

Pedro Principe, José Carvalho,
Eloy Rodrigues, Ricardo Saraiva

University of Minho

OpenAIRE compatibility for DSpace repositories



OPEN REPOSITORIES 2014
JUNE 9, HELSINKI, FINLAND



www.slideshare.net/OpenAIRE_eu



www.openaire.eu



@openaire_eu



facebook.com/groups/openaire



linkedin.com/groups/OpenAIRE-3893548



info@openaire.eu

AGENDA

1. **Overview of the OpenAIREplus project & the OpenAIRE guidelines**
2. **Presentation of the OpenAIRE guidelines for Literature Repositories: Aim, versions and specifications**
 - OpenAIRE compatibility status: levels and OAI sets
3. **How to make the repository OpenAIRE compatible: DSpace repository platform**
 - OAI Extended & OpenAIRE Authority Control
 - OAI 2.0 concepts – XOAI Core Library
4. **Demo RepositóriUM: OpenAIRE compatibility in practice**
5. **OpenAIRE validator and registration process**



Overview of the OpenAIREplus project and the OpenAIRE guidelines

1/5

Eloy Rodrigues

eloy@sdum.uminho.pt



What is OpenAIRE

- A Participatory European Open Access infrastructure to manage scientific publications and associated scientific material via **repository networks**.
- Supports discovery, sharing and re-use of **Open Access** publications and **EC funded** research results.
- Enhances **publications** by interconnecting them with **data sets**, **funding** information, related publications, institutional affiliation, metrics...

OpenAIRE



Human Network



e-Infrastructure

A participatory approach

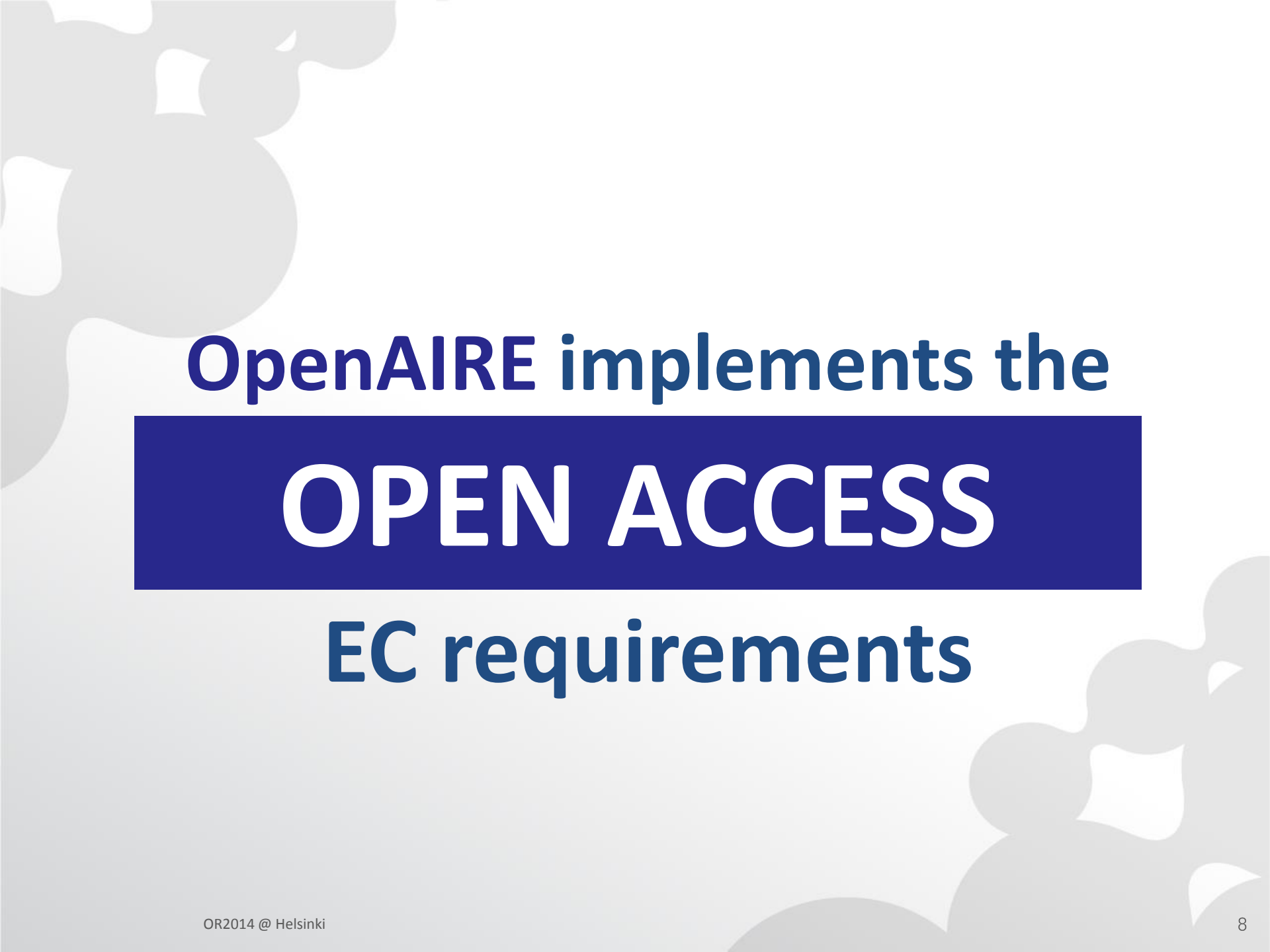
Capitalizing on previous investment



REPOSITORIES
TECHNOLOGIES
ORGANIZATIONS
PEOPLE



- Better sustainability
- Facilitated advocacy and adoption
- Deeper understanding of requirements and constraints



OpenAIRE implements the

OPEN ACCESS

EC requirements

EC OA Mandate Progression

FP7 OA Pilot (2008)

- Grant agreement SC39
- 20% programme areas
- Deposit in Repositories
- ERC's OA Guidelines: Deposit in discipline (or institutional) repositories. Cap embargo.

Horizon 2020 (2014)

- All grant agreements
- 100% programme areas
- Deposit in Repositories
- Open Data Pilot



OpenAIRE is about

LINKING

publications to projects

OpenAIREplus

- OpenAIRE is moving from a publication infrastructure to a more comprehensive infrastructure that covers all types of scientific output.
 - To put this into practice an integrated **suite of guidelines** were developed with specific requirements supporting the goal of OpenAIRE and the European Commission.
 - Managers of scholarly communication systems across Europe will be able to support authors to fulfill the EC Open Access requirements, as well as the requirements of **other (national or international) funders** with whom OpenAIRE cooperates.

OpenAIRE Guidelines

What are the...

- OpenAIRE has collaborated with key stakeholders and has produced three sets of guidelines for its data providers, all **based on existing well-established standards**.
- Provide additional support for OAI Aggregators and Open Access Journals to maintain provenance on the record or at journal level.
- Best practices for the use of transfer protocol (OAI-PMH), metadata formats, controlled vocabularies.

How do they work?

- Assist heterogeneous e-infrastructures like repositories, data archives and CRIS to interoperate in one common information space.
- Validation / Registration of OpenAIRE compatible data sources.
- Metadata is aggregated through simple OAI-sets: for thematic and institutional repositories

How do they work?

- Identification of Open Access and funded research results by **OAI-Sets:**

- **‘openaire’** – expose Open Access publications and/or Funded publications
- **‘openaire_data’** – only expose datasets fulfilling at least one of the following criteria:
 - The dataset is outcome of a funded research project
 - The dataset is linked with a publication in the OpenAIRE information space
- **‘openaire_cris’** – Different OAI-PMH sets need to be made available: for each entity type (e.g. get all records of cfProject), for the entire CERIF XML graph
- Regular harvesting from the data sources.
- Latest schema guarantees backwards-compatibility with previous versions (**‘ec_fundedresources’**).

OpenAIRE Guidelines

1

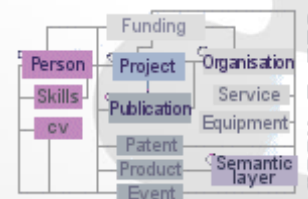
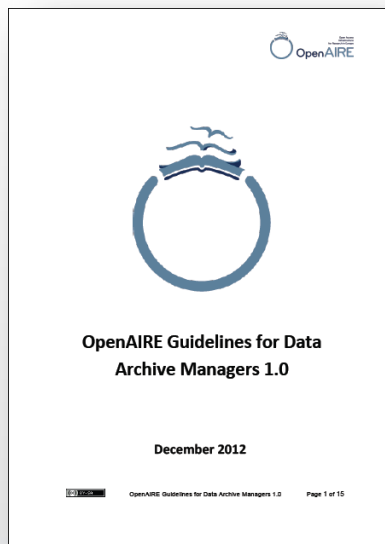
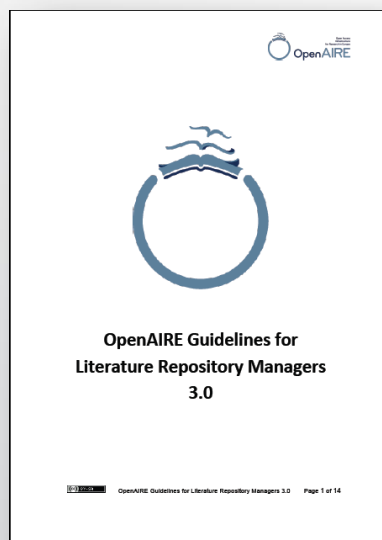
Guidelines for
Literature Repository
managers version 3.0

2

Guidelines for Data
Archive Managers

3

Guidelines for CRIS
- CERIF-XML



OpenAIRE Guidelines

How to get involved?

