Repository Managers and Administrators
Quick Guide to facilitate compatibility with
OpenAIRE Guidelines

Content
Compatibility with OpenAIRE Guidelines ................................................................. 2
Tips applying to all repository software .................................................................... 2
Implementation in DSpace ....................................................................................... 3
  Modification to the file DSPACE_PATH/config/input-forms.xml ............................. 3
  Valid values for the type of document .................................................................. 3
  Change of the languages allowed ......................................................................... 6
  Introducing projectID in the deposit form ............................................................. 7
  Mandatory dc:creator and dc:type .................................................................... 8
  Access Rights ..................................................................................................... 9
EC_fundedresources set definition ........................................................................... 10
DSpace 1.6.2 ........................................................................................................... 10
Other DSpace versions ......................................................................................... 11
Questions and Suggestions ...................................................................................... 12

Author: Juan Corrales Correyero
Editors & Contributors: Rob Ingram, Eloy Rodrigues, Alicia López Medina
Compatibility with OpenAIRE Guidelines

The OpenAIRE Guidelines 1.1, are based on the DRIVER Guidelines 2.0. Here we present some modifications that may be made to the default configuration of the repository, which will facilitate compliance with mandatory OpenAIRE guidelines. More detailed instructions will be given for DSpace, being the single most popular platform worldwide according to OpenDOAR and ROAR.

This document does not cover the whole of the guidelines, which are described in previous documents, but it is intended as a quick guide to allow repository managers to resolve common problems.

Tips applying to all repository software

As a basis for amendments to be made in the repositories, you can use the table “All the elements: a brief description” contained on pages 8 and 9 of the OpenAIRE Guidelines 1.1.

To summarize the requirements, the configuration of the repository should be modified to:

➢ Make it mandatory to fill in all the elements considered obligatory by the Guidelines: dc:title, dc:creator, dc:date, dc:type and dc:rights.
➢ Offer the possibility of introducing the projectID (page 6 OpenAIRE Guidelines 1.1) in the repository documents entry forms.
➢ Offer, where possible, a limited number of options, with the values specified by the OpenAIRE Guidelines 1.1:
   For dc:type, the types of publications described in the DRIVER Guidelines 2.0 on page 69.
   For dc:relation, if FP7 funded projects of the institution are known then they may be provided as a projects list.
   For dc:rights, the values for “accessRights” described on page 7 of OpenAIRE Guidelines 1.1 or applicable subset for the repository.
   For dc:language, to introduce values in the ISO 639-3 format (3 letters)
➢ If possible, automatically create the EC_fundedresources set (page 5 of the OpenAIRE Guidelines 1.1) from the records that meet the mandatory guidelines.
Implementation in DSpace

Modification to the file DSPACE_PATH/config/input-forms.xml

Valid values for the type of document

➢ Search for the following string to find the section to edit: value-pairs-name="common_types"
➢ For each element “pair”, we modify the value “displayed value” to the value required by the DRIVER Guidelines 2.0 on page 69. It is also convenient to eliminate some types whose interpretation may overlap with the DRIVER/OpenAIRE types and add those that are not part of the default DSpace set if it is considered necessary.

Listed below is a complete example of the element "common_types", that each institution should adapt to their needs

```xml
<value-pairs value-pairs-name="common_types" dc-term="type">
  <pair>
    <displayed-value>Animation</displayed-value>
    <stored-value>Animation</stored-value>
  </pair>
  <pair>
    <displayed-value>Contribution To Periodical</displayed-value>
    <stored-value>info:eu-repo/semantics/contributionToPeriodical</stored-value>
  </pair>
  <pair>
    <displayed-value>Patent</displayed-value>
    <stored-value>info:eu-repo/semantics/patent</stored-value>
  </pair>
  <pair>
    <displayed-value>Review</displayed-value>
    <stored-value>info:eu-repo/semantics/review</stored-value>
  </pair>
  <pair>
    <displayed-value>Article</displayed-value>
    <stored-value>info:eu-repo/semantics/article</stored-value>
  </pair>
</value-pairs>
```
Change of the languages allowed

In the same file, you can change the values allowed for the languages in order to make them compliant with the ISO 639-3 format as recommended on pages 76,77 of the DRIVER Guidelines 2.0 instead of the default two-letter language codes.

