Forthcoming standards
Neil Jacobs
Forthcoming standards

Everyone’s sharing metadata...

The main international forums:

• NISO
• CASRAI

Other initiatives

• JATS4R
• CrossRef / funder mandates
• Journal OA policies
• Event-based architectures

...and forthcoming application...

http://www.flickr.com/photos/mbiddulph/310952132/in/photostream/  CC-BY-SA
All stakeholders are making metadata available
Non-publisher initiatives in the UK

UK Research Councils / OSIP
Repository metadata / RIOXX
APC reporting

CC-O
Two international forums
NISO and CASRAI
NISO active groups (from website)

Access and License Indicators
Demand-Driven Acquisition (DDA) of Monographs

**JATS: Journal Article Tag Suite** (Also known as Standardized Markup for Journal Articles)

Journal Article Version (JAV) Addendum

**KBART (Knowledge Base and Related Tools)**

NCIP (NISO Circulation Interchange Protocol) Standing Committee

ONIX-PL Encoding Project

Open Discovery Initiative Standing Committee

PESC (Protocol for Exchanging Serial Content)

PIE-J (Presentation & Identification of E-Journals)

ResourceSync

SERU Standing Committee

Standard Interchange Protocol (SIP)

SUSHI Standing Committee and SUSHI Servers and SUSHI Lite Transfer

Z39.7 (Data Dictionary) Standing Committee

+ 

**NISO Alternative Assessment Metrics (Altmetrics) Initiative**

Bibliographic roadmap
CASRAI
Consortia Advancing Standards in Research Administration Information

**Academic CV** - the contents of a CV

**Research Outputs** - the types of outputs produced by research

**Open Access Reporting** - the contents of APC reports

**Research Data Management Plans** - the contents of a DMP for ethics review

**Research Data Management Terminology** - the terms we share when talking about research data management

**CRediT Taxonomy** - the terms used to classify the roles people play in research outputs.

Funding Awards - a pilot project led by Canadian stakeholders to standardize the format used by research funders to announce the results of funding competitions,

CRediT - standard agreements for understanding and recognizing the diversity of roles played by people in producing research outputs,

Peer Review Citations - standard agreements for understanding and recognizing the peer review contributions made by individuals,

Research Dataset-Level Metrics - standard agreements for sharing metrics about research datasets.
JATS₄R
JATS4R
JATS XML for Reuse

There are many varieties of JATS
This creates problems for computers and the people who use them

“Increase the reusability of the online literature by standardising the use of the Journal Article Tag Suite (JATS) for XML tagging.”

http://jats4r.org/

So far two sets of final recommendations:
1. Permissions and licences
2. Maths formulas

And created a validator tool

Next (drafts):
3. Citations
4. Data citations
5. General recommendations
CrossRef
CrossRef and funder OA mandates

In order to advertise conformance to funder mandates, Crossref members:

• must record funder information in their CrossRef deposits

• must deposit the FundRef funder identifiers corresponding to their funder names where these exist in the FundRef Registry

• should record award numbers when possible.

• should record funding information within CrossMark records if they are either implementing CrossMark or are planning to implement CrossMark within the next two years.

• should record licensing information if they have it by means of a URI specifying the license under which the publication is made.

• If publishers do not have licensing information, they should record a placeholder URI and fill in the target of the URI once they have agreed on licensing information

• should record full text links to the readable version(s) of the document. This may include different resources for the Version of Record (VOR) and Author Accepted Manuscript (AM).

• should record full text links to representations of the document that are made available for TDM. These may be the same or different to the "readable" versions of the document pointed to above.

• Where they are recording multiple versions of the document (e.g. AM & VOR), the publisher should map licensing information to the specific resource versions.

• should record full text links to archived versions of the document identified by the CrossRef DOI.

• should record archive arrangements made with third party archiving organizations where the document identified by the CrossRef DOI is archived with the third party.
CrossRef and funder OA mandates

In order to enhance the utility of CrossRef metadata to funders and in order to enable more sophisticated funder/publisher KPIs, CrossRef members:

• should consider participating in CrossMark in order to record updates, errata, corrigenda, retractions and withdrawals
• should consider depositing abstracts using CrossRef's JATS abstract element support.

• should consider collecting and depositing ORCIDs for publication authors.
• should consider making the bibliographic metadata and references for documents resulting from agency funding maximally available by overriding CrossRef opt-outs using the `<metadata_distribution_opt>` and `<reference_distribution_opt>` elements.

In order to alert funders of relevant publications as soon as possible, Crossref members:

• should consider assigning and registering DOIs at acceptance
Journal OA policies
Journal OA policies

What’s the problem?