- Find and discuss the guidelines at: guidelines.openaire.eu
- Test and register the repository at: validator.openaire.eu
- Find support and more info at: www.openaire.eu

Wiki: <http://guidelines.openaire.eu>

Q&A



1/5



OpenAIRE guidelines for Literature Repositories

Aim, versions & specifications

2/5

Pedro Príncipe

pedroprincipe@sdum.uminho.pt



Literature Guidelines – versions

1

AUGUST 2010
initial document
NOVEMBER 2010
(V. 1.1)

2

OCTOBER 2012
(V. 2.0)

Compatibility for
aggregators.
Extended
Namespace for
Project id.

3

DECEMBER 2012
(3.0 beta)
APRIL 2013
(3.0)

OAI set has been renamed
from ec_fundedresources to
openaire.
New relation elements for
indicating external identifiers,
references and connections to
datasets.

EC funded content

EC and/or other
funded content

Open Access and
EC and/or other
funded content

Guidelines 1.0 >> 2.0

- Provide the OpenAIRE compatibility for repositories and aggregators.
- Introduces two main changes:
 - Support for **aggregators** to become OpenAIRE compatible in order to expose their metadata to the OpenAIRE infrastructure.
 - **Extended namespace for project identification.**
 - 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).
 - Repositories that are already OpenAIRE compatible will remain compatible with no additional work.
 - The mandatory parts are the same as in the Guidelines 1.1.

Versions – useful links

1. <http://www.openaire.eu/en/component/content/article/207>
 - i. <http://www.openaire.eu/en/component/attachments/download/79> **(1.1)**
2. <http://www.openaire.eu/en/component/content/article/9-news-events/427>
 - i. http://www.openaire.eu/about-openaire/publications-presentations/public-project-documents/doc_download/431-openaire-guidelinesv2-0en **(2.0)**
3. <http://guidelines.openaire.eu> **(3.0)**

Why specific guidelines? needed to...

FUNDING INFORMATION

ACCESS RIGHTS AND LICENSE INFO

REFERENCED DATASETS & RELATED PUBLICATIONS

EMBARGO DATE INFORMATION

OpenAIRE Guidelines

- The OpenAIRE guidelines are supplementary and built on top of the DRIVER Guidelines
 - Plus fields: projectID, accessRights, embargoEndDate.
- All aspects of the DRIVER Guidelines are valid, with a very few exceptions.
- Guidelines with specific requirements supporting the goal of OpenAIRE and the EC.

OpenAIRE Set

- **Content definitions:**
 - The content to be inserted in the OpenAIRE set must be (EC) funded content (1st only EC, after Oct. 2012 for any funder (national or intern.)).
- **Set naming**

	setName	setSpec*
The OpenAIRE set	EC_funded_resources set	ec_fundedresources

OpenAIRE elements

projectId

access_rights

embargo_end_date

Element name	projectID
DCMI definition	dc:relation
Usage	Mandatory
Usage instruction	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. The projectID equals the Grant Agreement number, and is defined by the namespace: info:eu-repo/grantAgreement/Funder/ FundingProgram/ProjectNumber/ Jurisdiction/ProjectName/ProjectAcronym/
Example:	<pre><dc:relation> info:eu-repo/grantAgreement/EC/FP7/123456 </dc:relation></pre> <pre><dc:relation> info:eu-repo/grantAgreement/EC/FP7/12345/EU//OpenAIRE </dc:relation></pre>

accessRights

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; • info:eu-repo/semantics/closedAccess • info:eu-repo/semantics/embargoedAccess • info:eu-repo/semantics/restrictedAccess • info:eu-repo/semantics/openAccess
Examples:	<pre><dc:rights> info:eu-repo/semantics/openAccess </dc:rights></pre>

embargoEndDate

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).

Examples:

<dc:date> **info:eu-repo/date/embargoEnd/2011-05-12** <dc:date>

It was
SIMPLE
by intention

OpenAIRE Guidelines

For Literature repositories 3.0

Aim

Provide orientation for repository managers to define and implement their local data management policies according to the requirements of the OpenAIRE.

These guidelines are intended to guide repository manager to expose to the OpenAIRE infrastructure not only EC funded publications, but also other Open Access publications, regardless of their funding.

Merger of the DRIVER Guidelines into the context of OpenAIRE Guidelines.

Part of a set of OpenAIRE Guidelines...

OpenAIRE Guidelines

For Literature repositories 3.0

What's new:

- The OpenAIRE OAI set has been renamed from 'ec_funded_resources' to '**openaire**'.
- New elements for indicating external identifiers, relations to other publications (references), and relations to research datasets have been defined.

Metadata field - Contents

1. Field Name
2. DC Field
3. Usage
4. Usage Instruction
5. Do Not Confuse With
6. Since
7. Examples
8. Comments

Alternative Identifier

Element name	Alternative Identifier
DCMI definition	dc:relation
Usage	Recommended
Usage instruction	List alternative identifiers for this publication that are not the primary identifier (repository splash page), e.g., the DOI of publisher's version, the PubMed/arXiv ID. The term is defined by info:eu-repo/semantics/altIdentifier info:eu-repo/semantics/altIdentifier/<scheme>/<identifier> where <scheme> must be one of the following: Ark,arxiv, doi, hdl, isbn, purl...
Example	<pre><dc:relation>info:eu-repo/semantics/altIdentifier/doi/10.1234/789.1</dc:relation></pre>

Referenced Dataset

Element name	Referenced Dataset
DCMI definition	dc:relation
Usage	Recommended
Usage instruction	Encodes links to research datasets connected with this publication. The syntax of info:eu-repo/semantics/dataset is: info:eu-repo/semantics/dataset/<scheme>/<identifier> where <scheme> must be one of the following: Ark,arxiv, doi, hdl, isbn, purl...
Example	<pre><dc:relation> info:eu-repo/semantics/dataset/doi/10.1234/789.1 </dc:relation></pre>

Referenced Publication

Element name	Referenced Publication
DCMI definition	dc:relation
Usage	Recommended
Usage instruction	Encode links to publications referenced by this publication. The syntax of info:eu-repo/semantics/reference is: info:eu-repo/semantics/reference/<scheme>/<identifier> where <scheme> must be one of the following: ark, arxiv, doi, hdl, isbn...
Examples:	<pre><dc:relation> info:eu-repo/semantics/reference/doi/10.1234/789.1 </dc:relation></pre>



