

NEEO technical guidelines

Annex 3: Economists Online Gateway XML Admin-file procedure

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NEEO – WP5

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<http://drcwww.uvt.nl/~place/neo/Exchanging%20information%20between%20RePEc%20and%20Nereus.doc>

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1/6/2008	0.5	Initial document
9/6/2008	0.6	<ul style="list-style-type: none">• Editing; correction of some typos• Section B now contains a reference to an example Admin file (on NEEO surfgroepen)• Section C:<ul style="list-style-type: none">▪ Note that XHTML tagging is allowed in the “dc:description” fields▪ Entries for a info:eu-repo/semantics/department rdf:Organization are also allowed to be multi-lingual▪ Added nereus:oaiMetadataPrefix entry▪ Changed mandatory/optional status of fields▪ Added overview of mandatory/optional fields per entry type▪ Added note that xml:lang=“en” is optional on entries, and is the default▪ Added foaf:thumbnail for an institution▪ Added a note on how to declare a DAI
17/6/2008	1.0	<ul style="list-style-type: none">• Reviewed mandatory/optional status of the fields• dc:description is not mandatory, though strongly recommended• nereus:departments and nereus:authors are mandatory fields, with rdf:Bag non-empty• homepage, logo and thumbnail are repeatable (different languages)
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14/8/2009	1.5	<ul style="list-style-type: none">• revision of step by step procedures and instructions for partners, incorporating availability of validation tool at http://www.economistsonline.org/validate/

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Introduction

The XML Admin file

The NEEO project will produce dynamically built electronic publication lists for authors from its 16 project partners. It has been decided that each of these authors will be clearly identified through a DAI (Digital Author Identifier) in the MODS metadata of the publications. NEEO needs to be given a list of these DAIs in order to know which of the authors are to be highlighted in the Economists Online portal and to determine which of the authors need publication lists generated for them. For similar reasons, it is necessary to gather and maintain administrative information about the partner's institutions and their departments, some information on each of their IR platforms, and the policy of the project partner with respect to the exchange of information from and to RePEc.

The kind of information we are looking at collecting and presenting through the EO portal includes the following:

- EO authors: name, DAI, short biographical description, expertise, affiliation, photograph...
- EO institutions and their departments: short description of expertise, location ...
- IR platforms: OAI baseURL, OAI sets to be harvested by EO, IR archiving policy ...

The NEEO project will aggregate economics publications and datasets from at least 20 partner institutions. Partners can house multiple departments, different IR software platforms need to be harvested from and hundreds of individualized publications lists can potentially be generated. Moreover, it is the general objective of the NEEO project to define and implement models of interoperability that can be reused in other European contexts with scalability in mind, so that a network of tens or hundreds of institutional repositories could be supported by NEEO solutions.

Given these objectives and a large numbers of researchers to support, we realized that this would rapidly evolve into a virtually impossible administrative task to be dealt with in a centralized way. NEEO therefore needed to find a solution in which each of the NEEO data providers would be able to specify and maintain the specifications of its own institution, departments, authors, IR platforms, etc. in an autonomous way, and according to an agreed schema. Each of the project partners is therefore asked to maintain a file on a web server at their institution, called the 'XML Admin file', and formatted according to an RDF/XML schema as defined by the project.

RDF/XML structure based on the FOAF vocabulary

The WP5 Technical Workgroup has conducted a study on the various existing XML schemas for the description of an author and its biography, and lists the following options: vCard, XML Résumé, FOAF, MADS, BIO, AMF, CERIF, and IST World CXML. Please refer to the document "[NEEO Author Metadata](#)" for more information on these schemas and a comparative overview. Our conclusion is that none of these existing formats can fulfil our (even fairly basic) needs in the NEEO project. Also, given the fact that we needed an extensible schema that would permit us to integrate administrative specifications about an institution, department, IR software platform, etc. we opted for an RDF-based schema, based on the FOAF vocabulary. FOAF has been conceived specifically for the description of persons and its institutions in a virtual social network. Together with the extensibility feature of RDF, we decided that this would be the optimal way to move forward. Also, with the OAI-ORE initiative in mind, it looked like a good idea to start using RDF, so that in a more or less distant future, we could fairly easily move towards the description of an author (and his/her activities, publications, projects, relations, etc.) as an ORE-ResourceMap.

While writing our extended FOAF-based RDF/XML schema for NEEO, we realized that there is a need for a more robust and elaborate RDF vocabulary, that can describe the various administrative specifications needed in a big interoperable network of service and data providers, such as Economists Online. Other similar initiatives like DRIVER will benefit from this kind of solution. Although the creation of such an RDF vocabulary falls outside the scope of the NEEO

project, it is the ambition of several members of the WP5 Technical Workgroup to accomplish this task within the context of an implementation of the OAI-ORE protocol.

Underneath we describe the steps involved in dealing with the XML Admin files, both for the project partners and the Economists Online support desk at Tilburg University, followed by instructions to partner institutions (including the step-by-step listing and graphical overview). These instructions should be clear enough for people to follow without additional help from the support desk.

Step-by-step listing of procedures

1. A partner institution sets up a repository according to the technical guidelines (http://homepages.ulb.ac.be/~bpauwels/NEEO/WP5/WP5_Technical_guidelines.pdf)
2. The partner institution informs Economists Online support desk when the repository is ready, by mailing EconomistsOnline@uvt.nl
3. Economists Online sends partner the most recent copy of the Admin-file template (also available from the Surfgroepen site: <https://www.surfgroepen.nl/sites/NEEO-Project/Shared%20Documents/Workpackage%20support%20documents/WP5%20Interoperability%20Infrastructure%20and%20Gateway/Technical%20guidelines/WP5%20Technical%20guidelines%20-%20Annex%203%20-%20XMLAdmin%20file.rdf>)
4. The partner institution updates template so it contains all required information about the institution and its repository. (the updated template will now be called the XML Admin-file)
5. The partner institution puts the XML Admin-file online in a location that is publicly accessible, so the gateway can retrieve this file over HTTP. Make sure this URL is unlikely to change any time soon.
6. The partner institution mails the location of the XML Admin-file to EconomistsOnline@uvt.nl.
7. The Economists Online support desk adds the URL for the admin file to the gateway configuration and informs the partner when this is done. A basic test of the Admin-file and repository is performed to make sure everything works. The repository baseURL is then added to the harvester. If a problem exists, the support desk contacts the administrator of the Admin-file.
8. If everything works, both Admin-file (daily at 12:15) and repository (twice weekly) will be harvested regularly. If there is a problem, Admin-file administrators are asked to update their admin files, as explained below under Updating existing institution settings.

