



**CARL
ABRC**

CARL-OpenAIRE Collaboration

Open Repositories Working Group (ORWG)
OpenAIRE Working Group

April 2019

Objectives

- Describe [OpenAIRE Advance](#) and its relevance to Canadian repositories
- Describe CARL ORWG's review of the OpenAIRE Literature Guidelines, Version 4
- Discuss how your repository can become compliant and discoverable with OpenAIRE

What is OpenAIRE?

OpenAIRE's mission is to provide unlimited, barrier free, open access to research outputs financed by public funding.



What is OpenAIRE Advance?

OpenAIRE-Advance continues the mission of OpenAIRE to support the Open Access/Open Data mandates in Europe. ... It examines key elements of scholarly communication, i.e., co-operative OA publishing and next generation repositories, to develop essential building blocks of the scholarly commons.



Start date: 01/01/2018

Duration: 36 months

Total budget:
€9,999,997.50

Funding from the EC:
€9,999,997.50

Source:

<https://www.openaire.eu/openaire-advance-project>

OpenAIRE Background

- DRIVER (Digital Repository Infrastructure Vision for European Research) I & [II](#) 2006-2007 & 2007-2009
 - First EU initiative to explore the development of a distributed infrastructure to enable enhanced interoperability of data
 - led to COAR
- [OpenAIRE](#) 2008-2011
- [OpenAIREplus](#) 2012-2015
- [OpenAIRE Advance](#) 2018-2020

OpenAIRE Context

- OpenAIRE Advance [WP5 Global OA scholarly communication infrastructure](#)
 - Subtask 5.3.2. *Pilot the Aggregator-as-a-Service with Canadian repositories*

OpenAIRE Context

- Aggregator-as-a-Service with Canadian repositories
 - Metadata and full text aggregation from Canadian repositories and other data providers managing Canadian content
 - Enrich and enhance metadata based on automated inference from other external sources (e.g. Tri-agency public grants database)
 - Provide a view/portal for Canadian content and support tracking of Canadian research outputs

OpenAIRE Context

- Increased discoverability of repository's contents
- Provide a comprehensive view of OA in Canada
- Support the tracking and monitoring of compliance with the Tri-agency OA policy
- Offer value added services
- Demonstrate that “network” value of repositories

OpenAIRE Context

- [OpenAIRE Explore](#): search platform
 - Canadian portal (TBC)
- [OpenAIRE Provide](#) (beta): repository managers dashboard
 - Value added services

OpenAIRE Guidelines

- **OpenAIRE Guidelines for Literature Repositories**
 - [version 4 guidelines](#) and [schema files](#) (december 2018)
- OpenAIRE Guidelines for Data Archives
- OpenAIRE Guidelines for CRIS Managers based on CERIF-XML

OpenAIRE Literature Guideline Version 4

- OpenAIRE compatibility is different from [BASE search repository](#) or [OCLC OAIster](#) aggregators
- Use OAI-PMH
- Compliance to the guideline required
- Repository must be registered in [OpenDOAR](#)

OpenAIRE Literature Guideline Version 4

- OpenAIRE Application profile
- Uses 3 namespaces

Schema	# of elements
Simplified Dublin Core	7
DataCite Schema	12
OpenAIRE	13
Total	32

OpenAIRE Literature Guideline Version 4

- Full compliance cannot be achieved with current softwares
- CARL-OpenAIRE Group recommends a minimum implementation
 - Based on element requirement level
 - 4 levels: **Mandatory, Mandatory if Applicable**, Recommended, Optional.
 - 15 elements / 32

OpenAIRE Literature Guideline Version 4

- What cannot be achieved?
 - Multiple funding reference
 - Multiple authors with IDs

