

# GeoNetwork opensource – User Training

## *Module II for Editors – Metadata and data publishing*

### Exercise 5

#### *Creating customized metadata templates*

*A local version of GeoNetwork has been installed for the training's exercises.*

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*This tutorial leads you through the process of creating a customized metadata template using the on-line metadata editor.*

Through the previous tutorial you learned how to compile a metadata with the GeoNetwork's metadata editor, using one of the default templates stored in the system.

With this exercise you will practice the creation of an *ad hoc* template with the purpose of preparing a metadata structure that is best adapted to the data to describe. Starting from a new metadata, presented in the default view, you may decide to remove some optional elements while new ones from the advanced view could be added according to your needs. The result will be a number of metadata elements that, a part from the mandatory ones, are essentially only those that you would like to maintain.

The use of a customized template becomes particularly helpful when we have to compile a number of metadata that belong to the same collection or database of a project. In this case it often happens that some information recurs in the dataset description so that it would be convenient to paste in the template.

The point of contact, for instance, probably is the same person who acts as reference for all datasets produced within a project. The same for the metadata author who collects the information on the datasets produced and transfers it into the web. The geographic area, as well as the data presentation form and the reference system might be other examples of common elements for a collection of datasets.

The following text provides you with information on the GLCN (Global Land Cover Network) land cover maps collection which is derived from the original Globcover regional (Africa) archive. During this session you will use this information to fill in the metadata form as much as possible. Indeed, as you will notice, most of the metadata elements can be properly filled out with the information provided. As a consequence, when a number of similar metadata are needed, their creation based on this template will be significantly speeded up.

## *Information on a data collection*

### *A brief description of the data set...*

This land cover data set is **derived from the original raster based Globcover regional (Africa) archive**. It has been post-processed to generate a vector version at national extent with the LCCS regional legend (46 classes). This database can be analyzed in the GLCN software Advanced Database Gateway (ADG), which provides a user-friendly interface and advanced functionalities to breakdown the LCCS classes in their classifiers for further aggregations and analysis.

**The data set is intended for free public access and it's subject to copyrights rules.**

The shape file's attributes contain the following fields:

- Area (sqm)
- ID
- Gridcode (Globcover cell value)
- LCCCode (unique LCCS code)

You can download a zip archive containing:

- the shape file (.shp)
- the ArcGis layer file with global legend (.lyr)
- the ArcView 3 legend file (.avl)
- the LCCS legend tables (.xls)

### *Supplemental information to give some background...*

This land cover product is a vector version (ESRI shape) of the Globcover archive that was published in 2008 as result of an initiative launched in 2004 by the European Space Agency (ESA). Globcover is currently the most recent (2005) and resolute (300 m) datasets on land cover globally. Given the need of this valuable information for environmental studies, natural resources management and policy formulation, through activities of the Global Land Cover Network (GLCN) programme, the Globcover has been reprocessed to generate databases at national extent that can be analyzed through the Advanced Database Gateway software (ADG) by GLCN. ADG is a cross-cutting interrogation software that allows the easy and fast recombination of land cover polygons according to the individual end-user requirements. Aggregated land cover classes can be generated not only by name, but also using the set of existing classifiers. ADG uses land cover data with a Land Cover Classification System (LCCS) legend.

The ADG software is available for download on the GLCN web site at

[http://www.glcn.org/sof\\_7\\_en.jsp](http://www.glcn.org/sof_7_en.jsp)

### *Summary of the intentions with which the data set was developed...*

A land cover is extremely important for natural resource assessment and management, environmental modeling and decision-making. Given that the Globcover is currently the most recent (2005) and resolute (300 m) global dataset on land cover, the Global Land Cover Network (GLCN) programme has promoted the processing of this database to make it compliant with the GLCN standards and usable through its tools set for land cover based analysis and modelling.

*Info on the status of the data set and its publication...*

The **status** of the data set is **completed**, therefore it has been **published** last month (May 5<sup>th</sup> 2009) in digital form and in the **Geographic Coordinate System: GCS\_WGS\_1984**. At the moment there is **not a scheduled** time for new **updates**.

The **temporal extent** of the data, that is its reference period, is the year 2005

*Info on the person or the organization to contact for further information on the data set ...*

The **contact person** for this data set is John Latham, environment officer in FAO (Food and Agriculture Organisation of the United Nations)  
(Delivery Point: Viale delle Terme di Caracalla, 00153 Rome – Italy)  
contact details: [John.Latham@fao.org](mailto:John.Latham@fao.org)  
Antonio Martucci, information systems officer in FAO, has **compiled the metadata** for this data set. Therefore he can be also considered as **point of contact**.

*Some information on the data development statement...*

This land cover database is provided as ESRI shape file (vector format) and derives from reprocessing the raster based Globcover database (regional version). Globcover has undergone the following processing: a) vectoralization at the national extent using ESRI ArcGis (arcinfo) 9.3; b) topological reconstruction (custom AML scripts launched inside ArcGis-arcinfo 9.3); c) simplification of areas according to a minimum mapping unit of 0.1 skim (10 ha) (custom AML scripts launched inside ArcGis-arcinfo 9.3); application of the FAO/UNEP Land Cover Classification System (LCCS) legend (46 classes); final processing to assure full compatibility with the GLCN software Advanced Database Gateway (ADG).

