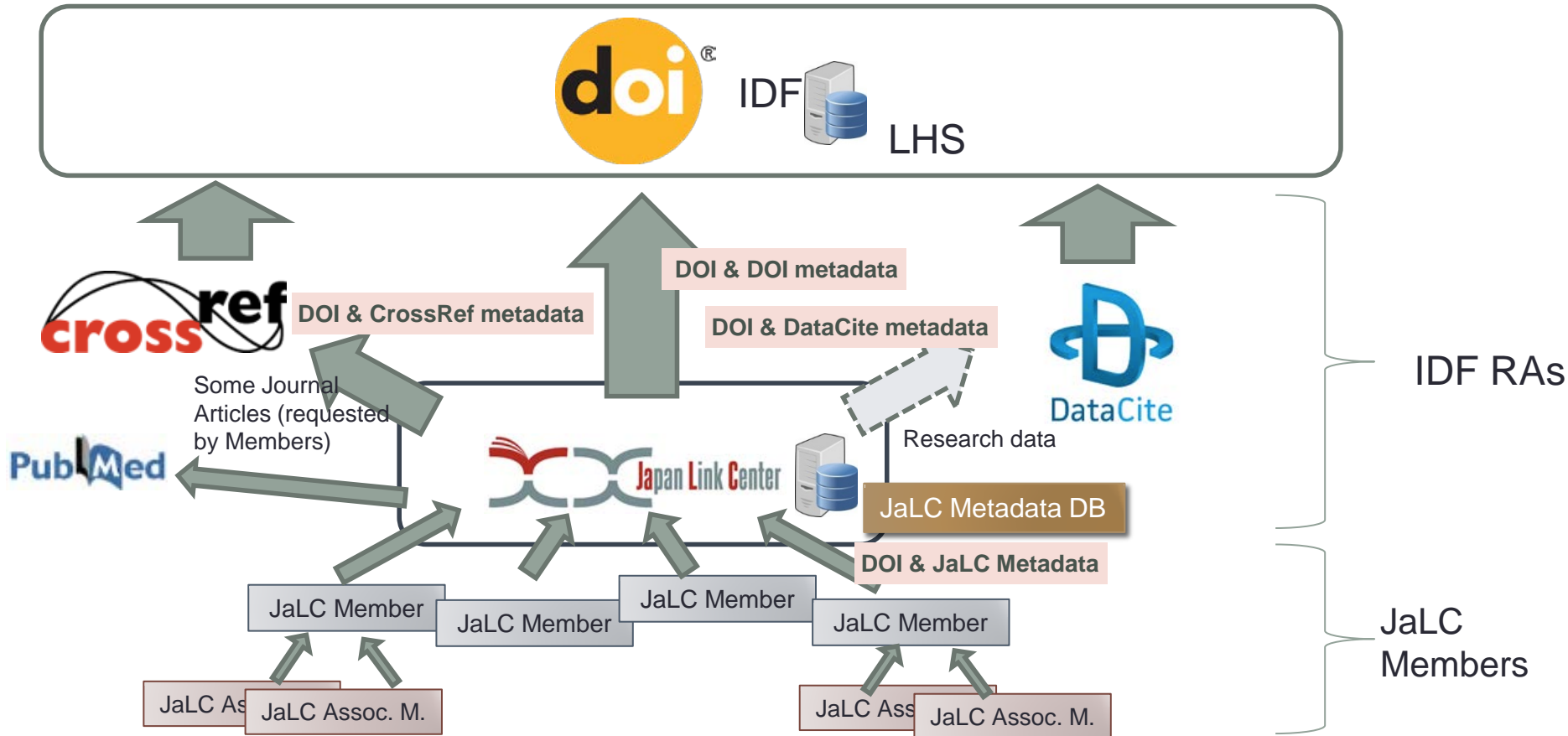


<http://japanlinkcenter.org/>

Japan Link Center (JaLC)