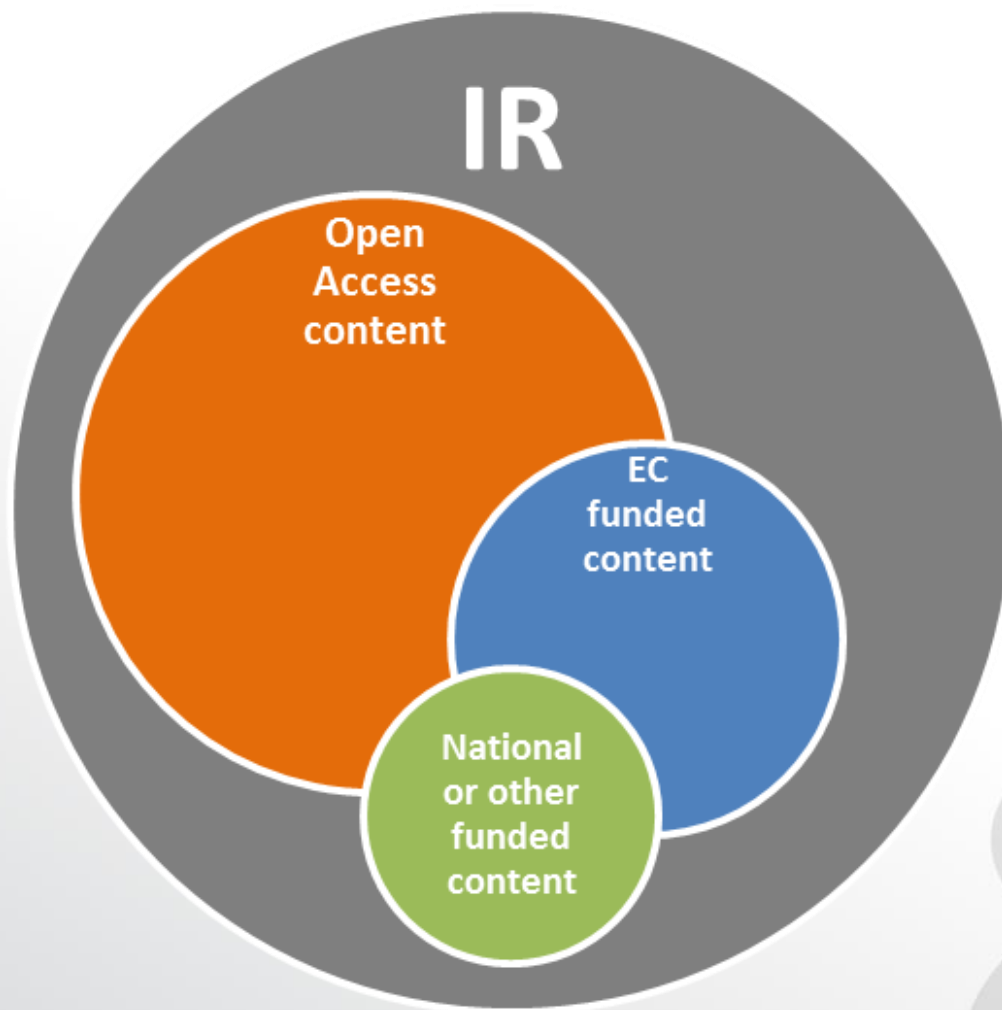
OpenAIRE

OpenAIRE

compatibility status

levels and OAI sets

OpenAIRE literature content



Compatibility status

**OpenAIRE
basic**

**Only Open
Access
content**

**OpenAIRE
2.0**

**EC funded
content**

**OpenAIRE
2.0 +**

**Open Access
and EC
funded
content**

**OpenAIRE
3.0**

**Open Access
and/or EC
funded
and/or
National/oth
er funded
content**

Compatibility status

OpenAIRE basic

Only Open
Access content

via driver oai
set

OpenAIRE 2.0

EC funded
content

via
ec_funded_re
sources oai
set

OpenAIRE 2.0 +

Open Access
and EC funded
content

via driver and
ec_funded_res
ources oai set

OpenAIRE 3.0

Open Access
and/or EC
funded and/or
National/other
funded content

via openaire
oai set

Check data providers

Name ↕	Country ↕	Documents ↕	Institution ↕	Compatibility ↕
PADIS	Italy	1609 (updated 17/12/2013)	Università degli studi La Sapienza di Roma	OpenAIRE basic (DRIVER OA)
Padua@research	Italy	3436 (updated 17/12/2013)	University of Padua	OpenAIRE 2.0+ (DRIVER OA, EC funding)
PORTO Publications Open Repository Torino	Italy	70385 (updated 04/12/2013)	POLITECNICO DI TORINO	OpenAIRE 2.0+ (DRIVER OA, EC funding)
PUMA	Italy	42731 (updated 21/10/2013)	Institute of Information Science and Technology "A. Faedo"	OpenAIRE 3.0 (OA, funding)
RCR	Italy	67384 (updated 06/12/2013)	UNIVERSITA DEGLI STUDI DI PALERMO	OpenAIRE 2.0 (EC funding)

<https://www.openaire.eu/search/openaire-data-providers>

Compatibility

OpenAIRE basic
(DRIVER OA)

OpenAIRE 2.0 (EC
funding)

OpenAIRE basic
(DRIVER OA)

OpenAIRE basic
(DRIVER OA)



457 OpenAIRE compatible data sources

Filter by

Quick Filters

- ☐ Publication Repositories
- ☐ Publication Repository Aggregators
- ☐ Data Repository Aggregators
- ☐ Journal Aggregators
- ☐ Data Repositories
- ☐ Journals

Name 	Country 	Documents 	Institution 	Compatibility 
Europe PubMed Central	United Kingdom	28000000 (updated 14/11/2013)	Europe PMC Funders Group	OpenAIRE basic (DRIVER OA)
CDS	Switzerland	1340746 (updated 02/06/2014)	Organisation Européenne pour la Recherche Nucléaire	OpenAIRE 2.0 (EC funding)
Biblioteca Virtual de Prensa Histórica (Virtual Library of Historical Newspapers)	Spain	1086800 (updated 19/05/2014)	Ministerio de Cultura	OpenAIRE basic (DRIVER OA)
arXiv.org e-Print Archive	United States	939874 (updated 20/05/2014)	Cornell University	OpenAIRE basic (DRIVER OA)

Q&A



2/5



How to make the repository OpenAIRE compatible DSpace repository platform

3/5

José Carvalho

jcarvalho@sdum.uminho.pt



Topics

- OpenAIRE compatibility for Dspace versions
- OAI Extended Addon
- XOAI addon
- OAI 2.0
- Specific metadata values
- Authority Control Addon

OpenAIRE compatibility for different Dspace versions

Dspace 1.8.2

Via **OALextended** Addon and also via **XOAI** addon

- Compatibility with OpenAIRE 2.0 guidelines

Dspace 3

OAI 2.0 is a standard part of DSpace 3.0

- Compatibility with OpenAIRE 2.0 guidelines via XOAI.
- (fix 'info:eu-repo/grantAgreement/EC/FP' on the filter 'openairerelationFilter')

Dspace 4

OAI 2.0 is a standard part of DSpace 4.0

- OpenAIRE 2.0 compatibility via XOAI and will be partially compatible with OpenAIRE 3.0 guidelines via patch (to be presented briefly).

Dspace 5

OpenAIRE compatible version

- Compatibility with OpenAIRE 3.0 and OpenAIRE data 1.0

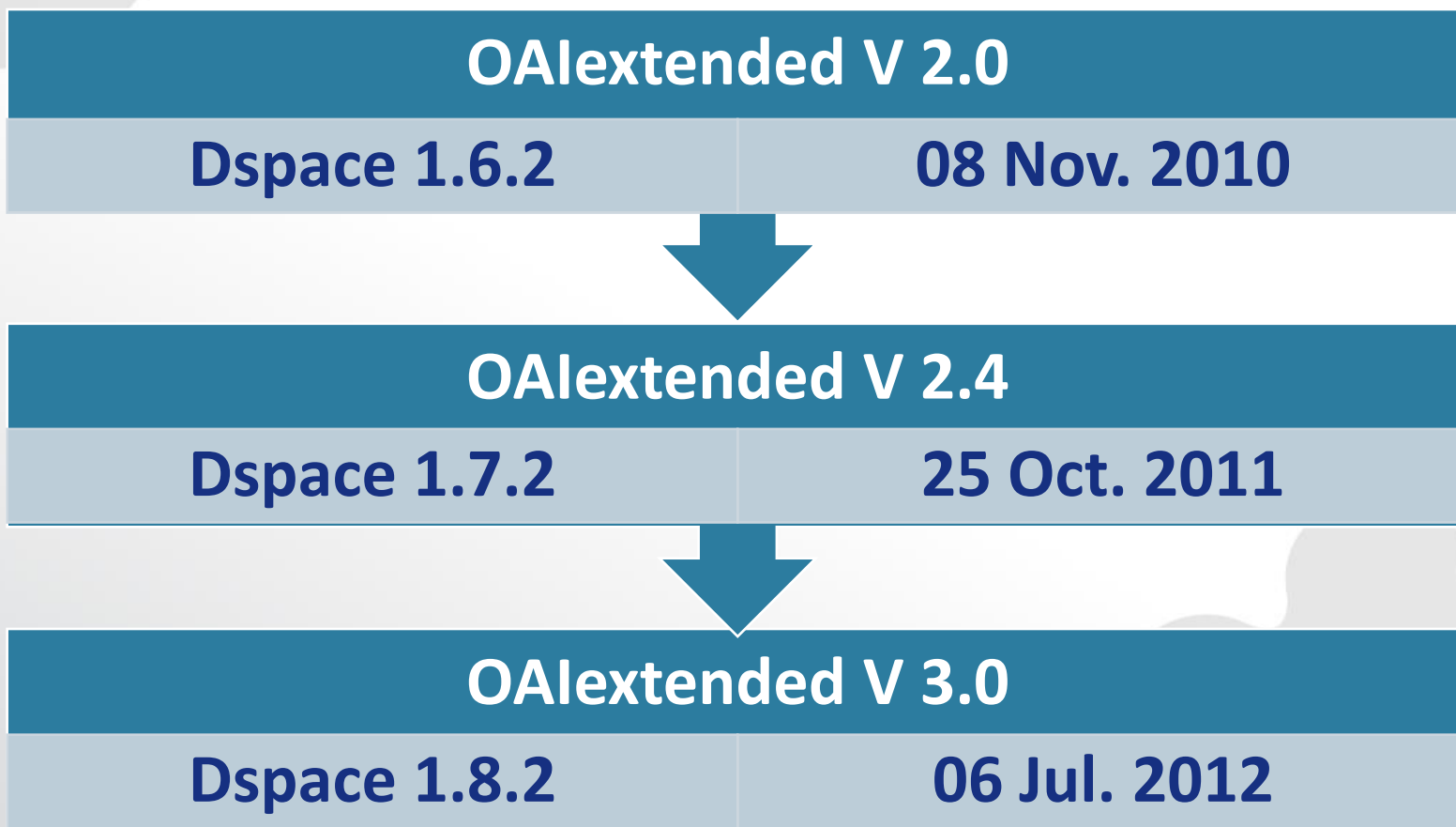
OAI extended Addon

OAI Extended Addon (or a patch to be more precise):

- Extends the base functionality of the **OAI-PMH interface** and delivers repository administrators more flexibility and functionalities to select and filter the information.
- The purpose of the OAI Extended Addon was to modify the OAI Interface's output, showing only items that were compliant with the **DRIVER Guidelines**.
- The Addon provides also the tools to create a **set** according to the requirements of the OpenAIRE Guidelines, helping European repositories to become OpenAIRE compliant.
- Other features are: hability to show didl schema and ETDMS itens... can easily be configured, changed or extended.

OpenAIRE compatibility

OAI Extended Addon – DSpace patch



OAextended

- Initially created for the DRIVER Guidelines
 - Since Nov. 2010 enables OpenAIRE compatibility.

How?

- Filter all the records that have a **dc.relation** with:
<info:eu-repo/grantAgreement/EC/FP7/??????>
- **To the EC Funded Resources SET**
 - OpenAIRE 2.0 guidelines set

Set EC Funded Resources

```

- <OAI-PMH xsi:schemaLocation="http://www.openarchives.org/OAI/2.0/ http://www
  <responseDate>2011-09-19T15:59:37Z</responseDate>
  <request verb="ListSets">http://repositorio.ul.pt/oaiextended/request</request>
- <ListSets>
  - <set>
    <setSpec>driver</setSpec>
    <setName>Driver Set</setName>
  </set>
  - <set>
    <setSpec>ec_fundedresources</setSpec>
    <setName>EC Funded Resources Set</setName>
  </set>
  - <set>
    <setSpec>thesis</setSpec>
    <setName>Doctoral and Master Thesis</setName>
  </set>
  - <set>
    <setSpec>hdl_10451_2</setSpec>
    <setName>BUL - Artigos em Revistas Internacionais</setName>
  </set>

```

XOAI

What is XOAI Add-on? (for DSpace 1.8.x)

- XOAI is a java implementation of an adaptable OAI-PMH data provider interface.
 - Enabling features like:
 - OpenAIRE and Driver compliance
 - Item filtering and formatting
 - Style Sheet Support
 - Virtual sets
 - Virtual contexts.