Updating existing institution settings

1. The partner institution updates the existing XML Admin-file so that it contains all required information about the institution and its repository.
2. The partner institution validates the updated XML Admin-file using the online application which can be found at <http://www.economistsonline.org/validate/>:
 - a. Enter the URL of the admin file
 - b. Select '*Test repositories too*' to test the basic validity (DIDL/MODS-compliance) of the repository as well (optional). This will retrieve the most recent records from the repository and checks whether these comply with the DIDL/MODS requirements for Economists Online. '*# of days*' can be changed to change the time period and retrieve more or less records.
 - c. Click '*Validate*' to validate the Admin-file and repository. If errors are found, the validator will provide a basic error message.
3. Between 12:00 and 12:30 Amsterdam time (GMT+1 or +2 during Daylight savings), the Economists Online gateway retrieves all Admin-files. If valid, the new Admin-file will be used to replace the existing Admin-file in the configuration. If the new Admin-file is invalid, the configuration will not be changed. An error log is mailed to the Economists Online support desk. (at a later point in time, error logs will be mailed directly to the Admin-file administrators)

Section A presents a graphical overview of the update process.

Partner instructions

When your repository complies with the specifications as laid out in the technical guidelines (http://homepages.ulb.ac.be/~bpauwels/NEEO/WP5/WP5_Technical_guidelines.pdf) it can be harvested by the Economists Online gateway. Send an email to the Economists Online support desk at Tilburg (EconomistsOnline@uvt.nl) to let them know that your repository is ready for harvesting. The support desk will mail you an empty XML Admin-template, which looks like¹ the example in Section B.

You have to update the Admin-template so that it includes all information specific to your institution. The template contains example content to further clarify what goes where. The detailed instructions in section C explain which elements are required and how the information should be entered.

Please note: make sure you use an XML editor or an editor that will output plain text (i.e. do not use word-processing applications such as Microsoft Word for this)² **and** that it saves the XML file encoded in UTF-8.

When all information is included in the XML Admin-file (this is the XML Admin-template changed to include your settings), the XML Admin-file should be validated using the tool that can be found at <http://www.economistsonline.org/validate/>. Put the XML Admin-file online at a publicly web-accessible location. Ask EconomistsOnline@uvt.nl to add the URL to the gateway configuration. Once it is added, go to <http://www.economistsonline.org/validate/> and enter the URL of the XML Admin-File. Press 'Validate' and wait for results. If no errors occur, the file is valid and can be used by the gateway. If there is a problem validating the XML Admin-file, make all required changes until the XML Admin-file validates. An invalid XML Admin-file will not be used by the gateway. Instead, it will use the previous configuration settings.

Once the XML Admin-file validates, it file will be frequently accessed to see if any settings have changed. Currently, Admin-files are checked daily around 12:00 Amsterdam time. For this reason, it is important to use a URL that is unlikely to change. If the gateway cannot find the XML Admin-file, an error will occur and the gateway will not be able to process your changes. Instead, the gateway will use the last known information and you will be contacted about the issue.

When the XML Admin-file is accessible, the support desk will set up the Economists Online gateway to harvest your repository. Before actually including the results in the live gateway, a test harvest will be conducted. Any issues discovered at this time will be communicated with the institution's repository contact, as defined in the XML Admin-file. After any required changes are made, a new test harvest will be conducted. This process will repeat until the results are valid according to the Economists Online gateway standards³.

Upon successful completion of the test harvest, the new institution's settings will be added to the live Economists Online gateway and the institution's repository will be included in the next harvesting run. This means that results from your repository should be visible after that harvesting run.

Harvesting will be done twice a week. The XML Admin-file contains a section for notes. You may use this to inform the Economists Online support desk when your repository will be unavailable for harvesting (e.g., if your repository is offline on a nightly basis between 2 and 3 am, enter that information and the Economists Online harvester will not attempt to harvest the repository during this time frame).

¹ The actual contents may have changed since publication of this document, so always use the XML Admin-template you received via email.

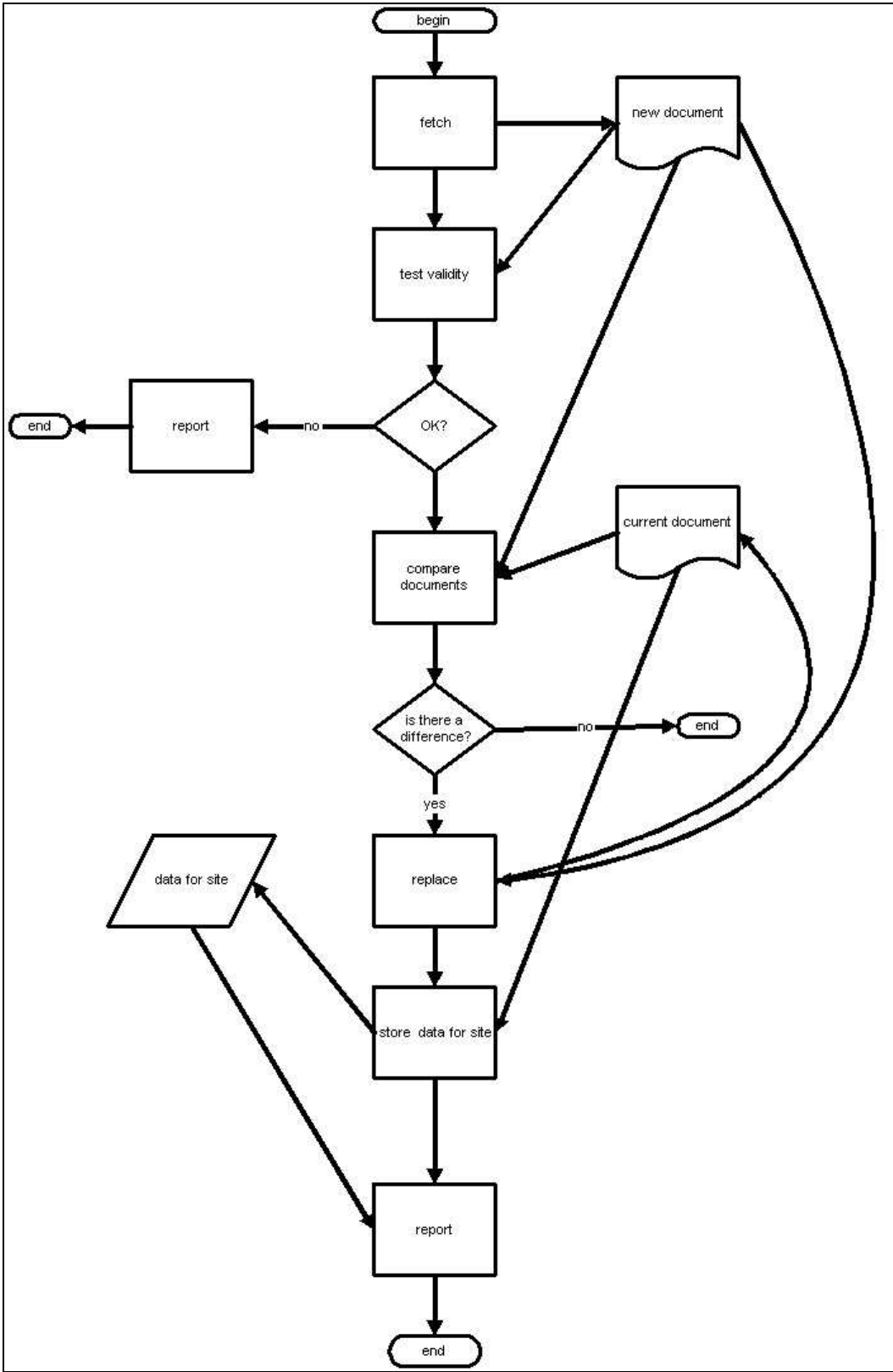
² A good example of a freely available editor for Microsoft Windows is jEdit (<http://www.jedit.org/>)