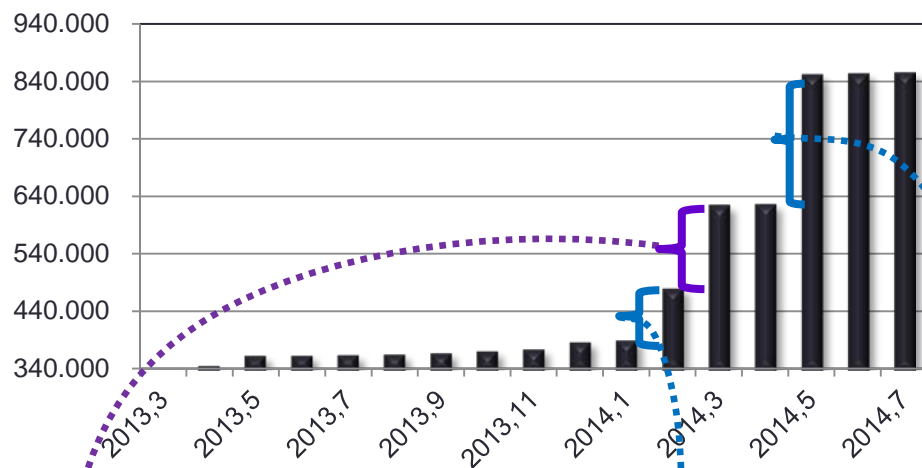
- Founded in March 2012
- Aimed to register DOIs for academic contents produced in Japan or in Japanese, to circulate information in Japan and overseas.
- Controlled by four national organizations:
 - Japan Science and Technology Agency (JST)
(has 915 associate members)
 - National Institute for Materials 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

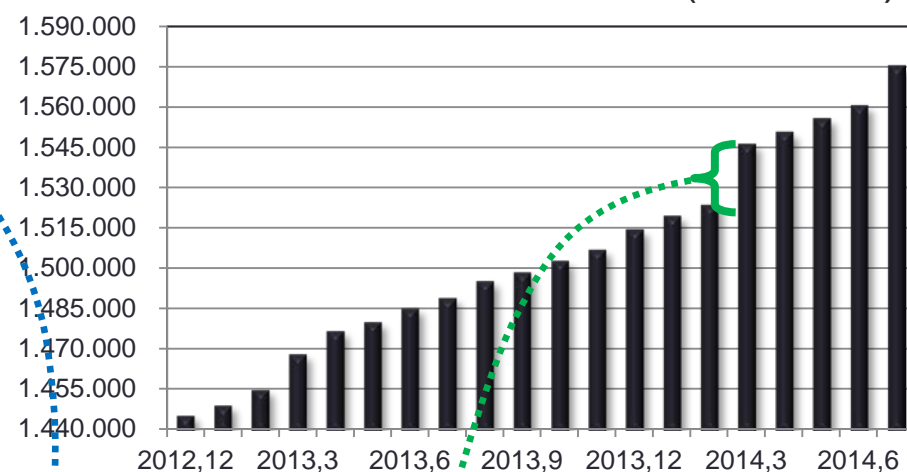


Number of DOIs

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 distributors' 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 -