XOAI info: <https://github.com/lyncode/xoai>

XOAI guide: http://www.lyncode.com/dspace/addons/xoai/doc/XOAI_en.pdf

OAI 2.0

OAI 2.0 is a standard part of DSpace 3.0

What is OAI 2.0?

OAI 2.0 is a Java implementation of an OAI-PMH data provider interface that uses XOAI, an OAI-PMH Java Library.

Why OAI 2.0?

Projects like OpenAIRE, Driver have specific metadata requirements.

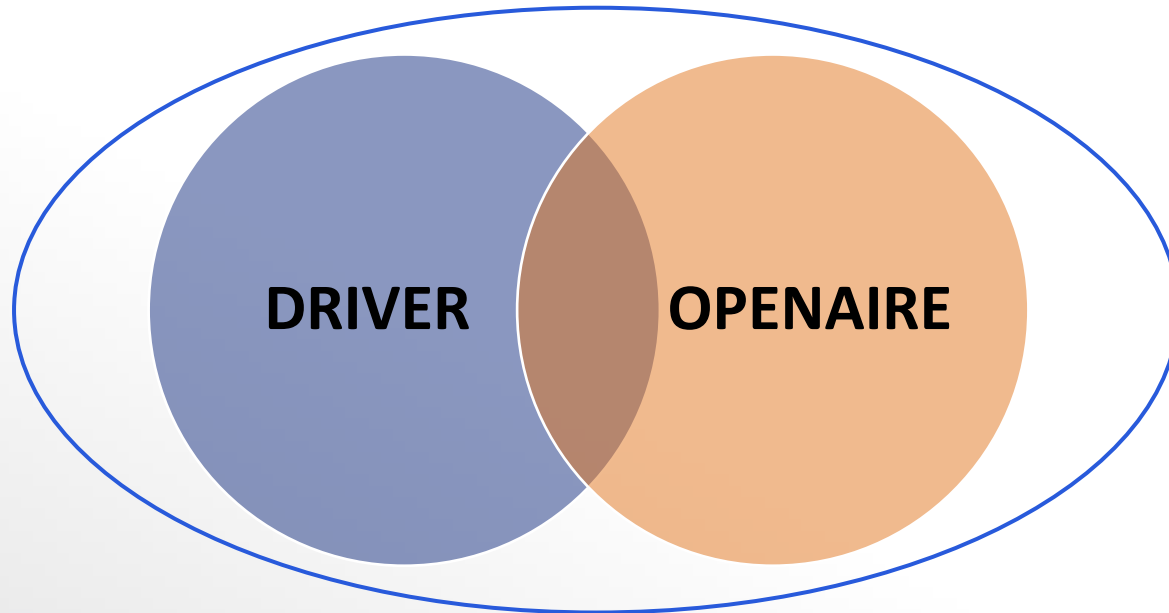
As the OAI-PMH protocol doesn't establish any frame to these specifics, OAI 2.0 can have more than one instance of an OAI interface (feature provided by the XOAI core library) so one could define an interface for each project.

Concepts: Filter, Transformer and Context

- With a **Filter** is possible to select information from the data source.
- A **Transformer** allows to make some changes in the metadata before showing it in the OAI interface
- OAI 2.0 also adds a new concept to the OAI-PMH basic specification, the concept of **context**.
 - ✓ <http://www.example.com/xoai/driver>
 - ✓ <http://www.example.com/xoai/openaire>
 - ✓ <http://www.example.com/xoai/request>

OAI 2.0

Contexts could be seen as virtual distinct OAI interfaces



- ✓ <http://repositorium.sdum.uminho.pt/oai/driver>
- ✓ <http://repositorium.sdum.uminho.pt/oai/openaire>
- ✓ <http://repositorium.sdum.uminho.pt/oai/request>

OAI 2.0 (openaire set)

DSpace [dspace-parent] (~ /Desktop/lyncode)

- .idea
- .settings
- dspace
 - .settings
 - bin
 - config
 - controlled-vocabularies
 - crosswalks
 - oai
 - metadataFormats
 - transformers
 - description.xml
 - xoai.xml**
 - XOAIConfiguration.xsd
 - DIM2DataCite.xsl
 - DIM2MARC21slim.xsl
 - google-metadata.properties
 - mapConverter-arxivSubject.pro
 - mapConverter-pubstatusPubme
 - mods.properties
 - mods-submission.xsl
 - QDC.properties
 - sample-crosswalk-DIM2DC.xsl
 - sword-swap-ingest.xsl
 - xhtml-head-item.properties
- emails
- modules

```

309         <string name="operator">contains</string>
310         <list>
311             <string>open access</string>
312             <string>openAccess</string>
313         </list>
314     </Configuration>
315 </CustomCondition>
316
317     <CustomCondition id="bitstreamAccessCondition">
318         <Class>org.dspace.xoai.filter.DSpaceAuthorizationFilter</Class>
319     </CustomCondition>
320
321     <CustomCondition id="openaireRelationCondition">
322         <Class>org.dspace.xoai.filter.DSpaceAtLeastOneMetadataFilter</Class>
323         <Configuration>
324             <string name="field">dc.relation</string>
325             <string name="operator">starts_with</string>
326             <string name="value">info:eu-repo/grantAgreement/EC/FP</string>
327         </Configuration>
328     </CustomCondition>
329 </Filters>
330
331 <Sets>
332     <Set id="driverSet">
333         <Spec>driver</Spec>
334         <Name>Open Access DRIVERset</Name>
335         <!-- Just an alias -->
336     </Set>
337     <Set id="openaireSet">
338         <Spec>ec_fundedresources</Spec>
339         <Name>EC_fundedresources set</Name>
340         <!-- Just an alias -->
341     </Set>
342 </Sets>
343 </Configuration>

```

OAI 2.0 (filter)

- dspace
 - .settings
 - bin
 - config
 - controlled-vocabularies
 - crosswalks
 - oai
 - metadataFormats
 - transformers
 - description.xml
 - xoai.xml
 - XOAIConfiguration.xsd
 - DIM2DataCite.xsl
 - DIM2MARC21slim.xsl
 - google-metadata.properties
 - mapConverter-arxivSubject.pro
 - mapConverter-pubstatusPubme
 - mods.properties
 - mods-submission.xsl
 - QDC.properties
 - sample-crosswalk-DIM2DC.xsl
 - sword-swap-ingest.xsl
 - xhtml-head-item.properties
 - emails
 - modules
 - registries
 - spiders
 - spring
 - dc2mods.cfg
 - default.context.xml

```

305 <CustomCondition id="driverAccessCondition">
306   <Class>org.dspace.xoai.filter.DSpaceAtLeastOneMetadataFilter</Class>
307   <Configuration>
308     <string name="field">dc.rights</string>
309     <string name="operator">contains</string>
310     <list>
311       <string>open access</string>
312       <string>openAccess</string>
313     </list>
314   </Configuration>
315 </CustomCondition>
316
317 <CustomCondition id="bitstreamAccessCondition">
318   <Class>org.dspace.xoai.filter.DSpaceAuthorizationFilter</Class>
319 </CustomCondition>
320
321 <CustomCondition id="openaireRelationCondition">
322   <Class>org.dspace.xoai.filter.DSpaceAtLeastOneMetadataFilter</Class>
323   <Configuration>
324     <string name="field">dc.relation</string>
325     <string name="operator">starts_with</string>
326     <string name="value">info:eu-repo/grantAgreement/k</string>
327   </Configuration>
328 </CustomCondition>
329 </Filters>
330
331 <Sets>
332   <Set id="driverSet">
333     <Spec>driver</Spec>
334     <Name>Open Access DRIVERset</Name>
335     <!-- Just an alias -->
336   </Set>
337   <Set id="openaireSet">
338     <Spec>ec_fundedresources</Spec>
339     <Name>EC_fundedresources set</Name>
340     <!-- Just an alias -->
341   </Set>
342 </Sets>

```

OAI 2.0 (ec_fundedresources set)

DSpace OAI-PMH Data Provider

SETS RECORDS IDENTIFIERS METADATA FORMATS

Responses

Fetches: 0 - 100 of 836

EC_fundedresources set (ec_fundedresources)	Records	Identifiers
Biblioteca da Universidade do Minho (com_1822_1)	Records	Identifiers
Centro de Engenharia Biológica Centre of Biological Engineering (com_1822_18)	Records	Identifiers
Departamento de Sistemas de Informação (com_1822_27)	Records	Identifiers
Departamento de Engenharia de Polímeros (com_1822_45)	Records	Identifiers
<f>Núcleo de Estudos em Gestão (com_1822_153)	Records	Identifiers
Departamento de Informática Centro de Ciências e Tecnologias da Computação (com_1822_404)	Records	Identifiers
Serviços de Documentação (com_1822_404)	Records	Identifiers

<http://repositorium.sdum.uminho.pt/oai/openaire?verb=ListSets>

OAI 2.0 (record)

Identifier oai:repositorium.sdum.uminho.pt:1822/19574 Last Modified 2013-01-02 15:10

