



OpenAIRE Guidelines 2.0

**Guidelines for content providers of the OpenAIRE
information space**

October 2012

Contents

Introduction	3
Aim	3
What's new.....	3
Acknowledgements & Contributors	4
Editors	4
Experts & Reviewers	4
License	5
Version	5
Relation to DRIVER Guidelines	6
OpenAIRE Set.....	7
OpenAIRE Set naming.....	7
OpenAIRE Set Content definitions.....	7
Compatibility of aggregators.....	8
OpenAIRE use of oai_dc.....	8
OpenAIRE specific use of three elements	9
All elements: short description	11

Introduction

Aim

The *OpenAIRE Guidelines 2.0* will provide orientation for repository managers to define and implement their local data management policies in compliance with the Open Access demands of the European Commission. Furthermore they will comply with the technical requirements of the OpenAIRE infrastructure that is being established to support and monitor the implementation of the FP7 OA pilot.¹

By implementing these Guidelines repository managers are facilitating the authors who deposit their publications in the repository, in complying with the EC Open Access requirements.

For developers of repository platforms the Guidelines provide guidance to add supportive functionalities for authors of EC funded research in future versions.

What's new

In comparison with previous versions of the Guidelines, this 2.0 version introduces two main changes:

1. Support for aggregators to become OpenAIRE compatible in order to expose their metadata to the OpenAIRE infrastructure.
2. Extended namespace for project identification. The extended namespace is intended to support a generic way of expressing project information, allowing its use not only for EC/FP projects, but ideally for any funder and project (national or international). Although the use of the extended namespace is recommended, repositories and journals that are already OpenAIRE compatible will remain compatible with no additional work, by using only the mandatory parts (which are the same as in the *OpenAIRE Guidelines 1.1*).

Regarding this second point, to express project information, in future versions of the Guidelines more sustainable solutions will be sought. This may include the introduction of vocabularies for funders and funding programmes, the presentation of this information in a linked data fashion and compatibility with the CERIF standard.

¹ For information on the FP7 OA pilot and OpenAIRE see <http://www.openaire.eu>.

Acknowledgements & Contributors

Editors

- Marnix van Berchum (SURF, the Netherlands)
- Eloy Rodrigues (Universidade do Minho, Portugal)

Experts & Reviewers

- Ana Alice Baptista (Universidade do Minho, Portugal)
- Magchiel Bijsterbosch (SURF, the Netherlands)
- Sheridan Brown (Key Perspectives, United Kingdom)
- Natasa Bulatovic (Max Planck Digital Library, Germany)
- Mikael Karstensen Elbæk (Danish Technical University (DTU), Denmark)
- Ilaria Fava (CASPUR, Italy)
- Marek Imialek (University of Bielefeld, Germany)
- Samuele Kaplun (CERN, Switzerland)
- Gerald Lawson (NERC, United Kingdom)
- Alicia López Medina (UNED, Spain)
- Paolo Manghi (CNR, Italy)
- Natalia Manola (University of Athens, Greece)
- Julien Rault (Sciences Po, France)
- Stefanie Rühle (University of Goettingen, Germany)
- Jochen Schirrwagen (University of Bielefeld, Germany)
- Birgit Schmidt (University of Goettingen, Germany)
- Georgi Simeonov (Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, Bulgaria)
- Peter Stanchev (Institute of Mathematics and Informatics, Bulgarian Academy of Sciences, Bulgaria)
- Friedrich Summann (University of Bielefeld, Germany)
- Maurice Vanderfeesten (SURF, the Netherlands)

License



This work is licensed under the Creative Commons Attribution-ShareAlike 3.0 Unported License.

Version

1.0	July 2010	Initial document
1.1	November 2010	Correction of names and references; addition of license and version statement
2.0	October 2012	Compatibility for aggregators; extended Namespace for Project Identification

Relation to DRIVER Guidelines

The OpenAIRE guidelines are supplementary and built on top of the [DRIVER Guidelines](#). For OpenAIRE compatibility purposes, all the aspects of the DRIVER Guidelines are valid, with the following exceptions:

1. Textual resources

DRIVER Guidelines 2.0², pp.17-18, Part A – Textual Resources:
Textual resources are open access, available directly from the repository for any user worldwide without restrictions such as authorisation or payment

Not mandatory for OpenAIRE. Resources can be open access, be under embargo or restricted access.

2. Use of dc:relation and dc:rights

DRIVER Guidelines, p.90:
The DC:RELATION field can typically be used for describing relations to other expressions, or versions of the document.

For OpenAIRE compliancy purposes the use of dc:relation and dc:rights will be more specific than expressed in the DRIVER Guidelines 2.0. This will be addressed in the description of the new elements **accessRights**, **embargoEndDate** and **projectID** (see pages 9-10 of these Guidelines).