OpenAIRE Literature Guideline Version 4

```
<oaire:fundingReferences>
  <oaire:fundingReference>
    <oaire:funderName>NSERC</datacite:funderName>
    <oaire:funderIdentifier
funderIdentifierType="Crossref">http://dx.doi.org/10.13039/501100000038 </oaire
:funderIdentifier>
    <oaire:awardTitle>Impact des colmatages chimiques et biologiques sur
les performances des procédés baromembranaires lors de la clarification et de la
concentration des jus de canneberge </oaire:awardTitle>
  </oaire:fundingReference>
  <oaire:fundingReference>
    <oaire:funderName>FRQ</datacite:funderName>
    <oaire:funderIdentifier
funderIdentifierType="Crossref">http://dx.doi.org/10.13039/501100003151 </oaire
:funderIdentifier>
    <oaire:awardTitle>Couplage des hautes pressions hydrostatiques et de la
filtration pour la production d'hydrolysats protéiques d'insecte
</oaire:awardTitle>
  </oaire:fundingReference>
</oaire:fundingReferences>
```

OpenAIRE Literature Guideline Version 4

Mandatory (M)	Mandatory if applicable (MA)
<ul style="list-style-type: none">Title	<ul style="list-style-type: none">Contributor
<ul style="list-style-type: none">Creator	<ul style="list-style-type: none">FundingReference
<ul style="list-style-type: none">Publication Date	<ul style="list-style-type: none">Embargo Period Date
<ul style="list-style-type: none">Resource Type	<ul style="list-style-type: none">Language
<ul style="list-style-type: none">Resource Identifier	<ul style="list-style-type: none">Publisher
<ul style="list-style-type: none">Access Rights	<ul style="list-style-type: none">Description
	<ul style="list-style-type: none">Subject
	<ul style="list-style-type: none">Resource Version
	<ul style="list-style-type: none">File Location

Resource Type

The type of scientific output the resource is a manifestation of. It describes the genre of the resource.

Namespace	oaire
Mandatory sub elements	resourceTypeGeneral uri
Controlled vocabulary	COAR Resource Type Vocabulary
XML exemple	<pre><oaire:resourceType resourceTypeGeneral="literature" uri="http://purl.org/coar/resource_type/c_6501"> journal article </oaire:resourceType></pre>
Documentation	

Resource Type

Implementation challenges

- COAR Resource Type Vocabulary
 - Not used in repository software
 - Can be implemented but long
- Solution
 - Map repository standard elements with controlled vocabulary

Funding Reference

Information about financial support (funding) for the resource being registered.

Namespace	oaire
Mandatory sub elements	funderName
Controlled vocabulary	n/a
XML exemple	<pre><oaire:fundingReferences> <oaire:fundingReference> <oaire:funderName>European Commission</datacite:funderName> </oaire:fundingReference> </oaire:fundingReferences></pre>

[Documentation](#)

Funding Reference

Implementation challenges

- Information not gathered in canadian repository at this time
- OpenAIRE can datamine this information from full text
 - need repository authorization to do so

Access Rights

Information about the right or mode the resource can be accessed.

Namespace	datacite
Mandatory sub elements	rightsURI
Controlled vocabulary	COAR Access Right Vocabulary 4 values: open access ; embargoed access ; restricted access ; metadata only access
XML exemple	<pre><datacite:rights rightsURI="http://purl.org/coar/access_right/c_abf2">open access</datacite:rights></pre>
Documentation	

Access Rights

Implementation challenges

- COAR Access Right Vocabulary
- Location of access rights information in repositories

Embargo Period Date

Dates relevant to describe an embargo period

Namespace	Datacite
Mandatory sub elements	dateType
Controlled vocabulary	n/a
XML exemple	<pre><datacite:dates> <datacite:date dateType="Accepted">2011-12-01</datacite:date> <datacite:date dateType="Available">2012-12-01</datacite:date> </datacite:dates></pre>
Documentation	

Embargo Period Date

Implementation challenges

- Date format (AAAA-MM-JJ)
- Location of those dates in repositories

OpenAIRE Implementations

- **Create specific OAI metadata format (oai_openaire)**
 - DSpace: see Library and Archives Canada (LAC/BAC) for [Theses Canada Harvesting program](#)
 - Eprint: RIOXX Application profile (see [University of Northampton](#) OAI Rioxx Metadata format)

OpenAIRE Implementations

- **What can the group do to help implementation?**
 - Create mapping tables for default repository elements and OpenAIRE elements
 - Create mapping tables for metadata values and controlled vocabularies values (ex: COAR Resources Type)
 - Document what need to be done, to help/simplify developments

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