Sets

Metadata

```
<oai_dc:dc xsi:schemaLocation="http://www.openarchives.org/OAI/2.0/oai_dc/ http://www.openarchives.org/OAI/2.0/oai_dc.xsd">
```

```
<dc:title>
  Angiogenic potential of gellan gum-based hydrogels for application in nucleus pulposus regeneration :
</dc:title>
```

```
<dc:creator>
  Correia, Joana Silva
</dc:creator>
```

```
<dc:creator>
  Gonçalves, Vera M.
</dc:creator>
```

```
<dc:creator>
  Salgado, A. J.
</dc:creator>
```

```
<dc:creator>
  Sousa, Nuno
</dc:creator>
```

```
<dc:creator>
  Oliveira, Joaquim M.
</dc:creator>
```

```
<dc:creator>
  Reis, R. M.
</dc:creator>
```

```
<dc:creator>
  Reis, R. I.
</dc:creator>
```

```
</dc:description>
```

```
<dc:date>
  2012-06-01
</dc:date>
```

```
<dc:type>
  info:eu-repo/semantics/article
</dc:type>
```

```
<dc:identifier>
  1937-3341
</dc:identifier>
```

```
<dc:identifier>
  http://hdl.handle.net/1822/19574
</dc:identifier>
```

```
<dc:language>
  eng
</dc:language>
```

```
<dc:relation>
  http://dx.doi.org/10.1089/ten.tea.2011.0632
</dc:relation>
```

```
<dc:relation>
  info:eu-repo/grantAgreement/EC/FP7/213904
</dc:relation>
```

```
<dc:rights>
  info:eu-repo/semantics/openAccess
</dc:rights>
```

```
<dc:publisher>
  Mary Ann Liebert, Inc.
</dc:publisher>
```

```
</oai_dc:dc>
```

Specific metadata values

How do you easily add... dc:relation with the project ID

- Have a dc:relation field in input-forms.xml to projects.
- You can also use the OpenAIRE Authority Control Addon to facilitate the search process of the project identification.
 - <http://projeto.rcaap.pt/index.php/lang-en/consultar-recursos-de-apoio/remository?func=fileinfo&id=354>

Specific metadata values

How do you easily add... dc:rights and embargo end date

- Just use a combo-box for dc:rights to input the 4 options:
 - info:eu-repo/semantics/closedAccess
 - info:eu-repo/semantics/embargoedAccess
 - info:eu-repo/semantics/restrictedAccess
 - info:eu-repo/semantics/openAccess
- Use a input-box for dc:date to insert the embargo end date:
 - <dc:date> info:eu-repo/date/embargoEnd/2014-05-12 <dc:date>

+ info: <https://wiki.duraspace.org/pages/viewpage.action?pageId=33238567>
http://colab.mpdl.mpg.de/mediawiki/ESciDoc_Application_Profile_OpenAIRE

Addon



OpenAIRE Authority Control

- This Addon use Dspace “Authority Control” functionality:
 - provides a way to list and verify OpenAIRE projects (FP7);
 - the list of projects is maintained as a web-service
 - a local cache is created in order to be queried by users
 - only adds the correct value in dc.relation field
- Main goals:
 - Simplify and standardize the projects (ID) identification in the deposit process;
 - Facilitates compliance with the OpenAIRE guidelines

OpenAIRE Authority Control

Add-on for:

Dspace 3.2

<http://goo.gl/cEPTZN>

Dspace 1.8.2

<http://projeto.rcaap.pt/index.php/lang-en/consultar-recursos-de-apoio/remository?func=fileinfo&id=354>

Dspace 1.7.2

<http://projecto.rcaap.pt/index.php/lang-pt/consultar-recursos-de-apoio/remository?func=fileinfo&id=345>

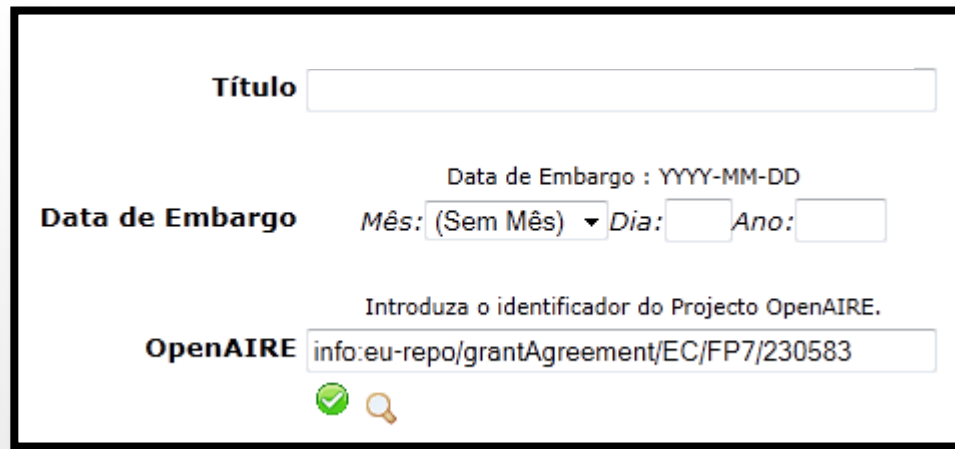
Dspace 1.6.2

<http://projecto.rcaap.pt/index.php/lang-pt/consultar-recursos-de-apoio/remository?func=fileinfo&id=342>

OpenAIRE

Authority Control Addon

- Allows users to search and include FP7 projects ID in the metadata of the records disposed in accordance with the guidelines



The screenshot shows a web form for the OpenAIRE Authority Control Addon. It includes a 'Título' field, a 'Data de Embargo' section with a date format 'YYYY-MM-DD' and fields for 'Mês' (a dropdown menu currently showing '(Sem Mês)'), 'Dia', and 'Ano', and an 'OpenAIRE' field with the text 'Introduza o identificador do Projecto OpenAIRE.' and the value 'info:eu-repo/grantAgreement/EC/FP7/230583'. Below the 'OpenAIRE' field are a green checkmark icon and a magnifying glass icon.

** Needs the OAlextended Addon to create the set (ec_fundedresources)*

OpenAIRE Authority Control Addon

Projetos FP7 contendo o termo pesquisado

Results 1 to 6 of 6 for "neco"

1.

230583 - NECOBELAC - Network of collaboration between Europe an...
220639 - CRENECO - The role of mesophilic crenarchaea in soil n...
237443 - HINECOP - Hydrodynamic interactions in non-equilibrium...
236079 - MarinEcosyStability - Complexity, stability and chaos ...
213651 - STONECORE - Stone conservation for the refurbishment o...
Projecto não identificado

2.

Identificador

3.

Accept

Introduza o título principal do registo.

Título

Data de Embargo : YYYY-MM-DD

Data de Embargo

Mês: (Sem Mês) ▼ Dia: Ano:

Introduza o identificador do Projecto OpenAIRE.

OpenAIRE

info:eu-repo/grantAgreement/EC/FP7/230583



Edit record

dc	relation	info:eu-repo/grantAgreement/EC/FP7/230583	por Remover
		☒ 217	

- Metadata

dc.relation info:eu-repo/grantAgreement/EC/FP7/230583

dc.rights openAccess

dc.title Teste OpenAIRE

Q&A



3/5



Demo RepositóriUM

OpenAIRE compatibility in practice



4/5

Ricardo Saraiva

rsaraiva@sdum.uminho.pt



French
Spanish
Portuguese

Universidade do Minho

Documentation Services

Search Portal

Bibliographic Catalogue

Home

Browse

- Communities & Collections
- Title
- Author
- Advisor
- Subject
- Issue date
- Document type

Sign on to:

- Receive email updates
- My DSpace authorized users
- Edit Profile

Helps:

- Help
- About DSpace
- DSpace Software

Search | Enter some text in the box below to search DSpace.

Use quotation marks (") to search phrases, + and - to add or remove words and use an asterisk (*) after a word stem to search all words starting with that root (e.g. select* will retrieve selects, selector, selecting,...). [Help](#)

Welcome to the University of Minho Institutional Repository!

RepositoriUM is the University of Minho Institutional Repository and contains a growing collection of the scientific output from the University.

The aim of RepositoriUM is to provide a permanent record of the research output of the University and maximise the visibility, usage and impact of its research through open access.

Most recent submissions:

- > O desempenho de fundos de investimento americanos que investem internacionalmente : o caso do mercado europeu, chinês e japonês
- > Subir o terceiro degrau : o processo de escolha de uma instituição de ensino superior em Angola
- > Cirurgia de ambulatório : experiência e satisfação do utente
- > Fusões e aquisições : determinantes do prémio da oferta no mercado europeu
- > Ammonium-dependent shortening of CLS in yeast cells starved for essential amino acids is determined by the specific amino acid deprived, through different signaling pathways

website mobile

RepositoriUM

- About RepositoriUM
- Commemorative book
- 10th Anniversary video
- Theses submission

UMinho OA Policy

- UMinho policy
- Briefing paper

Copyright

- About copyright
- Briefing paper
- Search journal
- Search editor

Follow us!

- OA Projects
- Twitter
- RSS Feed 1.0
- RSS Feed 2.0
- RSS Feed Atom

Universidade do Minho | Serviços de Documentação - Feedback - Statistics of RepositoriUM



OAI 2.0 is a standard part of DSpace 3.0

OAI 2.0 is a Java implementation of an OAI-PMH data provider interface that uses XOAI, an OAI-PMH Java Library.