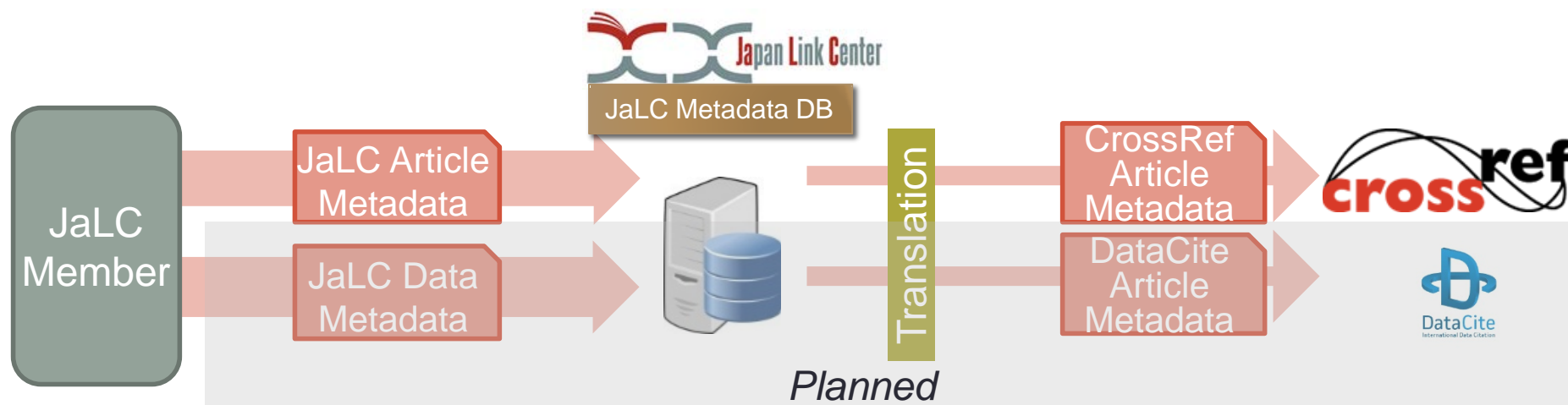
Metadata

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)	



Metadata (common)

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			35
11	doi				36
12	url				37
13	title_list				38
14	titles				39
15		lang	ISO639準		40
16		title			41
17		subtitle			42
18	creator_list				43
19	creator				44
20		sequence			45
21		type	person institute		46 47
22	names				48
23		lang	ISO639準		49
24		last_name			50
25		first_name			51
26		prefix			52
27		suffix			53
28	affiliation				54
29		affiliation_name			55
30		sequence			56
31		lang	ISO639準		57
32	researcher_id				58
33		id_code			59
					60
					61
	publication_date			○	1
	year			○	1
	month				0-1
	day				0-1
	publisher			○	1
	publisher_name			○	1
		lang	ISO639準		0-1
	location				0-1
	edition				0-1
	variation			△※2	0-1
	version			△※2	0-1
	format			△※2	0-1
	relation_list				0-1
	related_content			○	1-N
		type	DOI URL	○	1
		relation		○	1
	alternate_identifier				0-1
		type		○	1
	content_language				0-1
	fund_list				0-1
	fund			○	1-N
	funder_name			○	1
		lang	ISO639準	△※1	0-1
	funder_identifier				0-1
		type	FundRef		0-1
	award_number				0-1
	multiple_resolution_priority				0-1

XML (RDF)