Here is an example of the definition of languages allowed in this file:

```xml
<value-pairs value-pairs-name="common_iso_languages" dc-term="language_iso">
  <pair>
    <displayed-value>N/A</displayed-value>
    <stored-value>N/A</stored-value>
  </pair>
  <pair>
    <displayed-value>English</displayed-value>
    <stored-value>en</stored-value>
  </pair>
  <pair>
    <displayed-value>Spanish</displayed-value>
    <stored-value>es</stored-value>
  </pair>
  <pair>
    <displayed-value>German</displayed-value>
    <stored-value>de</stored-value>
  </pair>
</value-pairs>
```
Introducing projectID in the deposit form

As explained on page 6 of the OpenAIRE Guidelines 1.1 all projects financed by the EC FP7 should incorporate a new field called projectID that contains the "Grant Agreement Number" found in the documentation / correspondence between the EC and the investigator / coordinator. According to these guidelines, this number is mapped to element dc:relation and must have the form:

```
<dc:relation>
  info:eu-repo/grantAgreement/EC/FP7/12345
</dc:relation>
```

Again, we can add a new optional field in the file input-forms.xml with the form:

```
<field>
  <dc-schema>dc</dc-schema>
  <dc-element>relation</dc-element>
  <dc-qualifier></dc-qualifier>
  <repeatable>true</repeatable>
  <label>FP7 Grant Agreement Number</label>
  <input-type>onebox</input-type>
  <hint>Madatory for FP7 funded resources. Format: info:eu-repo/grantAgreement/EC/FP7/12345</hint>
  <required></required>
</field>
```

If you know the projects of your institution funded by the FP7 you can follow the same
procedure described in "Access Rights" to pre-define a list of projects from which the user may choose.

**Mandatory dc:creator and dc:type**

The OpenAIRE Guidelines 1.1, on page 8, include a table summarizing the DC elements where it is indicated that dc:creator and dc:type are required and that author names are recommended to follow the scheme "surname, first name".

To ensure that these fields are mandatory, just add text into the "required" element of the field definition for dc:contributor.author (which will be mapped to dc:creator when oai_dc metadata is harvested) and dc:type.

In the file input-forms.xml we could have the following:

```xml
<field>
  <dc-schema>dc</dc-schema>
  <dc-element>contributor</dc-element>
  <dc-qualifier>author</dc-qualifier>
  <repeatable>true</repeatable>
  <label>Authors</label>
  <input-type>name</input-type>
  <hint>Enter the names of the authors of this item below.</hint>
  <required>You must enter a Author name for this item.</required>
</field>

<field>
  <dc-schema>dc</dc-schema>
  <dc-element>type</dc-element>
  <dc-qualifier></dc-qualifier>
  <repeatable>true</repeatable>
  <label>Type</label>
  <input-type value-pairs-name="common_types">dropdown</input-type>
  <hint> Select the type(s) of content of the item. To select more than one value in the list, you may have to hold down the "CTRL" or "Shift" key.</hint>
  <required>You must select a document type for this item.</required>
</field>
```
Access Rights

Page 7 of OpenAIRE Guidelines 1.1 indicates that the **access rights to a work statement are obligatory** and that these rights should be expressed with the vocabulary defined in [http://wiki.surffoundation.nl/display/standards/info-eu-repo/#info-eu-repo-AccessRights](http://wiki.surffoundation.nl/display/standards/info-eu-repo/#info-eu-repo-AccessRights) and mapped to the field dc:rights.

We will modify the file input-forms.xml again to introduce the access rights.