3. Author names

DRIVER Guidelines 2.0, p.57, encoding scheme for the elements 'Creator' and 'Contributor':
APA bibliographic writing style as in a reference list. Syntax: surname, initials (first name)[http://en.wikipedia.org/wiki/Apa_style#Reference_list]

Not mandatory for OpenAIRE. Full first name(s) may be provided if available.

4. Use of MPEG-21 DIDL

DRIVER Guidelines 2.0, pp.37, DIDL document:
The DRIVER community supports the implementation of the metadataPrefix 'oai_dc' and the metadataPrefix 'didl'.

Use of metadataPrefix 'didl' is not supported by version 2.0 of the OpenAIRE Guidelines.

² References to the Driver Guidelines 2.0 refer to http://www.driver-support.eu/documents/DRIVER_Guidelines_v2_Final_2008-11-13.pdf

OpenAIRE Set

For harvesting of records relevant to OpenAIRE, the use of a specific set at the local repository is mandatory.

OpenAIRE Set naming

The OAI-PMH protocol states:

*Repositories may organize items into sets. Set organization may be flat, i.e. a simple list, or hierarchical.*³

The table below shows the preferred setName and setSpec that can be used to create the OpenAIRE set.

	setName	setSpec*
The OpenAIRE set	EC_fundedresources set	ec_fundedresources

**A harvester only uses the setSpec request to perform selective harvesting. The letters must be in small caps.*

OpenAIRE Set Content definitions

The specific content of the ' ec_fundedresources ' set is to be determined at the local repository.

The content to be inserted in the OpenAIRE set must conform to the following:

- All the resources that will be harvested are outcomes from research projects funded by the EC.
- All the resources that will be harvested are peer-reviewed.

³ See: <http://www.openarchives.org/OAI/openarchivesprotocol.html#Set>.

Compatibility of aggregators

Besides individual repositories and journals, also national aggregators can be made OpenAIRE compliant. Additional provenance information of the content providers harvested by the aggregator has to be presented to OpenAIRE.

Provenance information has to be provided in the `about` element of the record, according to the OAI-PMH guidelines:

<http://www.openarchives.org/OAI/2.0/guidelines-provenance.htm>.

```

- <OAI-PMH xsi:schemaLocation="http://www.openarchives.org/OAI/2.0/ http://www.openarchives.org/OAI/2.0/OAI-PMH.xsd">
  <responseDate>2012-04-26T14:10:48Z</responseDate>
  <request metadataPrefix="oai_dc" set="ec_fundedresources" verb="ListRecords">http://meresco11.bureau.knaw.nl:8000/oai</request>
  - <ListRecords>
    - <record>
      + <header></header>
      + <metadata></metadata>
      - <about>
        - <provenance xsi:schemaLocation="http://www.openarchives.org/OAI/2.0/provenance http://www.openarchives.org/OAI/2.0/provenance.xsd">
          - <originDescription harvestDate="2012-01-20T00:04:10Z" altered="true">
            - <baseURL>
              http://dspace.library.uu.nl:8080/dspace-oai/request
            </baseURL>
            <identifier>oai:dspace.library.uu.nl:1874/218065</identifier>
            <datestamp>2012-01-19T12:38:56Z</datestamp>
            <metadataNamespace>http://www.loc.gov/mods/v3</metadataNamespace>
          </originDescription>
        </provenance>
      </about>
    </record>
  </ListRecords>
</OAI-PMH>

```

Example of provenance information.

OpenAIRE use of oai_dc

The use of oai_dc is based on the usage by DRIVER, as expressed in the DRIVER Guidelines 2.0, pp. 52-82.

In three cases the use of the DC elements is specific to OpenAIRE, opposed to a more general use in DRIVER:

- ✓ **projectID** is needed to connect project information to the publication in the OpenAIRE information space. It equals to the Grant Agreement number as found in all documentation/correspondence between the EC and the researcher/coordinator.⁴ Further project information (project period, funding area etc.) will be ingested into the OpenAIRE information space by other means.
- ✓ **accessRights** will define the type of access to the publication
- ✓ When the value of accessRights is "embargoedAccess" **embargoEndDate** will define the date of the embargo period.

⁴ The (generic) namespace can be used to express project information from other funders than the EC.