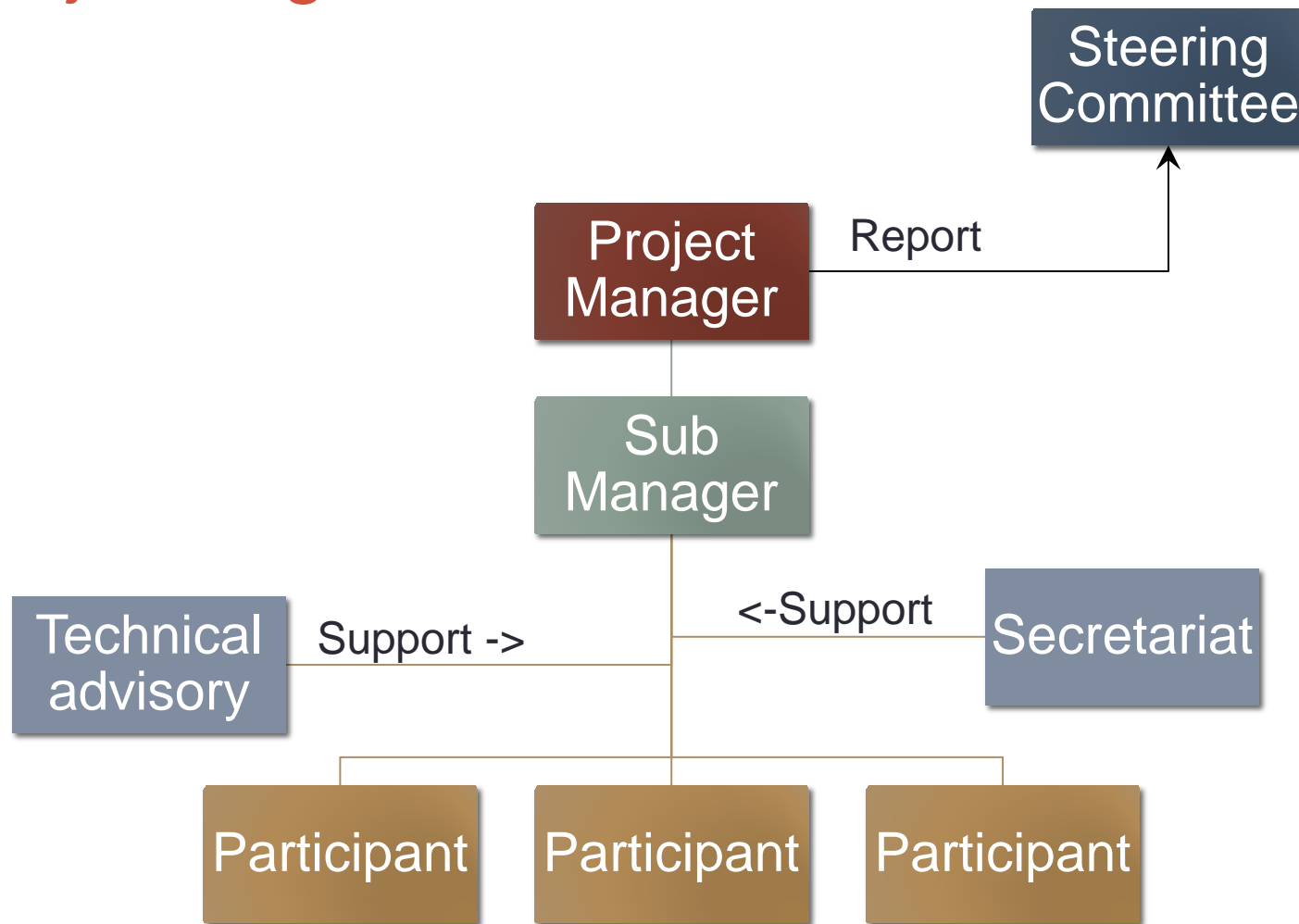
No	Name	mandatory	attribute		
			name	value	
1	xml	<input type="radio"/>			
2	rdf:RDF	<input type="radio"/>	xmlns:rdf	http://www.w3.org/1999/02/22-rdf-syntax-ns#	
3			xmlns:dc	"http://purl.org/dc/elements/1.1/"	
4			xmlns:owl	http://www.w3.org/2002/07/owl#	
5			xmlns:foaf	"http://xmlns.com/foaf/0.1/"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