OAI 2.0 can have more than one instance of an OAI interface

(feature provided by the XOAI core library) so one could define an interface for each project with specific metadata:

- ✓ <http://repositorium.sdum.uminho.pt/oai/oai?verb=ListSets>
- ✓ <http://repositorium.sdum.uminho.pt/oai/driver?verb=ListSets>
- ✓ <http://repositorium.sdum.uminho.pt/oai/openaire?verb=ListSets>

RepositóriUM

OpenAIRE Currently running DSpace V3.2

http://repositorium.sdum.uminho.pt/oai/openaire?verb=GetRecord&metadataPrefix=oai_dc&identifier=oai:repositorium.sdum.uminho.pt:1822/22267

Identifier oai:repositorium.sdum.uminho.pt:1822/22267 Last Modified 2014-01-24 16:38:49

Sets

com_1822_18
com_1822_12004
col_1822_2958
ec_fundedresources

Metadata

```
<dc:type>
  info:eu-repo/semantics/conferenceObject
</dc:type>

<dc:identifier>
  978-989-97478-1-4
</dc:identifier>

<dc:identifier>
  http://hdl.handle.net/1822/22267
</dc:identifier>

<dc:language>
  eng
</dc:language>

<dc:relation>
  info:eu-repo/grantAgreement/EC/FP7/228310
</dc:relation>

<dc:rights>
  info:eu-repo/semantics/openAccess
</dc:rights>
```

RepositóriUM

OpenAIRE Currently running DSpace V3.2

/dspace/config/crosswalks/oai/transformers



The screenshot shows the DSpace configuration interface. On the left, a tree view displays the directory structure: config, bib, controlled-vocabularies, crosswalks, firstpage, oai, metadataFormats, and transformers. The 'transformers' directory is selected. Below the tree, a list of files is shown: '..', 'driver.xml', and 'openaire.xml'. A red arrow points from 'openaire.xml' to the right-hand pane, which displays the XML code for this file. The code includes comments and XSL templates for formatting dates, removing unwanted elements, prefixing types, and modifying rights.

```
<!-- Formatting dc.date.issued -->
<xsl:template match="/doc:metadata/doc:element[@name='dc']/doc:element[@name='date']/d
  <xsl:call-template name="formatdate">
    <xsl:with-param name="datestr" select="." />
  </xsl:call-template>
</xsl:template>

<!-- Removing other dc.date.* -->
<xsl:template match="/doc:metadata/doc:element[@name='dc']/doc:element[@name='date']/d

<!-- Prefixing dc.type -->
<xsl:template match="/doc:metadata/doc:element[@name='dc']/doc:element[@name='type']/d
  <xsl:call-template name="addPrefix">
    <xsl:with-param name="value" select="." />
    <xsl:with-param name="prefix" select="'info:eu-repo/semantics/'"></xsl:with-pa
  </xsl:call-template>
</xsl:template>

<!-- Prefixing and Modifying dc.rights -->
<!-- Removing unwanted -->
<xsl:template match="/doc:metadata/doc:element[@name='dc']/doc:element[@name='rights']
<!-- Replacing -->
<xsl:template match="/doc:metadata/doc:element[@name='dc']/doc:element[@name='rights']
```

Bug fix:

'info:eu-repo/grantAgreement/EC/FP' on the filter 'openairerelationFilter')



OpenAIRE Authority Control

OpenAIRE *Installing openaireauthoritycontrol_v3.0 (for Dspace 3.2)*

Assuming the variables `$DSPACE_SRC`, `$ADDON_SRC` and `$DSPACE_BIN` to identify the locations of the following directories: DSpace sources, OpenAIRE Authority Control Add-on source and DSpace deployment directory (same as `dspace.dir` at `dspace.cfg` file).

Steps

Step 1 : Copy Source

```
cp -r $ADDON_SRC/data/dspace-source/* $DSPACE_SRC/
```

Step 2 : Add messages

```
cat $ADDON_SRC/data/Messages.properties >> $DSPACE_SRC/dspace-api/src/main/resources/Messages.properties
```

In the package it's also provided the portuguese message translation

```
cat $ADDON_SRC/data/Messages_pt_PT.properties >> $DSPACE_SRC/dspace-api/src/main/resources/Messages_pt_PT.properties
```



OpenAIRE Authority Control

OpenAIRE *Installing openaireauthoritycontrol_v3.0 (for Dspace 3.2)*

Step 3 : Configure DSpace

Uncomment the authority control plugins and add the new one (suppose installation over a clean DSpace 3.2), so at `$DSPACE_SRC/dspace/config/dspace.cfg` change

```
plugin.named.org.dspace.content.authority.ChoiceAuthority = \  
org.dspace.content.authority.OpenAIREAuthority = OpenAIRE
```

Also add:

```
choices.plugin.dc.relation = OpenAIRE  
choices.presentation.dc.relation = lookup  
authority.controlled.dc.relation = true
```

to DSpace Authority Control Manager, and also add:

```
openaire.projects.filename = ${dspace.dir}/config/openaire-cache.list  
openaire.projects.url = "http://api.openaire.research-  
infrastructures.eu:8280/is/mvc/openaire/export/FP7/ALL/ALL/project/dspace.do"  
# Minimum of chars to start searching on the list (default >= 4)  
openaire.projects.suggest.minchar = 4 # Maximum of projects listed (default <=  
10)openaire.projects.suggest.max = 20
```



OpenAIRE Authority Control

OpenAIRE *Installing openaireauthoritycontrol_v3.0 (for Dspace 3.2)*

Step 4: Configure **input-forms.xml**

At \$DSPACE_SRC/config/input-forms.xml after '<page number="1">' add:

```
<field>
  <dc-schema>dc</dc-schema>
  <dc-element>relation</dc-element>
  <dc-qualifier></dc-qualifier>
  <repeatable>>false</repeatable>
  <label>OpenAIRE Project Identifier</label>
  <input-type>onebox</input-type>
  <hint>Enter the search term (number, name or acronym) of the European project (EC
/ ERC) and click on the magnifying glass to select the project. &lt;a
href=&quot;http://www.openaire.eu/open-access/open-access-in-fp7 &quot;&gt;More
Information&lt;/a&gt;</hint>
</field>
```

User view

Introduza o nome do projeto com financiamento da Comissão Europeia (7ºPQ, H2020, ERC).
Adicione o termo de pesquisa (número, nome ou acrónimo) e clique na lupa para seleccionar o projecto. Mais informação
Exemplo: 246686 - OPENAIRE - Open Access Infrastructure for Research in Europe

Projeto com financiamento da Comissão Europeia





OpenAIRE Authority Control

OpenAIRE *Installing openaireauthoritycontrol_v3.0 (for Dspace 3.2)*

Post Installation

After building DSpace (mvn & ant - see the DSpace Documentation), configure cron to refresh the openaire project list, for example:

```
0 0 * * * $DSPACE_BIN/bin/openaire-refresh-list
```

It's also recommended to **execute the same script just after deploying the add-on** (after building DSpace) for the first time, **this will download the list of OpenAIRE projects, this is required for the add-on to work properly.**

```
$DSPACE_BIN/bin/openaire-refresh-list
```

Endereço remoto: /dspace/bin

Nome	Tamanho	Tipo	Modificado	Permissões	Proprietári...
..					
buildpath.bat	1 871	Windows B...	22/05/2014 14:...	-rwxrw-r--	dspace dsp...
dspace	2 569	File	22/05/2014 14:...	-rwxrw-r--	dspace dsp...
dspace-info.pl	11 074	PL File	22/05/2014 14:...	-rwxrw-r--	dspace dsp...
dspace.bat	2 901	Windows B...	22/05/2014 14:...	-rwxrw-r--	dspace dsp...
dspace_migrate	6 188	File	22/05/2014 14:...	-rwxrw-r--	dspace dsp...
log-reporter	10 079	File	22/05/2014 14:...	-rwxrw-r--	dspace dsp...
make-handle-config	4 737	File	22/05/2014 14:...	-rwxrw-r--	dspace dsp...
openaire-refresh-list	481	File	22/05/2014 14:...	-rwxrw-r--	dspace dsp...



Submission workflow

OpenAIRE Searching by the name or the project id number

Browser address bar: <https://repositorium.sdum.uminho.pt/submit#null>

Universidade do Minho: De... | repositorium.sdum.uminho.pt

File Edit View Favorites Tools Help

X Find: del of the intervertebral disc diseases and regeneration Previous Next Options ▾

Resumo

Entre 2003 e 20121, a Universidade do Minho publicou 7173 documentos de todos os tipos (dos quais 5480 documentos citáveis, tipos article e review) indexados na

Introduza o nome do projeto FP7 (Obrigatório no caso de projetos FP7 com acordos de concessão assinado dep
Exemplo: 246686 - OPENAIRE - Open Access Infrastructure for Resea

Projeto FP7

Introduza os nomes de patrocinadores.
Exemplo: Fundação para a Ciência e a Tecnologia (FCT

Patrocinadores

Introduza aqui mais alguma informação útil relativamente ao artigo e que não introduziu noutro campo coloque-a

Informações adicionais

Esta informação não será visível para o público. Pode indicar aqui se este documento deve ser partilhado numa coleção de outra comunidade.
Exemplo: Partilhar este documento com a comunidade...

Comentários e sugestões

Esta coleção é por predefinição de Acesso Aberto, caso pretenda que este artigo tenha outra condição de acesso indique-a aqui.

Acesso | Acesso Aberto ▾

Universidade do Minho: Selecção do projeto FP7/ERC - ...

https://repositorium.sdum.uminho.pt/tools/lookup.jsp?field=dc_relation&formID=ed

Projetos FP7 contendo o termo pesquisado

Results 1 to 2 from 2 for the term "switchbox"

- 259772 - SWITCHBOX - Switchbox: Maintaining health in old age L...
Projeto não identificado
- info.eu-repo/grantAgreen
Identificador do projeto (Se aceitar este valor ser colocado na caixa de texto do projeto)

Aceitar Ver mais resultados Cancelar



Submission workflow

OpenAIRE *Select the project and accept... the necessary namespace will be filled*

Browser window showing the submission workflow for OpenAIRE. The URL is <https://repositorium.sdum.uminho.pt/submit#null>.