³ Please fix all known issues before asking for a new test harvest.

Once everything is up and running, the harvesting should work without any problems. After a while, you may wish to change information in the XML Admin-file to reflect changes in your repository. Simply make the changes to a copy of your XML Admin-file, test its validity and upload the (valid!) updated file to the URL already known to the Economists Online gateway.

Once your repository is part of the Economists Online gateway, changes are made through the XML Admin-file. Each time the gateway updates itself with the contents of the XML Admin-file, any changes are redirected to the support desk. The support desk will make the required changes to the system. If necessary, the institution's repository contact (as listed in the XML Admin-file) will be asked to confirm certain changes.

Section A: Schematic overview of XML Admin-file processing by Economists Online gateway support desk (Tilburg University)



Section B: Economists Online XML Admin-template (example)

Is available at the following address:

http://homepages.ulb.ac.be/~bpauwels/NEEO/WP5/WP5_Technical_guidelines_-_Annex3Template.rdf

(Bold indicates content that should be changed to reflect your institution's data; this example uses Sciences Po as its institution)

Section C: Detailed description of the XML Admin-file

The following information presents snippets from the XML Admin-file, with a detailed explanation of the requirements for the contents. This description serves as a clarification for the XML Admin-file. It is advised to read this alongside the actual XML Admin-file.

The Admin file contains many commentary remarks to document all elements. These are placed between `<!--` and `-->`. Although these comments are not required for the XML Admin-file to function, it is suggested to leave these in nonetheless.

```
<?xml version="1.0" encoding="UTF-8"?>
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns:foaf="http://xmlns.com/foaf/0.1/" xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:dcterms="http://purl.org/dc/terms/"
  xmlns:nereus="http://www.nereus4economics.info/"
  xmlns:xinclude="http://www.w3.org/2001/XInclude"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
```

This section must be present as-is, at the start of the file.

Required: yes
Frequency: once (unique, may occur only once per XML Admin-file.)

```
<!--+
  | Throughout this document, the use of xinclude is allowed to include
  | documents. After parsing the document, every xinclude:include element
  | will be replaced by the document referenced by the href attribute.
  | Using xinclude means you can use runtime generated documents and
  | use documents describing authors and your organization for other
  | projects too, without having to duplicate their contents in this file.
  | See http://www.w3.org/TR/xinclude/ for more information.
  |
  +-->
```

It is possible to replace all or parts of the XML Admin-file by `xincludes`, if you are familiar with this option. The use of `xinclude` is not explained in detail here.

Required: no (comment)
Frequency: NA (comment)

Institution

```
<!--+
| This document must contain exactly one foaf:Organization with rdf:type set to
| info:eu-repo/semantics/institution. This entry describes the EO partner institution and contains
| a list of departments to which EO scholars are affiliated.
+-->
<!-- The rdf:ID attribute has no specific meaning, and is not referenced anywhere else in this
document. -->
<foaf:Organization rdf:ID="sciences-po.fr">
  <!-- This is the description of an EO partner institution -->
  <rdf:type>info:eu-repo/semantics/institution</rdf:type>
```

This `foaf:Organization` with `rdf:type info:eu-repo/semantics/institution` describes the partner institution. The `rdf:ID` attribute is only used to identify the organization in this document, it is not used anywhere else. Although there is no specific meaning to the attribute, the use of a meaningful name is recommended.

Required: yes

Frequency: unique, only one organization of type institution per XML Admin-file

```
<!-- This is the official name of the EO partner institution. Is used throughout the EO portal
interfaces. -->
<foaf:name>Sciences Po</foaf:name>
<foaf:name xml:lang="es">Sciences Po</foaf:name>
<!-- This is the official acronym of the EO partner institution -->
<dcterms:alternative>ScPo</dcterms:alternative>
<dcterms:alternative xml:lang="es">ScPo</dcterms:alternative>
```

This section contains information about the partner institution. Among other things, it serves as input for the content of the EO Partners page. The document must contain exactly one `foaf:Organization` with `rdf:type` set to `info:eu-repo/semantics/institution`. This entry describes the EO partner institution and contains a list of departments to which EO scholars are affiliated.

Enter the official (as defined by the institution) name and acronym of the partner institution. The acronym will be used to refer to the institution in situations where the full name cannot be used, e.g. when creating text buttons to link to the institutions. The acronym is also used internally by the repository, to denote the originating location of the repository contents.

The default name is listed as `<foaf:name>English name</foaf:name>` and is in English. A different name may be included for use in one of the other languages, by using `xml:lang`⁴. The following expressions have an identical result: `<foaf:name>` and `<foaf:name xml:lang="en">`. If no language-specific text is present, the default (English) text will be used. The default is required, language variations are optional.⁵

The default acronym is listed as `<dcterms:alternative>English name</dcterms:alternative>` and is in English. A different `dcterms:alternative`

⁴ Possible values for the `xml:lang` attribute are: "en", "fr", "es" and "de".

⁵ If a user selects to display information in a language for which no text is entered in the Admin file (e.g. a user selects Spanish, but no `xml:lang="es"` is present), the system shows the default (English) text.

may be included for use in one of the other languages, by using `xml:lang`. The following expressions have an identical result: `<dcterms:alternative>` and `<dcterms:alternative xml:lang="en">`. If no language-specific text is present, the default (English) text will be used. The default is required, language variations are optional.⁵

(please note: the `xml:lang="en"` attribute is optional for the default `foaf:name` and `dcterms:alternative`, since it is already considered to be in English.)