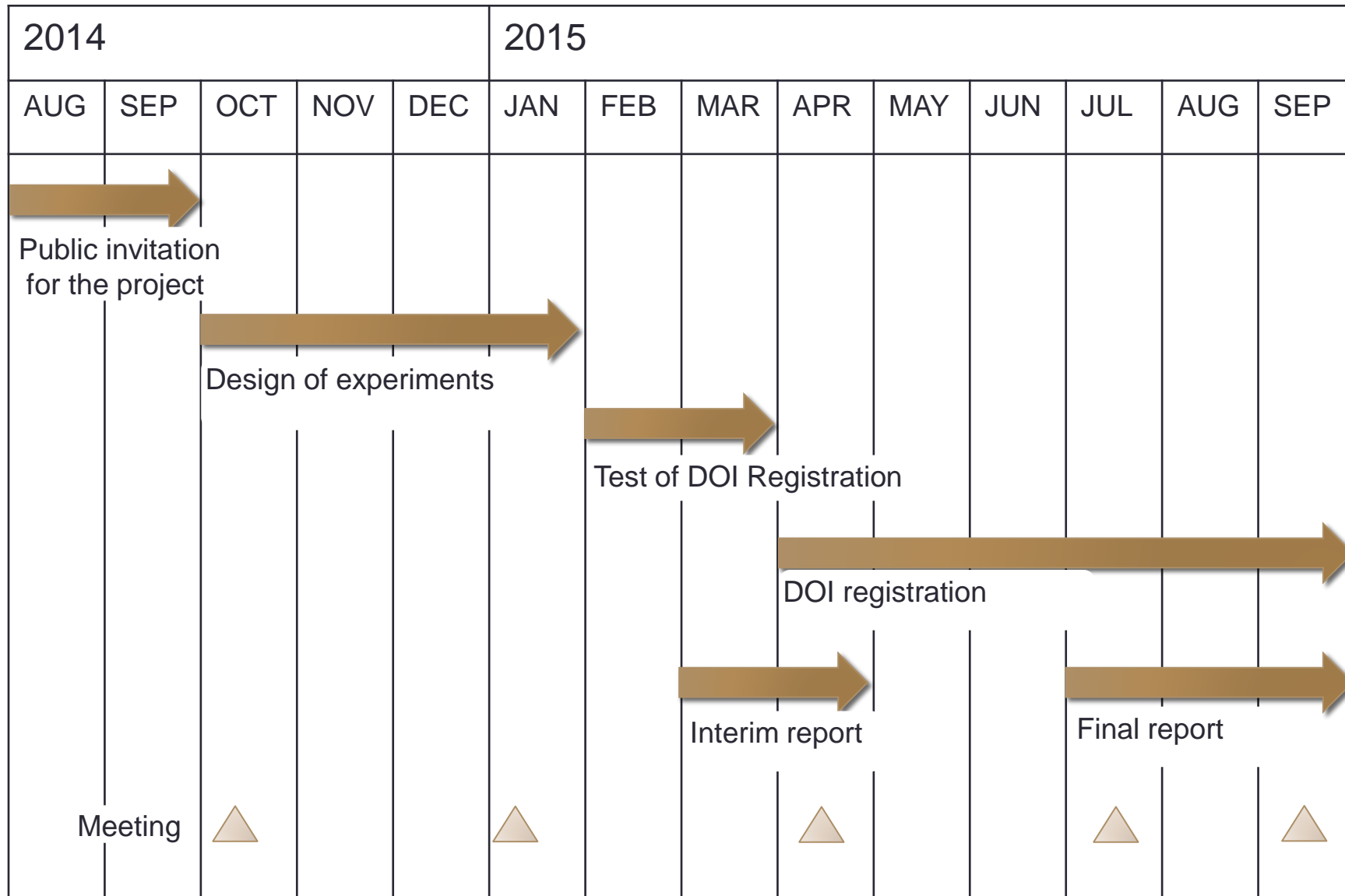
Examples of subjects to be examined

- 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

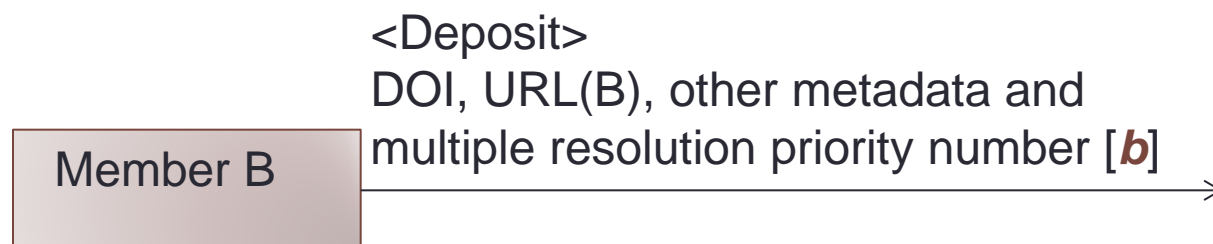
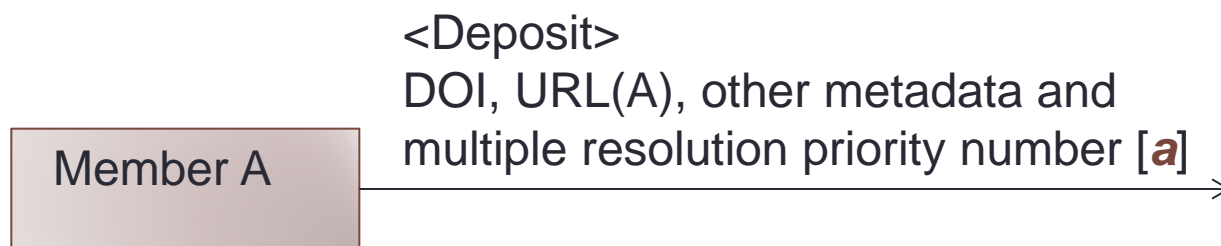
Examples of subjects to be examined (cont'd)

- 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



Multiple resolution



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/>