Doing Open Access at scale requires standardisation in OA policy expression.

(Note necessarily standardisation in the OA policies themselves)

By publishers, funders and universities
Journal OA policies
What’s the approach?

1. Consensus on the problem
2. Building a business case for change
3. Agreement on options (metadata, recommended practice, principles, etc)
4. Definition of terms / recommendations
5. Pressing the business case and the solution(s); take-up...
Journal OA policies
Consensus on the problem?

Use case
“If I publish a paper in this journal, then does it have the potential to be compliant with my funder OA policies? If so, under what conditions?”

Need information about journal-level policies clearly expressed to enable this question to be answered in all cases and at the right time.
Journal OA policies

Building a business case

For authors
- Can make informed decisions on complying with OA policies

For universities
- Reduced risk of non-compliance with funder and publisher OA policies

For journal publishers
- Confidence that journal OA policy is being interpreted correctly
- Can derive much article-level information from journal OA policy
# Funder and institution OA policies

## SECTION 1: ORGANISATION

<table>
<thead>
<tr>
<th>Field</th>
<th>Contents</th>
<th>Mandatory or Optional</th>
<th>Guidelines</th>
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<tbody>
<tr>
<td>Name of organisation issuing the policy</td>
<td>String</td>
<td>M</td>
<td>Name of the organisation (funder, university, university department or faculty, research institution or other) issuing the policy.</td>
</tr>
<tr>
<td>Identifier for the organisation</td>
<td>String</td>
<td>O</td>
<td>An identifier for the organisation, if known.</td>
</tr>
<tr>
<td>Type of organisation</td>
<td>String</td>
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<td>Specify whether the organisation type issuing the policy is a research funder, an institution, both, or other.</td>
</tr>
<tr>
<td>Link to organisation</td>
<td>URL</td>
<td>M</td>
<td>Link to the organisation website.</td>
</tr>
<tr>
<td>Country or region in which the organisation is based</td>
<td>ISO 3166-1 code</td>
<td>M</td>
<td>Name of the country or region where the organisation is based. If a country, insert ISO 3166-1 code, which is an international standard defining the codes for the representation of names of countries and their subdivisions.</td>
</tr>
</tbody>
</table>

## SECTION 2: POLICY

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<td>Link to policy on the organisation’s website.</td>
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<td>URL</td>
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<td>Link to policy in the Registry of Open Access Repositories Mandatory Archiving Policies (ROARMAP).</td>
</tr>
<tr>
<td>Link to funder policy in SHERPA/RoMEO</td>
<td>URL</td>
<td>O</td>
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Real-time messaging
Real-time messaging

Event-based systems – why?

• Greater funder / government scrutiny of research performance
  Eg STAR-Metrics in US, Gateway to Research and HEFCE metrics report in UK

• Greater need for universities to act on trigger events during publication process
  Acceptance, APCs, compliance, impact/marketing, etc

• Already used in many other industries – now a commodity application rather than “forthcoming”

• Current initiatives based on this model including SHARE in the US
Push information for discoverability

What happens now

Push to:
- CrossRef
- A+I databases: Web of Science, Scopus, PubMed...

Table of Contents alerts

Tend to be options within publisher production systems

Rely on either
- Publisher selecting target
Or
- User selecting journal

Neither really work well where a range of unknown users need configurable aggregations of article metadata for their workflows, triggered by various events, well beyond traditional “scholarly communication”
Real-time messaging
Some standards

- RSS and Atom [feeds]

- PubSubHubbub (PuSH), RSSCloud [feed notification]

- ResourceSync [“change notification” syntax]
Real-time messaging
Feed notification – PuSH (or RSSCloud)

Publisher

I have new content for Feed X for you

Give me your latest content for Feed X please

Hub

Here it is

Here is a new update to Feed X

Subscriber
Real-time messaging
“Change notification” syntax – ResourceSync (NISO Group)

Change messages minimally include:
• Resource URI
• Nature of the change (create, update, delete…)
• Datetime

Enables:
• Source (eg publisher) to decide which elements of framework to support
• Destination (eg subscriber) to find out which elements the Source supports
• Discovery and navigation based on URIs / web

Status:
• Core protocol is ANSI/NISO Z39.99-2014, ResourceSync Framework Specification
In summary
You can’t predict when / where (meta)data will be used

Machine reuse: JATS4R

Can I comply with OA policies?
• Journal (and funder) OA policies

Have I complied with OA policies?
• CrossRef / funder mandates

Ensuring everybody knows
• Event-based architectures
Thanks for listening.

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