Required: `foaf:name`: yes (English version, other languages are not required)
`foaf:alternative`: no (an institution may exist without an acronym)
Frequency: unique (only one name and alternative per institution, for each language)

```
<!-- A short description of the EO partner institution can be entered underneath. This can
be done in various languages. The language can be denoted through the use of the
xml:lang attribute. Possible values are: en, fr, es, de. At least the "en" version must be
given. -->
<dc:description>Sciences Po is a research and education institution.</dc:description>
<dc:description xml:lang="fr">Sciences Po est une institution de recherche et de
formation.</dc:description>
<!-- URL of the homepage of the EO partner institution -->
<foaf:homepage rdf:resource="http://www.sciences-po.fr"/>
```

This information is used on the EO Partners screen to present information about the institution. Since any description text is taken directly from this file, please ensure proper punctuation and spelling.

Just like with the institution's name and acronym, the default for `dc:description` and `foaf:homepage` is English. You may use the `xml:lang` attribute to denote descriptions and homepage URLs for other languages, e.g. when you have both an English and German site for your institution. The following expressions have an identical result: `<foaf:homepage>` and `<foaf:homepage xml:lang="en">`.

Required: no; though strongly recommended
Frequency: unique (only one description and homepage URL per institution, for each language)

```
<!-- URL of an image that represents the logo of the EO partner institution. -->
<foaf:logo rdf:resource="http://www.sciences-po.fr/logo-sciencespo.jpg"/>
<!-- URL of an image that represents a thumbnailed logo of the EO partner institution. -->
<foaf:thumbnail rdf:resource="http://www.sciences-po.fr/thumbnail-sciencespo.jpg"/>
```

Acceptable image types are: *gif*, *png*, and *jpg*. Thumbnails are used on the home page of the EO portal; the logos are shown in the popup frame for an institution. The maximum image dimensions for logos and thumbnails are as follows:

Type	Maximum height in pixels	Maximum width in pixels
logo	65	300
thumbnail	33	50

Pictures with dimensions smaller than these maximums will be shown as-is in the portal. Bigger pictures will be automatically resized to these maximum values: please be aware that this can

result in distorted images. The logo and thumbnail are stored and maintained by the institution, on its own web server.

The default is English. You may use the `xml:lang` attribute to denote logos and thumbnails for other languages. The following expressions have an identical result: `<foaf:logo>` and `<foaf:logo xml:lang="en">`.

Required: yes

Frequency: unique (only one logo and thumbnail per institution, for each language)

```
<!-- The country of the EO partner institution. This value is used to sort EO partners per
country in the EO portal interfaces. -->
<dcterms:spatial xsi:type="dcterms:ISO3166">FR</dcterms:spatial>
```

ISO3166 country codes⁶ should be entered as upper-case.

Required: yes

Frequency: unique (an institution can only be located in a single country)

```
<!-- A list of departments within this EO partner institution. Further details of each department
are given in a foaf:Organization entry with rdf:type set to info:eu-repo/semantics/department.
Referencing is done based on identical value of the rdf:nodeID attribute. -->
<nereus:departments>
  <rdf:Bag>
    <rdf:li rdf:nodeID="ofce.sciences-po.fr"/>
    <rdf:li rdf:nodeID="xxxx.sciences-po.fr"/>
  </rdf:Bag>
</nereus:departments>
```

One or more departments may be present in this `rdf:Bag` section. For each department listed here, a corresponding `foaf:Organization` entry is required in the Admin file (see below). The contents of the `rdf:Bag` container is unordered. If you have more than one department, you may enter them in any order.

Required: yes; at least one department **must** be listed

Frequency: unique (only one list of departments per institution)

⁶ http://www.iso.org/iso/country_codes/iso_3166_code_lists/english_country_names_and_code_elements.htm

```

<!-- A list of repositories that are maintained by this EO partner institution. At least one of these
MUST be present in this document. Further details of each repository are given in a
rdf:description entry with with rdf:type set to info:eu-repo/semantics/repository. Referencing is
done based on identical value of the rdf:nodeID attribute. -->
<nereus:repositories>
  <rdf:Bag>
    <rdf:li rdf:nodeID="ir.sciences-po.fr"/>
    <rdf:li rdf:nodeID="theses.sciences-po.fr"/>
  </rdf:Bag>
</nereus:repositories>

```

At least one repository **must** be present in this `rdf:Bag` section. For each repository listed here, a corresponding `rdf:Description` entry is required in the Admin file (see below). The contents of the `rdf:Bag` container is unordered. If you have more than one repository, you may enter them in any order.

Required: yes, at least one repository **must** be listed
Frequency: unique (only one list of repositories per institution)

```

<!-- A list of repositories which contain records for the downloads of object files of publications
that are contained in the repositories listed under <nereus:repositories>. Further details of each
usageRepository are given in a rdf:Description entry with rdf:type set to info:eu-
repo/semantics/usageRepository. Referencing is done based on identical value of the
rdf:nodeID attribute. -->
<nereus:usageRepositories>
  <rdf:Bag>
    <rdf:li rdf:nodeID="usage1.sciences-po.fr"/>
  </rdf:Bag>
</nereus:usageRepositories>

```

This section contains a list of `usageRepositories`. For each `usageRepository` listed here, a corresponding `rdf:Description` entry is required in the Admin file (see below). The contents of the `rdf:Bag` container is unordered. If you have more than one `usageRepository`, you may enter them in any order. The `nereus:usageRepositories` element is not mandatory.

Required: no
Frequency: unique (one `nereus:usageRepositories` per institution)

```

<!-- Automatic handlers for this file will send a mail to the following people if this document is
invalid. If the document is invalid, the e-mail addresses from the last valid version are used to
alert you -->
<nereus:contacts>
  <nereus:contact name="Contact person" e-mail="info@sciences-po.fr"/>
</nereus:contacts>

```

This section must contain the contact person for the XML Admin-file. If there is a problem with the repository, the person listed here will be contacted by e-mail. Please note, if there is a problem with a new version of the XML Admin-file, the person listed in the last available valid version will

be contacted, as that will be the most recent information available to the EO administrators. Must contain one or more contacts.

Required: yes, at least one `nereus:contact` must be present
Frequency: unique (but may contain multiple `nereus:contact`'s)

```
<!-- Optional notes regarding the partner. Any number of notes is allowed -->  
<nereus:note>2008-07-03 : Our list of authors is not yet complete</nereus:note>
```

Sometimes there may be a need to communicate certain information about the organisation. This can be done through the use of notes. Zero or more notes may be present. Notes are read by the EO support desk and have to be in English.

Required: no
Frequency: may be repeated (you may use as many `nereus:note`'s per partner as necessary, but please remove old notes that are no longer valid)

```
</foaf:Organization>
```

Concludes the `foaf:Organization` element. Must be present.

