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13th International Conference on Current Research Information Systems, CRIS2016, 9-11 June
2016, Scotland, UK

CASRAI-UK: Using the CASRAI approach to develop standards for communicating and sharing research information in the UK

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Abstract

This paper explains how the Consortia Advancing Standards in Research Administration Information (CASRAI) might be used to share research information in an open and sustainably governed approach, led by research organisations.

CASRAI is an international non-profit organisation dedicated to reducing administrative burden and improving outcomes and impact reporting through good stewardship of information requirements by research organisations (universities, colleges, teaching hospitals and other research centres). The objective is to improve the flow of information within and between research stakeholders. The approach sees the ‘user-led’ development and maintenance of standard information agreements. These agreements include (a) specifications defining what data elements (entities) are needed for various key business processes in the research lifecycle and (b) definitions for all the terms appearing in these specifications. The open and standardised definitions are curated and maintained in an open online dictionary that can then be used by system providers and others to exchange information in a standard, agreed format e.g. by using CERIF-XML as the transfer mechanism.

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Peer-review under responsibility of the Organizing Committee of CRIS2016

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Keywords: standards; interoperability; definitions; administration; dictionaries

1. Main text

CASRAI (<http://casrai.org>) is well established in Canada and is working to establish its approach in other countries. The process used by CASRAI and the outputs generated can be used anywhere - not just in Canada or the UK.

Between 2013 and 2015 Jisc and other UK stakeholders worked with CASRAI to deliver a pilot of the CASRAI approach in the UK (<http://jisccasraipilot.jiscinvolve.org/wp/>). The Jisc-CASRAI UK pilot ran three working groups:

1. Organisational Identifiers

<http://jisccasraipilot.jiscinvolve.org/wp/2015/03/06/organisational-identifiers-working-group-outputs-and-update>
Outcome: this group recommended an International Standard Name Identifier (ISNI) model for unique identifiers for organisations.

2. Data Management Plans

<http://jisccasraipilot.jiscinvolve.org/wp/working-groups/data-management-plans/>
Outcome: a profile for Ethics Compliance in data management planning was produced. The profile is also being considered for use in Canada. See http://dictionary.casrai.org/Research_Dataset/Ethics_Compliance

3. Open Access Reporting

<http://jisccasraipilot.jiscinvolve.org/wp/working-groups/open-access/>
Outcome: this group produced a profile for Article Processing Charges. See http://dictionary.casrai.org/Open_Access_APC_Report

One of the key benefits of the Jisc-CASRAI UK pilot was the positive networking with fellow stakeholders from a range of higher education institute and partner organisations with different perspectives. These parties worked together to agree the list of entities and associated definitions for each use case.

For example in the case of Article Processing Charges funders, suppliers, and research organisation representatives were able to compare different understandings of key terms and reach agreement on a standard definition. The benefits of the exercise include:

- Common understanding of terminology
- Basis for developing clear technical specifications
- Transferring data more easily:
 - between Research Organisations
 - reporting to Funders
- Avoid duplication of effort in describing entities
- Confidence that we reduce misinterpretation of data during comparison
- Reduced barriers to communication
- Community ownership

Many questions arose during the pilot which must be addressed as we go forward with the UK chapter:

- The process was not clear to all from the start - more explanation should be provided in future for those participating in all roles. For example it was unclear that the concept included incorporating similar previous work or using what had already been produced where that satisfied the requirements.
- Planning and research are essential:
 - A clear and narrow scope is essential. In the Open Access group it became clear that the remit was too wide for the time available in the pilot. The remit could have included UK Research Excellence Framework requirements, UK funder requirements, European Union requirements, and local higher

education requirements. After some discussion we agreed to first of all focus on terminology associated with the cost of open access hence the first set of dictionary terms is for article processing charges (APC's) (http://dictionary.casrai.org/Open_Access_APC_Report) and more work will be required to expand and maintain this.