*Info on the data set distribution and on-line resources that, if necessary, can be reached via Web...*

GLOBCOVER on the ESA web site  
[http://www.esa.int/esaEO/SEMGSY2IU7E\\_index\\_0.html](http://www.esa.int/esaEO/SEMGSY2IU7E_index_0.html)

Global Land Cover Network – GLCN  
[http://www.glcnet.org/index\\_en.jsp](http://www.glcnet.org/index_en.jsp)

## *Fill in the form*

Creating a metadata template is basically like writing a new metadata record. Therefore, you have to apply the same logical steps of the Exercise 1A , as follow:

1. **Log in** through username and password, to allow GeoNetwork to identify you and determine if you have the required permissions to create metadata;
2. Select **New metadata** from the administration page;
3. Select the metadata **template** to use as a starting point (template for vector data in ISO 19139 for the this exercise);
4. Select the **group** the template will belong to;
5. Click on **Create** to open a **new metadata** form.

Complete the metadata form as much as possible using only the information useful to identify the resource. Please consider that some **metadata fields** are **mandatory**, some others are strongly **recommended** whereas the remaining are **optional**. Please remind that some of the elements are filled in automatically; to change their content click on the close drop-down arrow.

Finally, in order to save the metadata as template, pay attention to select **Template** from the drop-down list called **Type**, at the bottom of the metadata form (Fig. 1).

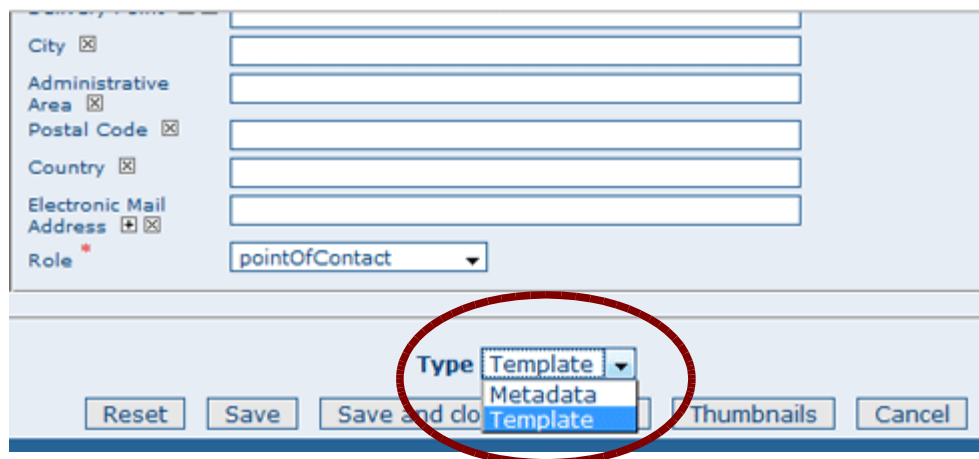
The image shows a screenshot of a web-based metadata form. On the left side, there is a list of fields with checkboxes: 'City', 'Administrative Area', 'Postal Code', 'Country', 'Electronic Mail Address', and 'Role'. Each field has a corresponding text input box to its right. The 'Role' field has a dropdown menu currently showing 'pointOfContact'. At the bottom of the form, there is a 'Type' dropdown menu which is open, showing three options: 'Template', 'Metadata', and 'Template'. The first 'Template' option is selected and highlighted in blue. Below the dropdown menu are several buttons: 'Reset', 'Save', 'Save and close', 'Thumbnails', and 'Cancel'. A red circle is drawn around the 'Type' dropdown menu and the 'Save and close' button.

Figure 1

It is recommended to save the template after each block, before carry on with the next step, by clicking on **Save**. Use the **Save and Close** button only when you have completed the metadata form editing.

The templates are stored in the GeoNetwork catalogue separately from the rest of metadata. Therefore, if you decide to change your template later on, you have to retrieve it from the catalogue searching by template. The next steps will guide you on performing the search:

1. **Authenticate** though username and password, since searching for templates is a restricted activity only for editors.
2. Open the **advanced search** from the home page, by clicking on **Advanced** below the search button (Fig. 1);
3. Type some **keywords** in the fields available on the left section **What?** to facilitate the search (i.e. *training*) (Fig. 2);
4. Select **Template** from the drop-down list called **Kind** in the **Restricted to** box (Fig. 3);
5. Click on **Search**. The template will appear ready to be edited (Fig. 4).

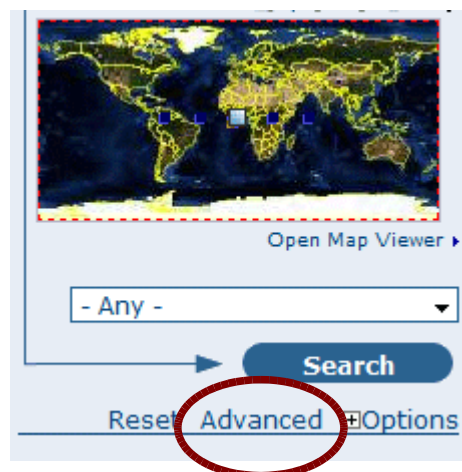


Figure 1

**WHAT?**

What?

Title

Abstract

Keywords

Map type

☐ Digital
☐ Interactive

☐ Hard copy
☐ Downloadable

Search accuracy

☐ Precise
☒
☐
☐
☐ Imprecise

**WHERE?**

lat (n)

lat (m)

long (min)

-180

Type  
Region

Figure 2

**WHEN?**

☒ Anytime

☐ From  To

Restrict to

Catalog

Group

Kind

Category

Options

Sort by

Hits per page

Output

**Search**

[Reset](#) [Hide advanced options](#)

Figure 3

Aggregate Results matching search criteria : 1-1/1 (page 1/1),

**Logo** **TEMPLATE FOR TRAINING**

**Abstract** This land cover data set is derived from the original raster based Globcover regional (Africa) archive. It has been post-processed to generate a vector version at national extent with the LC...

**Keywords** GLCN, landcover, GLOBCOVER, natural resources, environment, forest, agriculture, land management

Figure 3

*...and now, have a good work with another metadata section!*