Required: yes
Frequency: once per `foaf:Organization` element

Department

```
<!-- The rdf:nodeID attribute must match an rdf:nodeID attribute of an entry under
nereus:departments in the info:eu-repo/semantics/institution Organization. -->
<foaf:Organization rdf:nodeID="ofce.sciences-po.fr">
<!-- This is the description of an EO partner institution department -->
<rdf:type>info:eu-repo/semantics/department</rdf:type>
```

For each department listed in *info:eu-repo/semantics/institution* `rdf:Organization`, a descriptive entry is required. So if you listed three departments, this section is included three times, with different `rdf:nodeID`'s. Only one is present in this example.

Required: yes (unless your list of departments under *info:eu-repo/semantics/institution* `rdf:Organization` is empty)
Frequency: may be repeated

```
<!-- This is the name of the department. Is used in the EO portal interfaces -->
<foaf:name>Centre de recherche en économie de Sciences Po</foaf:name>
<!-- This is the official acronym of the department -->
<dcterms:alternative>OFCE</dcterms:alternative>
```

Remark that 'department' is a generic term for any organizational unit to which EO authors are affiliated. This could be a faculty, lab, insitute, research center, etc

Enter the official (as defined by the institution) name and acronym of the department. The name and acronym of the department are used in the EO portal interfaces.

The default name is listed as `<foaf:name>English name</foaf:name>` and is in English. A different name may be included for use in one of the other languages, by using `xml:lang`⁷. The following expressions have an identical result: `<foaf:name>` and `<foaf:name xml:lang="en">`. If no language-specific text is present, the default (English) text will be used. The default is required, language variations are optional.⁸

The default acronym is listed as `<dcterms:alternative>English name</dcterms:alternative>` and is in English. A different alternative may be included for use in one of the other languages, by using `xml:lang`. The following expressions have an identical result: `<dcterms:alternative>` and `<dcterms:alternative xml:lang="en">`. If no language-specific text is present, the default (English) text will be used. The default is required, language variations are optional.⁵

(please note: the `xml:lang="en"` attribute is optional for the default `foaf:name` and `dcterms:alternative`, since it is already considered to be in English.)

Required: `foaf:name`: yes (English version, other languages are not required)

⁷ Possible values for the `xml:lang` attribute are: "en", "fr", "es" and "de".

⁸ If a user selects to display information in a language for which no text is entered in the Admin file (e.g. a user selects Spanish, but no `xml:lang="es"` is present), the system shows the default (English) text.

foaf:alternative: no (an institution may exist without an acronym)
Frequency: unique (only one name and alternative per institution, for each language)

```
<!-- A short description of the department can be entered underneath. This can be done in
various languages. The language can be denoted through the use of the xml:lang attribute.
Possible values are: en, fr, es, de. At least the "en" version must be given. -->
<dc:description>The OFCE is both a university research centre and an institution for
forecasting and evaluating public policies.</dc:description>
<!-- URL of the homepage of the department -->
<foaf:homepage rdf:resource="http://www.ofce.sciences-po.fr"/>
```

This information is used on the EO Scholars screen, to list the affiliation of an author within an institution and to provide a link to the department homepage.

Since any description text is taken directly from this file, please ensure proper punctuation and spelling. XHTML tagging of the text is allowed in the description fields (i.e. begin and end tags should be systematically used).

Just like with the department's name and acronym, the default for `dc:description` and `foaf:homepage` is English. You may use the `xml:lang` attribute to denote descriptions and homepage URLs for other languages, e.g. when you have both an English and German site for the department. The following expressions have an identical result: `<foaf:homepage>` and `<foaf:homepage xml:lang="en">`.

Required: no; though strongly recommended
Frequency: unique (only one description and homepage per department, for each language)

```
<!-- A list of EO scholars that are affiliated to this department. The rdf:nodeID attributes used
here, should correspond to the rdf:nodeID attribute on foaf:Person entries in this document.
Zero or more of these authors may be present in this document. -->
<nereus:authors>
  <rdf:Bag>
    <rdf:li rdf:nodeID="jeanpaul.fitoussi"/>
  </rdf:Bag>
</nereus:authors>
```

A list of EO scholars that are affiliated to this department. The `rdf:nodeID` attributes used here, should correspond to `rdf:nodeID` attributes on `foaf:Person` entries in this document. Zero or more of these authors may be present in this section. Authors may belong to one or more departments.

Required: yes (if you list a department you must include `nereus:authors` and the `rdf:Bag` element must not be empty)
Frequency: unique (only one list of authors per department is allowed)

```
</foaf:Organization>
```

Concludes the `foaf:Organization` element. Must be present.

Required: yes

Frequency: once per `foaf:Organization` element

```
<foaf:Organization rdf:nodeID="xxx.sciences-po.fr">
  <rdf:type>info:eu-repo/semantics/department</rdf:type>
  <foaf:name>xxx</foaf:name>
  <dcterms:alternative>XXXX</dcterms:alternative>
  <dc:description>XXX</dc:description>
  <foaf:homepage rdf:resource="http://www.xxx.sciences-po.fr"/>
</foaf:Organization>
```

Example of a second department. As you can see, the `foaf:Organization` with `rdf:type info:eu-repo/semantics/department` may occur multiple times.

Author

```
<!-- The rdf:nodeID attribute must match an rdf:nodeID attribute of an entry under
nereus:authors in one of the info:eu-repo/semantics/department Organization. This rdf:nodeID
attribute also corresponds to the favourite name, to be used in the short URL for the publication
list of this scholar -->
<foaf:Person rdf:nodeID="jeanpaul.fitoussi">
```

For each author entry under `nereus:authors` in the `info:eu-repo/semantics/department` `rdf:Organization`, a descriptive entry is required, starting with `foaf:Person`. The `rdf:nodeID` attribute must match an entry under `nereus:authors`. So, if you have fifteen authors listed, this section is included fifteen times, with different `rdf:nodeID`'s. Only one is present in this example. The contents of this particular `rdf:nodeID` is also used as the URL for the publication list of this scholar, e.g. <http://www.example.com/eo/jeanpaul.fitoussi>.

Required: yes (if you list `nereus:authors` under a `info:eu-repo/semantics/department` department, this must be present. If no authors are listed, this is not required)
Frequency: may be repeated, if the department has multiple scholars participating in EO.

The information below identifies an author. This information is used on the *EO Scholar(s)* and *EO Partner scholars* screens.

```
<!-- The name of the scholar -->
<foaf:name>Jean-Paul Fitoussi</foaf:name>
```

The name of the scholar, using '*firstname lastname*'. There may be only one `foaf:name` per scholar.