Find: Previous Next Options

Resumo Entre 2003 e 20121, a Universidade do Minho publicou 7173 documentos de todos os tipos (dos quais 5480 documentos citáveis, tipos article e review) indexados na

Introduza o nome do projeto FP7 (Obrigatório no caso de projetos FP7 com acordos de concessão assinado depois de 2008 e que contenham a cláusula especial 39).
Exemplo: 246686 - OPENAIREF - Open Access Infrastructure for Research in Europe

Projeto FP7

☒ ☐

Introduza os nomes dos patrocinadores.
Exemplo: Fundação para a Ciência e a Tecnologia (FCT)

Patrocinadores

Introduza aqui mais alguma informação útil relativamente ao artigo e que não introduziu noutro campo coloque-a aqui. Esta informação será visível no registo público.

Informações adicionais

Esta informação não será visível para o público. Pode indicar aqui se este documento deve ser partilhado numa coleção de outra comunidade.
Exemplo: Partilhar este documento com a comunidade...

Comentários e sugestões

Esta coleção é por predefinição de Acesso Aberto, caso pretenda que este artigo tenha outra condição de acesso indique-a aqui.

Acesso



By editing the item metadata

OpenAIRE Add the field **dc.relation** if it doesn't exist in the item...

Browser address bar: <https://repositorium.sdum.uminho.pt/tools/edit-item>

Page title: Universidade do Minho: Editar item

Find: del of the intervertebral disc diseases and regeneration

degois	publication	issue	12	por	Remover
degois	publication	lastPage	10	por	Remover
degois	publication	title	PLoS ONE	por	Remover
			1932-6203		
degois	publication	volume	8	por	Remover

dc.relation [dropdown] [Adicionar]

Bitstreams

Note também que se o campo "Descrição de Formato" não estiver vazia, o formato será sempre configurado para "Desconhecido", dessa forma limpe o campo de descrição de formato antes de editar o campo.

Primário bitstream	Nome	Fonte	Descrição	Formato	Descrição de formato	Ordenar	
	17859-Understanding the	Written by FormatFilter o	Extracted text	5 (Text)		1	Ver Remover
	17859_uid_148.zip		SWORD deposit packagi	1 (Unknown)		1	Ver Remover
	license.txt	license.txt		2 (License)		1	Ver Remover
☐	17859-Understanding the			3 (Adobe PDF)			Mover para cima Mover para baixo Ver Remover

By editing the item metadata

OpenAIRE *Unlock the key authority value for manual editing...*

Universidade do Minho: Edi... x repositorium.sdum.uminho.pt

File Edit View Favorites Tools Help

X Find: del of the intervertebral disc diseases and regeneration Previous Next Options

dc	relation	value	action
degois	publication	firstPage	1
degois	publication	issue	12
degois	publication	lastPage	10
degois	publication	title	PLoS ONE
degois	publication	volume	8
dc	relation		

Desbloquear o valor da chave de autoridade para a edição manual ou bloqueá-la novamente

dc.coauthor

Adicionar

Bitstreams

Note também que se o campo "Descrição de Formato" não estiver vazia, o formato será sempre configurado para "Desconhecido", dessa forma limpe o campo de descrição de formato antes de editar o campo.

Primário bitstream	Nome	Fonte	Descrição	Formato	Descrição de formato	Ordenar	Ver	Remover
17859-Understanding the	Written by FormatFilter o	Extracted text	5	(Text)		1		



By editing the item metadata

OpenAIRE Search by the name or the project id number...

The screenshot displays the OpenAIRE repository's metadata editor. The main window has a browser address bar showing <https://repositorium.sdum.uminho.pt/tools/edit-item>. The interface includes a menu bar (File, Edit, View, Favorites, Tools, Help) and a search bar with the text "del of the intervertebral disc diseases and regeneration".

The metadata form contains several fields:

- degois publication firstPage**: 1
- degois publication issue**: 12
- degois publication lastPage**: 10
- degois publication title**: PLoS ONE
- degois publication volume**: 8
- dc relation**: Switchbox

A red arrow points to a lock icon on the 'dc relation' field. Below the form, there is a section for 'dc.coauthor' with a dropdown menu.

Bitstreams

Note também que se o campo "Descrição de Formato" não estiver vazia, o formato será sempre o formato antes de editar o campo.

Primário bitstream	Nome	Fonte	Descrição	Formato
17859-Understanding the	Written by FormatFilter o	Extracted text	5	(Text)

An inset window titled "Universidade do Minho: Selecção do projeto..." is open, showing search results for the term "Switchbox". The results list two items:

- 259772 - SWITCHBOX - Switchbox: Maintaining health in old age t...
Projeto não identificado
- Identificador do projeto (Se aceitar este valor ser colocado na caixa de texto do projeto)

The inset window also includes buttons for "Aceitar", "Ver mais resultados", and "Cancelar".



By editing the item metadata

OpenAIRE *Block the **dc.relation** field manual edition and update the item*

Browser address bar: <https://repositorium.sdum.uminho.pt/tools/edit-item>

Universidade do Minho: Edi... | repositorium.sdum.uminho.pt

File Edit View Favorites Tools Help

X Find: del of the intervertebral disc diseases and regeneration Previous Next Options

degois	publication	firstPage	1	por	Remover
degois	publication	issue	12	por	Remover
degois	publication	lastPage	10	por	Remover
degois	publication	title	PLoS ONE	por	Remover
			1932-6203		
degois	publication	volume	8	por	Remover
dc	relation		info:eu-repo/grantAgreement/EC/FP7/259772		Remover
			17013		
dc.coauthor					Adicionar

dc.coauthor

Bitstreams

Note também que se o campo "Descrição de Formato" não estiver vazia, o formato será sempre configurado para "Desconhecido", dessa forma limpe o campo de descrição de formato antes de editar o campo.

Primário bitstream	Nome	Fonte	Descrição	Formato	Descrição de formato	Ordenar	Ver	Remover
	17859-Understanding the	Written by FormatFilter o	Extracted text	5 (Text)		1		

Recommendations

- ✓ Promote awareness and disseminate the OpenAIRE compliance regularly within your academic & researchers community;
- ✓ Provide the OpenAIRE compatibility of your repository through the OAIextend or the XOAI Add-ons;
- ✓ Install on your repository the OpenAIRE authority control Add-on for facilitating the publications submission and the correct filling of the necessary information;
- ✓ Monitor periodically your repository in search for EC & ERC funded publications and update the necessary metadata whenever needed.

Q&A



4/5



OpenAIRE validator and registration process



5/5

Pedro Príncipe

<http://validator.openaire.eu>

Registration Steps

1. Register your repository in OpenDOAR

OpenDOAR is an authoritative worldwide directory of academic open access repositories.

2. Test compliancy with OpenAIRE

Make your repository OpenAIRE complaint – by implementing the OpenAIRE Guidelines

3. Add your repository in OpenAIRE

OpenAIRE in collaboration with OpenDOAR provides you an easy web tool to help you register the repository.

1. OpenDOAR

- The first step is to register your repository in [OpenDOAR](#).
- If you are already registered in OpenDOAR:
 - Check if the information is update
 - Attention to the URL and admin email

2. Test the OpenAIRE compliance



OpenAIRE

- After you have made some progress in **implementing the guidelines** you should run a compliancy test.
- The OpenAIRE provides a validator where you can verify if the repository is truly compatible with the guidelines.
 - Enter the **OAI-PMH base URL** of your repository and choose to test your repository against the OpenAIRE rule set.
 - After running the test you can **browse the results**.
 - The results are updated periodically, and the whole test might take some time to finish.

Join OpenAIRE today!

The OpenAIRE services provide you with an easy way to validate your repository/journal and register it into the OpenAIRE network. To begin, read [these instructions](#).

1

[Test the compatibility](#) of your repository/journal or aggregator to the [OpenAIRE guidelines](#) for

- ✓ Publication Repositories / Journals / Aggregators
- ✓ Data Archives/Repositories

2

[Register your repository](#) or [journal](#) in OpenAIRE

For more information check the [FAQ](#).

If you need further assistance please contact us through the [OpenAIRE Helpdesk](#).



OpenAIRE

HOME

JOIN OPENAIRE

TEST COMPATIBILITY

HELP

RUN COMPATIBILITY TESTS

BROWSE TEST RESULTS

SCORE INFORMATION

our repository/journal and register it into the Open

Journal or aggregator to the [OpenAIRE guidelines](#) for

Interfaces and publishing protocols

- Compatibility level **"OpenAIRE 3.0"** corresponds to run a validation test on **"openaire"** set.
- Compatibility level **"OpenAIRE 2.0"** corresponds to run a validation test on **"ec_fundedresources"** set.
- Compatibility level **"Driver"** corresponds to run a validation test on **"driver"** set.

Run compatibility test (1)

[My Account](#) | [Logout](#)

[HOME](#)

[JOIN OPENAIRE](#)

[TEST COMPATIBILITY](#)

[HELP](#)



Info

Select repository/journal

Select from the list, or enter the base OAI URL of the repository/journal. The repository's/journal's published sets are exposed in a later stage and you may select one for the compatibility tests.

Select guidelines

You may apply two types of compatibility tests on your repository:

Run Compatibility Test

1

Select repository/journal

☐ Base URL(*)

Please choose existing Base URL... ▾

☒ Or Manually Enter a Base Url(*)

[Next](#) ►

Run Compatibility Test

1 Selected repository: <http://repositorium.sdum.uminho.pt/oai/openaire>

2 Select guidelines

☒ OpenAIRE For Literature Repositories [More info](#)

☐ OpenAIRE For Data Archives [More info](#)

View/Select Rules

☒ for Content [Show](#)

☐ for Usage [Show](#)

3 Select parameters

Number of records ☐ All ☒ Custom

Set

Would you like to group your results by a specific record's field?