- Once a use case has been identified it is important to research work already done to avoid duplication of effort and avoid proliferation of dictionaries. Often we found that whilst several initiatives had done great work on an area it was not comprehensive enough to satisfy all of our requirements.
- There can be some politics involved. If two similar profiles already exist how do we choose which to recommend as the go to profile or as the basis of further work?

We are now taking the UK iteration forward to a formal 'chapter' of CASRAI – "CASRAI-UK".

By forming a chapter in this international membership organisation we aim to bring a UK perspective and leadership to this mission and to bring sustainable international integration with other research-producing areas of the world working to collectively solve the core issues around administrative burden and administrative data - through standard information agreements.

As this CASRAI-UK chapter will be the first outside of the initial Canadian chapter we have asked CASRAI for guidance on how to start a new chapter.

Via a Call for Participation the Proposal Group sought other UK research organisations to form the initial nucleus of the CASRAI-UK chapter.

The 'first year' goals for the CASRAI-UK chapter include:

- Reach our goal of a strong representative UK membership in the initial stages of the chapter
- Convene a UK workshop of the inaugural chapter members to prioritise possible work areas, e.g. by reviewing outcomes of the Jisc-CASRAI pilot.
- Engage key partners (such as research-funders and solutions-providers) that might be interested in partnering in the new chapter
- Work with the CASRAI Secretariat to launch one or more standards projects under the new chapter and convene the required Working Groups
- Deliver the first contributions of the CASRAI-UK chapter into the standards dictionary (beyond what was delivered in the Jisc-CASRAI pilot activity)
- Pilot implementations of the standards in the applicable CRIS, Repository, Funder Publishing or other systems
- Assess the outcomes of any results of new chapter activity including revising the resulting standard agreements (as needed) with the relevant communities
- Launch a follow-on membership drive for new members in CASRAI-UK

The inaugural meeting of the CASRAI-UK chapter took place on 16th May 2016. Over 60 representatives from higher education institutes (HEI's) and partner organisations such as software suppliers and publishers attended.

The CASRAI process was explained to the attendees, and learning from the pilot, particular emphasis was given to noting:

- The process is a collaborative process with the aim of all stakeholders agreeing common terminology.
- The process is led by HEI's and activity is agreed and delivered by members with support from CASRAI secretariat.
- The focus is in on agreeing standard terminology and is not system or solution specific. Once definitions are available these can be delivered via any platform using any relevant tools.

A brainstorming exercise took place to prioritise some potential areas for future working groups. Many ideas were forthcoming and a few were prioritised on the day. For example, although several strands of work have already taken place, there was a feeling that more work was needed on clarifying and sharing standard open access terms. The ideas from the day will be written up and shared in an open call for further ideas which will be open during summer 2016 with a view on a decision on a few of the most pressing, popular, and importantly feasible, ideas being put forward for the first set of working groups.

For this first set of working groups we plan to follow the established methodology already used in Canada. We will need to listen carefully to stakeholder views and identify issues and address them if the chapter is to thrive. Despite some initial confusion about the process and roles the authors feel there is a huge benefit to be gained from working together with stakeholders to agree common language to aid information sharing. We are sure to encounter some issues on the way but are buoyed by the level of support from across the community and are optimistic that stakeholders will work together to resolve any problems.

What does this mean to the reader?

Your organisation can become involved and benefit from this neutral forum for discussing and developing standard terminology. Involvement can be at many levels:

- Propose a working group
- Sit on the steering group
- Propose and be involved in a working group
- Review documents and contribute to discussion
- Just watch and use

We are linking in with other networks such as the UK Association of Research Managers and Administrators (ARMA). We look forward to producing our first outputs and reporting back to future EuroCRIS events and news updates. We hope that everyone can re-use our products (and we theirs) and collaborate with a view to facilitating better exchange and reuse of research information in and across stakeholder organisations.

We are linking to international activities of CASRAI for example, Contributor Roles (<http://casrai.org/credit>) and Snowball Metrics (<https://www.snowballmetrics.com/>).

If you are interested in joining CASRAI-UK or setting up a new national chapter contact info@casrai.org