Required: yes
Frequency: unique (only one `foaf:name`)

```
<!-- the title of the scholar -->
<foaf:title>Dr.</foaf:title>
```

The title of the scholar. There may be only one `foaf:title` per scholar. If a scholar has more than one title, enter them in the proper order as one attribute, e.g. *Prof. Dr.*

Required: no
Frequency: unique (only one `foaf:title`. However, several titles may be listed in the `foaf:title` element)

```
<!-- The given name of the scholar -->
<foaf:givenname>Jean-Paul</foaf:givenname>
```

The given name of the scholar.

Required: yes
Frequency: unique (only one foaf:givenname)

```
<!-- The family name of the scholar -->  
<foaf:family_name>Fitoussi</foaf:family_name>
```

The family name of the scholar. There may be only one foaf:family_name per scholar.

Required: yes
Frequency: unique (only one foaf:family_name)

```
<!-- The DAI of this scholar. -->  
<dc:identifier>http://sciences-po.fr/dai/123456</dc:identifier>
```

The DAI (Digital Author Identifier) of the scholar. Only one DAI can be used per scholar. Each DAI must be a unique URI. In the MODS metadata a DAI is expressed as follows (within the <extension><daiList> element):

```
<identifier IDref="n1" authority="auth">uniqueid</identifier>
```

with the authority attribute being optional. The corresponding entry in the Admin file is:

```
<dc:identifier>auth/uniqueid</dc:identifier>
```

i.e. the value of the authority attribute and uniqueid are concatenated together with a "/" character.

Example:

```
<dc:identifier>http://sciences-po.fr/dai/123456</dc:identifier>
```

Will match both of the following entries in the metadata:

```
<identifier IDref=... authority="http://sciences-po.fr/dai">123456</identifier>  
<identifier IDref=...>http://sciences-po.fr/dai/123456</identifier>
```

Required: yes
Frequency: unique (only one DAI. Please note: each DAI must be unique in itself, i.e. no two scholars (at least within the EO community, and ideally worldwide) can have the same DAI)

```
<!-- A short description of the main activities of the scholar can be entered underneath. This  
can be done in various languages The language can be denoted through the use of the  
xml:lang attribute. Possible values are: en, fr, es, de. At least the "en" version must be given.  
-->  
<dc:description>Dr. Jean-Paul Fitoussi is a Professor of Economics at Sciences Po  
(Paris) and President of the Sciences Po's Economic Research Centre.</dc:description>
```

You can enter descriptions in multiple languages, using the `xml:lang` attribute. The description will appear verbatim on the EO Scholar screen. XHTML tagging of the text is allowed in the description fields (i.e. begin and end tags should be systematically used).

Required: no; though strongly recommended
Frequency: unique (only one description per scholar allowed, per language)

```
<!-- The preferred email address of the scholar -->
<foaf:mbox rdf:resource="mailto:jeanpaul.fitoussi@sciences-po.fr"/>
<!-- URL pointing at an image that represents a photograph of this scholar -->
<foaf:img rdf:resource="http://www.ofce.sciences-po.fr/fitoussi/fitoussi.jpg"/>
<!-- URL of the personal homepage of this scholar -->
<foaf:homepage rdf:resource="http://www.ofce.sciences-
po.fr/fitoussi/accueil_fitou.html"/>
```

The email address and homepage URL of the scholar allow the user to contact the scholar or to find out more about his work. The photograph is displayed on the EO Scholar page, along with the description and a button to send an email. The pictures of the authors are all stored and maintained by the institution on its own web server. The ideal photo dimensions are as follows:

Ideal height in pixels	Ideal width in pixels
154	105

Pictures with dimensions in the range `h:100-154px x b:80-105px` will be shown as-is in the portal screens. Pictures that fall outside these ranges will be automatically cropped and/or resized: please be aware that this can result in distorted images.

Required: no
Frequency: unique (only one of each allowed, a different homepage per language is allowed)

```
</foaf:Person>
```

Ends the scholar information. Required.

Required: yes (if a `foaf:Person` is present, an accompanying `</foaf:Person>` must be present too)
Frequency: once per `foaf:Person` element

Repository

```
<!-- The value of the rdf:nodeID attribute should correspond to the rdf:nodeID attribute of one
of the entries in the "nereus:repositories" entry of an "eu-repo:info/admin/institution" entry in
this document. -->
<rdf:Description rdf:nodeID="ir.sciences-po.fr">
<!-- This is the description of a repository of an EO partner institution -->
<rdf:type>info:eu-repo/semantics/repository</rdf:type>
```

For each repository entry under `nereus:repositories` in the `info:eu-repo/semantics/institution` `rdf:Organization`, a descriptive entry is required, starting with `rdf:Description`. The `rdf:nodeID` attribute must match an entry under `nereus:repositories`. So if you have three repositories listed, this section is included three times, with different `rdf:nodeID`'s. Only one is present in this example.

Required: yes
Frequency: may be repeated (once for each entry under `nereus:repositories` repository in the `info:eu-repo/semantics/institution` `rdf:Organization`)

```
<!-- BaseURL of the OAI interface of this repository -->
<nereus:oaiBaseURL>http://ir.sciences-po.fr/oai</nereus:oaiBaseURL>
```

This is the BaseURL used by the OAI harvester. Only one BaseURL per repository is allowed. A baseURL should never end with a '?'. The NEEO gateway will set your Admin file as non-valid, if you do so.

Required: yes
Frequency: unique (one per repository)

```
<!-- metadataPrefix to be used. If not given, 'didl' is used for harvesting. -->
<nereus:oaiMetadataPrefix>didl-mods</nereus:oaiMetadataPrefix>
```

This is the metadataPrefix to be used when doing the OAI harvesting. This defaults to 'didl', meaning that if this setting is not specified, the `metadataPrefix=didl` parameter will be used on the OAI harvesting requests.

Required: no
Frequency: unique (one per repository)

```
<!-- URL to the public web interface of this repository -->
<nereus:nativeAccess>http://ir.sciences-po.fr/</nereus:nativeAccess>
<!-- URL to a web page describing the IR policy of this repository -->
<nereus:policy>http://ir.sciences-po.fr/policy.html</nereus:policy>
```

These URLs are used on the EO Partners screen, to provide the user with links to the repository and policy pages. Only one entry of both `nereus:nativeAccess` and `nereus:policy` are allowed.