☒ No ☐ Yes

XPath Examples: 1. //header/setSpec 2. //record/metadata

`//*[name()='dc:language']`

Run Compatibility Test: View/Select Rules

for Usage

Use of OAI-DC (M)

Use of OAI-PMH:

'openaire' or

'ec_fundedresources' or

'driver' set must exist (M)

Use of OAI-PMH:

'openaire' set must exist (M)

driver set must exist (R)

ec_fundedresources set must
exist (openaire2.0)

for Content

Field Access Level (M)

Field Alternative Identifier (R)

Field Audience (R)

Field Contributor (R)

Field Coverage (R)

Field Creator (M)

Field Date of Publication (M)

Field Description (MA)

Field Embargo End Date (MA)

Field Format (R)

Field Language (R)

Field License Condition (R)

Field Project Identifier for

ecfundedresources (M)

Field Project Identifier for

openaire(MA)

Field Publication Type (M)

Field Publication Version (R)

Field Publisher (MA)

Field Referenced Dataset (R)

Field Referenced Publication (R)

Field Resource Identifier (M)

Field Source (M)

Field Subject (MA)

Field Title (M)

Run compatibility test (3)

Browse Compatibility Test Results

 Refresh (F5) to see the progress of the latest activities.

Type	Status	Score	User	Started	Duration	Repository	Rule Set	Reports
OAI Usage Validation	finished	100	pedroprincipe@sdum.uminho.pt	2014-03-17 18:41:55	3 secs	http://repositorium.sdum.uminho.pt/oai/openaire	Custom	Show Results
OAI Content Validation	finished	90	pedroprincipe@sdum.uminho.pt	2014-03-17 18:41:55	4 secs	http://repositorium.sdum.uminho.pt/oai/openaire	Custom	Show Results
OAI Usage Validation	finished	73	pedroprincipe@sdum.uminho.pt	2014-03-12 15:50:36	2 secs	http://fulir.irb.hr/cgi-bin/oai2	Custom	Show Results
OAI Content Validation	finished	0	pedroprincipe@sdum.uminho.pt	2014-03-12 15:50:35	2 secs	http://fulir.irb.hr/cgi-bin/oai2	Custom	View Errors

Run Compatibility Test:

Score information

How the score is computed

Each rule is assigned a weight. The score is estimated as the weighted average of the percentage of errors for each rule.

For example, for rules r_1 , r_2 , r_3 with corresponding weights w_1 , w_2 , w_3 , if the percentage of errors is p_1 , p_2 , p_3 , then the score is calculated by the following formula:

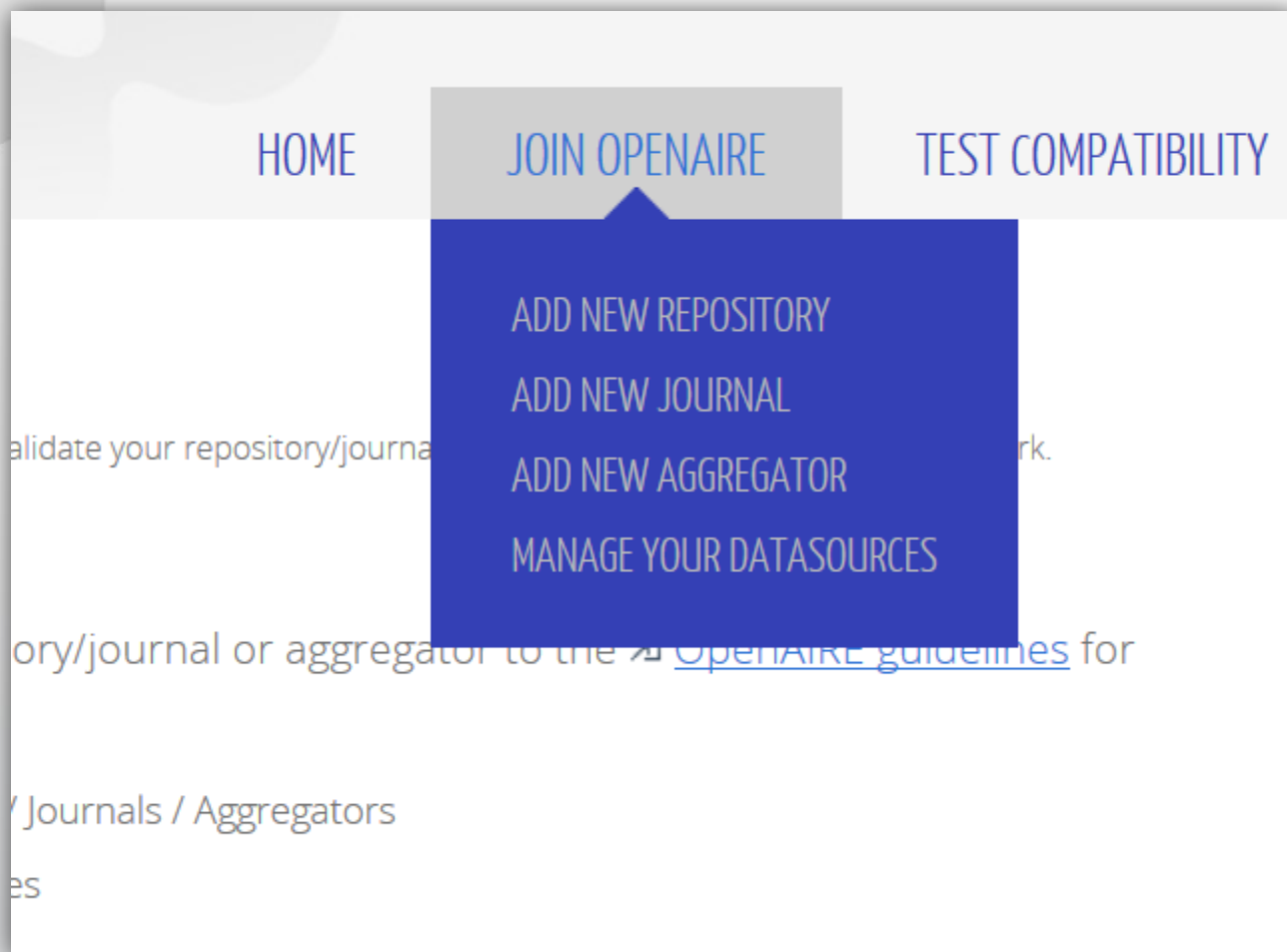
$$\text{score} = (w_1 * p_1 + w_2 * p_2 + w_3 * p_3) / w_1 + w_2 + w_3$$

You can find the weights of the various rules used in a test inside its report.

3. Join OpenAIRE

1. Add and correct any details in the form and click submit. After a short compatibility test against the OpenAIRE rule set, your repository will be ready to join OpenAIRE.
2. An email will be sent to the repository administrator to confirm this request. Please make sure you have contacted them before registering.
3. If the compatibility test does not succeed, you will be unable to join OpenAIRE until you correct all the errors that are found. Then you must re-submit your request.

Join OpenAIRE



Join OpenAIRE

Interfaces and publishing protocols

i Compatibility level "OpenAIRE 3.0" corresponds to run a validation test on "openaire" set. Compatibility level "OpenAIRE 2.0" corresponds to run a validation test on "ec_fundedresources" set and will soon be obsolete. Please upgrade to OpenAIRE 3.0 Guidelines. Compatibility level "Driver" is now obsolete.

Base OAI-PMH Url	Desired Compatibility Level
http://repositorium.sdum.uminho.pt/oai/openaire	OpenAIRE 2.0
http://repositorium.sdum.uminho.pt/oai/driver	Driver

[Add new Interface](#)

Current compatibility status

Driver	OpenAIRE 2.0	OpenAIRE 3.0
Yes	Yes	No

JOIN OpenAIRE

Join OpenAIRE today!

The OpenAIRE services provide you with an easy way to validate your repository/journal and register it into the OpenAIRE network. To begin, read [these instructions](#)

1

[Test the compatibility](#) of your repository/journal or aggregator to the [OpenAIRE guidelines](#) for

- ✓ Publication Repositories / Journals / Aggregators
- ✓ Data Archives/Repositories

2

[Register your literature repository](#), [data repository](#), [journal](#) or [aggregator](#) in OpenAIRE

For more information check the [FAQ](#)

If you need further assistance please contact us through the [OpenAIRE Helpdesk](#)

OpenAIRE API documentation

6 June 2014

Table of Contents

1. Overview
2. Bulk access via OAI-PMH
3. Bulk access to FP7 projects
4. Selective access with HTTP API

Common API parameters
Publications
Datasets

Chapter 1. Overview

The OpenAIRE API allows developers to access the information space of OpenAIRE programmatically.

- Bulk access:

OAI-PMH

FP7 projects export for DSpace and EPrints

- Selective access via **HTTP Search API**

Search HTTP API for metadata about publications

Search HTTP API for metadata about datasets

- Find and discuss the guidelines at: guidelines.openaire.eu
- Test and register the repository at: validator.openaire.eu
- Find support and more info at: www.openaire.eu
- Access the OpenAIRE API documentation: api.openaire.eu

Wiki: <http://guidelines.openaire.eu>

Q&A

OpenAIRE compatibility for repositories

Pedro Principe, pedroprincipe@sdum.uminho.pt

José Carvalho, jcarvalho@sdum.uminho.pt

Eloy Rodrigues, eloy@sdum.uminho.pt

Ricardo Saraiva, rsaraiva@sdum.uminho.pt