First, add the new element dc:rights to the “form” section of the file input-forms.xml

```xml
<field>
  <dc-schema>dc</dc-schema>
  <dc-element>rights</dc-element>
  <dc-qualifier></dc-qualifier>
  <repeatable>false</repeatable>
  <label>Access Rights</label>
  <input-type value-pairs-name="common_rights">dropdown</input-type>
  <hint>Select the access rights for this item.</hint>
  <required>You must select the access right for this item.</required>
</field>
```

And, within the element "form-value-pairs" we indicate the possible values for this field. If the repository allows, for instance, only embargoed and open access records, then it is convenient to include only these two values instead of the four possibilities:

```xml
<value-pairs value-pairs-name="common_rights" dc-term="rights">
  <pair>
    <displayed-value>N/A</displayed-value>
    <stored-value></stored-value>
  </pair>
  <pair>
    <displayed-value>Open Access</displayed-value>
    <stored-value>info:eu-repo/semantics/openAccess</stored-value>
  </pair>
  <pair>
    <displayed-value>Embargoed Access</displayed-value>
    <stored-value>info:eu-repo/semantics/embargoedAccess</stored-value>
  </pair>
</value-pairs>
```
EC_fundedresources set definition

If the DSpace version installed is 1.6.2 it is helpful to install the patch OAI Extended v2. For other versions you must create a new community, e.g. "OpenAIRE", and map the items to research papers funded by the FP7 to this community.

DSpace 1.6.2

This section describes the installation and configuration of the patch Extended OAI v.2. If you do not want to install this patch then the explanations given in the next section are also valid for DSpace 1.6.2

The steps are:

➢ Download the patch from the page of RCAAP.
➢ If the repository is installed on a UNIX type machine (like Linux) run

```bash
cd [ADDON_SRC]/setup.sh [DSPACE_SOURCE]
```

Where [ADDON_SRC] is the directory containing the patch and [DSPACE_SOURCE] the DSpace source directory.

➢ If the repository is installed on a different operating system, follow the instructions in the patch.

➢ Rebuild the DSpace installation as directed by DSpace itself (probably perform the following steps):

```bash
cd [DSPACE-SOURCE]/dspace/target/dspace-<version>-build.dir
ant -Dconfig=[DSPACE]/config/dspace.cfg update
cp -R [DSPACE]/webapps/* [TOMCAT]/webapps
```

Where [DSPACE-SOURCE] is the directory containing the patch, [TOMCAT] the directory where you installed tomcat and [DSPACE] the directory where DSpace is installed.

➢ The URL for OAI-PMH harvesting for compatibility with OpenAIRE will change from
http://[REPOSITORY_HOME]/oai/request to http://[REPOSITORY_HOME]/oaiextended/request. If your repository is registered with any services such as OAIster, OpenDOAR or ROAR, you should notify them of this change
➢ Check that the replacement set "EC Funded Resources Set" shows at http://[REPOSITORY_HOME]/oaiextended/request?Verb=ListSets and that all records compatible with OpenAIRE are listed on the URL http://[REPOSITORY_HOME]/oaiextended/request?verb=ListRecords&metadataPrefix=oai_dcc&set=ec_fundedresources

If you follow these steps, the items that meet the following requirements should be automatically mapped to the new set:

➢ The format of the fields: dc:type, dc: relation and dc:rights is compliant with the OpenAIRE Guidelines 1.1

Other DSpace versions

For other DSpace versions you need to create a new community or a new collection for the records compliant with OpenAIRE and the administrator of the repository must map the compatible records to this community/collection.

Once the new community or collection has been created, you need to follow these steps:
➢ Find out the ID / author of the item you want to map to the collection OpenAIRE
➢ Browse to the OpenAIRE collection or to another collection in the OpenAIRE community.
➢ From the XMLUI interface:
   In the context menu, select "Item Mapper".
   In the text box, enter the Item ID and click the “Search Items” button
   Click the button “Map selected items”
➢ From the jspui interface:
   Click the "Item Mapper" link
   Search for the items to be mapped by the author's name and select those you
Click the Add button

Thus, assuming that the identifier of the OpenAIRE community/collection is hdl_123456789_123, the harvesting URL for the set would be http://[REPOSITORY_HOME]/oai/request?verb=ListRecords&metadataPrefix=oai_dc&set=hdl_123456789_123

Questions and Suggestions

If you have questions or suggestions for this document, you can write to the address recolecta@fecyt.es