Required: no
Frequency: unique (one of each per repository)

```
<!-- A short description of the repository. This can be done in various languages The language can be denoted through the use of the xml:lang attribute. Possible values are: en, fr, es, de. At least the "en" version must be given. -->
<dc:description>This IR contains all but theses of Sciences Po</dc:description>
```

Required: no
Frequency: unique (one per repository, per language)

```
<!-- A list of setSpecs of OAI sets you want to get harvested in the NEEO Gateway. If the list is empty, then everything from this repository is harvested -->
<nereus:neeo-sets>
  <rdf:Bag>
    <rdf:li>eo</rdf:li>
    <rdf:li>neeo</rdf:li>
  </rdf:Bag>
</nereus:neeo-sets>
```

This section contains an unordered list of setSpecs of OAI sets from the repository that need to be harvested by the NEEO Gateway. If the list is empty, everything from the repository is harvested.

Required: no
Frequency: unique (one `nereus:neeo-sets` per repository)

```
<!-- A list of RePEc series that you want to feed with publications that are contained in this repository. The rdf:nodeID attributes used here should correspond to the rdf:nodeID attribute on a rdf:Description entry of type "info:eu-repo/semantics/series". Zero or more of these series may be specified. If none are specified then no publications will be forwarded to RePEc. The RePEc handle of the series must be used as the value of the rdf:nodeID attribute. This handle is issued by the Economists Online helpdesk. -->
<nereus:feed-repec-series>
  <rdf:Bag>
    <rdf:li rdf:nodeID="RePEc:dgr:scpeco"/>
  </rdf:Bag>
</nereus:feed-repec-series>
```

A list of RePEc series that you want to feed with publications that are contained in this repository. The `rdf:nodeID` attributes used here should correspond to the `rdf:nodeID` attribute on a `rdf:Description` entry of type "info:eu-repo/semantics/series". Zero or more of these series may be specified. If none are specified then no publications will be forwarded to

RePEc. The RePEc handle of the series must be used as the value of the `rdf:nodeID` attribute. This handle is issued by the Economists Online helpdesk.

Required: no
Frequency: unique (one `nereus:feed-repec-series` per repository)

```
<!-- A list of RePEc series that you request the EO Gateway NOT to harvest from RePEc.
Zero or more of these series may be specified. The value of the nereus:not-from-repec-
series element must be a valid RePEc handle of a series. -->
<nereus:not-from-repec-series>
  <rdf:Bag>
    <rdf:li>RePEc:scp:scepeco</rdf:li>
  </rdf:Bag>
</nereus:not-from-repec-series>
```

A list of RePEc series that you request the EO Gateway NOT to harvest from RePEc. Zero or more of these series may be specified. The value of each `rdf:li` element must be a valid RePEc handle of a series.

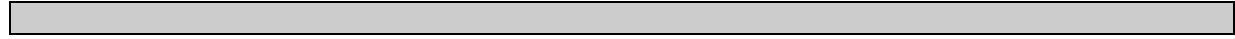
Required: no
Frequency: unique (one `nereus:not-from-repec-series` per repository)

```
<!-- Optional notes regarding the repository. Any number of notes is allowed -->
<nereus:note>Please do not harvest between 02:00 and 03:00 GMT</nereus:note>
</rdf:Description>
```

Sometimes there may be a need to communicate certain information about the repository. This can be done through the use of notes. Zero or more notes may be present. Notes are read by the EO support desk and have to be in English.

Required: no
Frequency: may be repeated (you may use as many `nereus:note`'s per repository as necessary, but please remove old notes that are no longer valid)

```
<rdf:Description rdf:nodeID="theses.sciences-po.fr">
  <rdf:type>info:repo/semantics/repository</rdf:type>
  <nereus:oaiBaseURL>http://theses.sciences-po.fr/oai</nereus:oaiBaseURL>
  <nereus:nativeAccess>http://theses.sciences-po.fr</nereus:nativeAccess>
  <nereus:policy>http://theses.sciences-po.fr/policy.html</nereus:policy>
  <dc:description>This repository contains only the theses of Sciences
Po</dc:description>
  <nereus:neeo-sets>
    <rdf:Bag>
      <rdf:li>economy</rdf:li>
    </rdf:Bag>
  </nereus:neeo-sets>
  <nereus:note>Please do not harvest between 02:00 and 03:00
GMT</nereus:note>
</rdf:Description>
```



Example of a second repository. As you can see, the `rdf:Description` with `rdf:type` `info:eu-repo/semantics/repository` may occur multiple times.

Series

```
<!-- The value of the rdf:nodeID attribute should correspond to the rdf:nodeID attribute of one
of the entries in the "nereus:feed-repec-series" entry of an "info:eu-
repo/semantics/repository" entry in this document. -->
<rdf:Description rdf:nodeID="RePEc:dgr:scpeco">
<!-- This is the description of a RePEc series that this repository wants the EO Gateway to
feed -->
<rdf:type>info:eu-repo/semantics/series</rdf:type>
```

For each series entry under `nereus:feed-repec-series` in the `info:eu-repo/semantics/repository` `rdf:Description`, a descriptive entry is required, starting with `rdf:Description`. The `rdf:nodeID` attribute must match an entry under `nereus:feed-repec-series`. So if you have three series listed, this section is included three times, with different `rdf:nodeID`'s. Only one is present in this example.

Required: yes
Frequency: may be repeated (once for each entry under `nereus:feed-repec-series` in the `info:eu-repo/semantics/repository` `rdf:Description`)

```
<!-- Every entry must be defined through a ReDIF-Series template. The handle of this series
must start with "RePEc:dgr:" followed by 6 characters. -->
<nereus:template>
Template-type: ReDIF-Series 1.0
Name: Research Papers of Sciences Po -- OFCE
Publisher-name: Sciences Po -- OFCE
Publisher-homepage: http://www.ofce.sciences-po.fr/wpseries
Maintainer-name: WP Series Handler at the OFCE Office
Maintainer-Email: ofce-series@sciences-po.fr
Handle: RePEc:dgr:scpeco
</nereus:template>
```

Every RePEc series must be defined through a ReDIF-Series template. The maintainer of the repository is responsible for the exactness of this definition and of the uniqueness of the handle of the series. The EO Gateway will check on the `Handle` entry and create or update the definition of the series in the EO RePEc archive, based on the settings in this `nereus:template`.

Required: yes
Frequency: unique, every RePEc series must be defined by exactly one ReDIF-Series template

```
<!-- A list of setSpecs of OAI sets you want to feed into this RePEc series through the EO
Gateway -->
<nereus:sets>
  <rdf:Bag>
    <rdf:li>scpeco</rdf:li>
    <rdf:li>scpeco2</rdf:li>
  </rdf:Bag>
```

```
</nereus:sets>
```

This section contains an unordered list of setSpecs of OAI sets from the repository that you wish to feed into this RePEc series.