OpenAIRE specific use of three elements

Element name	projectID
DCMI definition	dc:relation
Usage	Mandatory
Usage instruction	<p>A vocabulary of projects will be exposed by OpenAIRE through OAI-MPH, and available for all repository managers. Values will include the project name and projectID.</p> <p>The projectID equals the Grant Agreement number, and is defined by the namespace⁵</p> <p>info:eu-repo/grantAgreement/Funder/ FundingProgram/ProjectNumber/ Jurisdiction/ProjectName/ProjectAcronym/</p> <p>For OpenAIRE compatibility the 3 first elements (green parts) are mandatory and the 3 last (yellow parts) are optional. Repositories may choose to use only the first part of the namespace (as in the previous versions of the Guidelines), or use the extended version with six parts, which is recommended.</p> <p>When using the extended version, all parts must be present in every occurrence, using "/" even when there is no value to input, e.g. EC/FP7/12345/EU//OpenAIREplus</p>
Do not confuse with	--
Examples	<pre><dc:relation> info:eu- repo/grantAgreement/EC/FP7/12345 </dc:relation></pre> <p>Or</p> <pre><dc:relation> info:eu- repo/grantAgreement/EC/FP7/12345/EU// OpenAIRE </dc:relation></pre>

⁵ See <http://wiki.surffoundation.nl/display/standards/info-eu-repo/#info-eu-repo-GrantAgreementIdentifiers>

Element name	accessRights
DCMI definition	dc:rights
Usage	Mandatory
Usage instruction	Use values from vocabulary Access Rights at http://wiki.surffoundation.nl/display/standards/info-eu-repo/#info-eu-repo-AccessRights ; values are: info:eu-repo/semantics/closedAccess info:eu-repo/semantics/embargoedAccess info:eu-repo/semantics/restrictedAccess info:eu-repo/semantics/openAccess
Do not confuse with	--
Examples	<pre><dc:rights> info:eu-repo/semantics/openAccess </dc:rights></pre>

Element name	embargoEndDate
DCMI definition	dc:date
Usage	Recommended
Usage instruction	Recommended when accessRights = info:eu-repo/semantics/embargoedAccess The date type is controlled by the name space info:eu-repo/date/embargoEnd/, see http://wiki.surffoundation.nl/display/standards/info-eu-repo/#info-eu-repo-DateTypesandvalue . Encoding of this date should be in the form YYYY-MM-DD (conform ISO 8601).
Do not confuse with	--
Examples	<pre><dc:date> info:eu-repo/date/embargoEnd/2011-05-12 </dc:date></pre>

All elements: short description

For a detailed explanation of all the DRIVER elements see the DRIVER Guidelines, pp. 58-82.

Legend

- extended element compared to DRIVER Guidelines, see above
- **mandatory** (*M*) = the element must always be present in the metadata record. An empty element is not allowed.
- **mandatory when applicable** (*MA*) = when the element can be obtained it must be present in the metadata record
- **recommended** (*R*)= the use of the element is recommended
- **optional** (*O*)= it is not important whether the element is used or not

Basic element	Status	Encoding schemes
Title	M	None, free text
Creator	M	None. Recommended practice is "last name, first name(s)"
Subject	MA	Choice of keywords and classifications can be free text (preferably in English) and defined by an URI scheme (preferably info:eu-repo/classification).
Description	MA	None, free text. Recommended practice is to include an abstract in English. "Abstract" is the default interpretation to the value for dc:description
Publisher	R	None
Contributor	O	None. Recommended practice is "last name, first name(s)"
Date	M	Date ISO 8601 W3C-DTF - "Published" is the default interpretation to the value for dc:date; When accessRights = embargoedAccess, the addition of the embargo end date is recommended, defined by the URI scheme info:eu-repo/date/embargoEnd ⁶
Type	M	Publication type and Version type defined by an URI scheme (preferably info:eu-repo/semantics).
Format	R	IANA registered list of Internet Media Types (MIME types) [http://www.iana.org/assignments/media-types/]

⁶ <http://wiki.surffoundation.nl/display/standards/info-eu-repo/#info-eu-repo-DateTypesandvalue>

Identifier	M	URI scheme, linking to persistent identifier (URN, handle, DOI), full text document or human start page. Identifiers should be unique. ⁷
Source	O	Guidelines for Encoding Bibliographic Citation Information in Dublin Core Metadata [http://dublincore.org/documents/dc-citation-guidelines/] as in dcterms:bibliographicCitation
Language	R	ISO 639-3
Relation	M	Project identification defined by namespace info:eu-repo/grantAgreement/ Funder/ FundingProgram/ProjectNumber/ Jurisdiction/ProjectName/ProjectAcronym/ ⁸ . Green fields mandatory; yellow fields recommended.
Coverage	O	“Period” is the default interpretation to the value for dc:coverage. Encoding: DCMI Period [http://dublincore.org/documents/2000/07/28/dcmi-period/] For more encoding schemas see Chapter 5 Use of vocabularies and semantics.
Rights	M	accessRights mandatory, from vocabulary “AccessRights” ⁹
Audience	O	None. “Education level” is the default value for dc:audience.

⁷ See

<http://www.openarchives.org/OAI/openarchivesprotocol.html#UniqueIdentifier>

⁸ <http://wiki.surffoundation.nl/display/standards/info-eu-repo/#info-eu-repo-GrantAgreementIdentifiers>

⁹ <http://wiki.surffoundation.nl/display/standards/info-eu-repo/#info-eu-repo-AccessRights>