As an example, the following harvested record from the repository would be placed in the RePEc:dgr:scpeco series of the EO RePEc archive, since one of the setSpec entries under the OAI header corresponds to an rdf:li entry above.

```
<record>
  <header>
    <identifier>ir.sciences-po.fr:2013/474</identifier>
    <timestamp>2005-02-22T01:00:17Z</timestamp>
    <setSpec>scpeco</setSpec>
    <setSpec>scpmath</setSpec>
  </header>
  <metadata>
    <didl:DIDL ...>
      ...
    </didl:DIDL>
  </metadata>
</record>
```

Required: yes (if you list a series you must include nereus:sets and the rdf:Bag element must not be empty)

Frequency: unique (only one list of sets per series is allowed)

```
</rdf:RDF>
```

Ending tag for the XML Admin-file. Must be present as the very last line.

Required: yes

Frequency: unique, must be present as the very last line.

Usage repository

```
<!-- The value of the rdf:nodeID attribute should correspond to the rdf:nodeID attribute of one
of the entries in the "nereus:usageRepositories" entry of an "eu-repo:info/admin/institution"
entry in this document. -->
<rdf:Description rdf:nodeID="usage1.sciences-po.fr">
<!-- This is the description of a usageRepository of an EO partner institution -->
<rdf:type>info:eu-repo/semantics/usageRepository</rdf:type>
```

For each usage repository entry under `nereus:usageRepositories` in the `info:eu-repo/semantics/institution` `rdf:Organization`, a descriptive entry is required, starting with `rdf:Description`. The `rdf:nodeID` attribute must match an entry under `nereus:usageRepositories`. So if you have three repositories listed, this section is included three times, with different `rdf:nodeID`'s. Only one is present in this example.

Required: yes
Frequency: may be repeated (once for each entry under `nereus:usageRepositories` in the `info:eu-repo/semantics/institution` `rdf:Organization`)

```
<!-- BaseURL of the OAI interface of this usageRepository -->
<nereus:oaiBaseURL>http://usage1.sciences-po.fr/oai</nereus:oaiBaseURL>
```

This is the baseURL used by the OAI harvester. Only one BaseURL per usage repository is allowed. A baseURL should never end with a '?'. The NEEO gateway will set your Admin file as non-valid, if you do so.

Required: yes
Frequency: unique (one per usage repository)

```
<!-- metadataPrefix to be used. If not given, 'swup' is used for harvesting. -->
<nereus:oaiMetadataPrefix>neeo-swup</nereus:oaiMetadataPrefix>
```

This is the metadataPrefix to be used when doing the OAI harvesting. This defaults to 'swup', meaning that if this setting is not specified, the `metadataPrefix=swup` parameter will be used on the OAI harvesting requests.

Required: no
Frequency: unique (one per usage repository)

```
<!-- A short description of the usageRepository. This can be done in various languages The language can be denoted through the use of the xml:lang attribute. Possible values are: en, fr, es, de. At least the "en" version must be given. -->
<dc:description>This IR contains download records for publications of Sciences Po</dc:description>
```

Required: no
Frequency: unique (one per usage repository, per language)

```
<!-- A list of setSpecs of OAI sets you want to get harvested in the NEEO Gateway. If the list is empty, then everything from this usageRepository is harvested -->
<nereus:neeo-sets>
  <rdf:Bag>
    <rdf:li>neeo</rdf:li>
  </rdf:Bag>
</nereus:neeo-sets>
```

This section contains an unordered list of setSpecs of OAI sets from the usage repository that need to be harvested by the NEEO Gateway. If the list is empty, everything from the usage repository is harvested.

Required: no
Frequency: unique (one `nereus:neeo-sets` per usage repository)

```
<!-- Optional notes regarding the usageRepository. Any number of notes is allowed -->
<nereus:note>Please do not harvest between 02:00 and 03:00 GMT</nereus:note>
</rdf:Description>
```

Sometimes there may be a need to communicate certain information about the usage repository. This can be done through the use of notes. Zero or more notes may be present. Notes are read by the EO support desk and must be in English.

Required: no
Frequency: may be repeated (you may use as many `nereus:note`'s per usage repository as necessary, but please remove old notes that are no longer valid)

Overview of fields per type of entry

Institution

Element	mandatory	repeatable
<rdf:Organization ...>		
<rdf:type>	Y	N
<foaf:name>	Y	Y (multilingual)
<dcterms:alternative>	N	Y (multilingual)
<dc:description>	N	Y (multilingual)
<foaf:homepage>	N	Y (multilingual)
<foaf:logo>	Y	Y (multilingual)
<foaf:thumbnail>	Y	Y (multilingual)
<dcterms:spatial>	Y	N
<nereus:departments>	Y	N
<rdf:li>	Y (at least 1)	Y
<nereus:repositories>	Y	N
<rdf:li>	Y (at least 1)	Y
<nereus:usageRepositories>	N	N
<nereus:contacts>	Y	N
<nereus:contact>	Y (at least 1)	Y
<nereus:note>	N	Y

Department

Element	mandatory	repeatable
<rdf:Organization ...>		
<rdf:type>	Y	N
<foaf:name>	Y	Y (multilingual)
<dcterms:alternative>	N	Y (multilingual)
<dc:description>	N	Y (multilingual)
<foaf:homepage>	N	Y (multilingual)
<nereus:authors>	Y	N
<rdf:li>	Y (at least 1)	Y

Author

Element	mandatory	Repeatable
<foaf:Person ...>		
<foaf:name>	Y	N
<foaf:title >	N	N
<foaf:givenname>	Y	N
<foaf:family_name>	Y	N
<dc:identifier>	Y	N
<dc:description>	N	Y (multilingual)
<foaf:mbox>	N	N
<foaf:img>	N	N
<foaf:homepage>	N	Y (multilingual)

Repository

Element	mandatory	Repeatable
<rdf:Description ...>		
<rdf:type>	Y	N
<nereus:oaiBaseURL>	Y	N
<nereus:oaiMetadataPrefix>	N	N

<nereus:nativeAccess>	N	N
<nereus:policy>	N	N
<dc:description>	N	Y (multilingual)
<nereus:neeo-sets>	N	N
<nereus:feed-repec-series>	N	N
<nereus:not-from-repec-series>	N	N
<nereus:note>	N	Y

Series

Element	mandatory	repeatable
<rdf:Description ...>		
<rdf:type>	Y	N
<nereus:template>	Y	N
<nereus:sets>	Y	N
<rdf:li>	Y (at least 1)	Y

Usage repository

Element	mandatory	Repeatable
<rdf:Description ...>		
<rdf:type>	Y	N
<nereus:oaiBaseUrl>	Y	N
<nereus:oaiMetadataPrefix>	N	N
<dc:description>	N	Y (multilingual)
<nereus:neeo-sets>	N	N
<nereus:note>	N	Y