Technical document:

How to use Reportnet for reporting under the Nitrates Directive (91/676/EEC).

These guidelines explain how to use Reportnet (the European Environment Agency's electronic infrastructure for data collection) for finding information and reporting information to the EU Commission in pursuance of the Nitrates Directive (91/676/EEC). The reporting is organised in collaboration between DG Environment and the European Environment Agency (EEA)

(Version 12 March 2008)

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1. How to find the reporting obligations for NiD at Reportnet (ROD) and CIRCA

ROD is the part of Reportnet where you can find the EEA's reporting obligations database. It contains records describing environmental reporting obligations that countries have towards international organisations.

Step 1: Finding reporting obligations

- Go to <u>http://rod.eionet.europa.eu/index.html</u>

Show reportin	g obligations	0
Country	Any country	GQ
Issue	Water	4
Organisation	DG ENV (EC) - European Commission, Directorate General Envi	
	Include terminated obligations	

- Select Issue: Water
- Select Organisation: DG ENV (EC) European Commission, Directorate General Envi..
- Click on the GO icon

- Just scroll to find "Annex V Nitrates report", or click on the column head "Reporting obligation" to order obligations alphabetically and you will find the NiD obligations as one of the first items.

Step 2: Finding reporting guidelines

The link to "Annex V Nitrates report" will show the reporting obligation and the link after the element **Reporting Guidelines** will bring you to the location at CIRCA where you can find the Guidance documents.

Direct link to NiD reporting guidelines:

http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/nitrates_directive&vm=detailed&sb=Title

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2. How to download table definitions and templates under the Nitrates Directive from the Data Dictionary of Reportnet.

The "NiD Revised Guidelines" consists of two parts, the main part and the annex. This "annex" contains detailed specifications in a structured format for the tabular and geographical data (part 1) and templates for summary tables (part 2) on water quality.

These technical specifications are translated into a dataset definition and templates in the Data Dictionary of Reportnet. The Data Dictionary (DD) is a central service for storing technical specifications of the data requested in reporting obligations.

A **definition** explains what data is needed and how it should be provided. A **template** is a "form" where the data can be filled in

In the DD the automatically generated data definition and templates will be available for downloading. The templates (Excel or XML schemas) and the specifications will guide in formatting and collating the data delivery.

To find this dataset definition and the templates for the NiD dataset

Go to the Data Dictionary of Reportnet:

http://dd.eionet.europa.eu/

Under "Latest released data definitions" click on "The Evaluation of water quality under the Nitrates Directive"

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EIONET Data Dictionary (DD)				
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» Datasets » Tables » Data elements	Latest versions of datasets in any sta	atus		Search Restore
» Attributes » Import datasets	Dataset	Status	Tables	
» Subscribe	Evaluation of water quality under the Nitrates Directive.		GW NO3 concentrations GW ADA concentrations SW EQ concentrations SW Eutrophication measurements SW Eutrophication state SW Adams Adams SW Z DES GIS NVZ DES GIS NVZ POT GIS WTA GIS	
	Total results: 1			

Click on the dataset to open the "View dataset definition" page

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	Create an XML Schema for this dataset Create an instance XML for this dataset Create an MS Excel template for this dataset Create an OpenDocument spreadsheat templ. Create validation metadata for MS Access te Get the comma-separated codelists of this d. Get the codelists of this dataset in XML form NiD Templates Summary tables on water qual [Uplead a document]	ate fo mplati ataset at lity.do	rr this dataset
	Short name	0	NiD_water
	RegistrationStatus	0	Candidate
	Reference URL	0	http://dd.eionet.europa.eu/dataset.isp?mode=view&ds_idf=NiD
	Name	0	Evaluation of water quality under the Nitrates Directive.
	Keyword	0	Article V, Eutrophication, Groundwater, NO3, Surface water, Water, water quality
	EEAissue	0	Agriculture, Eutrophication , Soil degradation and pollution, Water
			Ground- and surface water sampling points to define waterquality based on nitrate
	ShortDescription		concentrations and other parameters
	ShortDescription Definition	0	concentrations and other parameters Data on monitoring stations are collected for each reporting period (4 year period). Full details of the data requested on water are presented in this specification by tables and include characteristics on the water monitoring stations, values for the concentrations of NO3 for each station as well as information on the Nitrate Vulnerable Zones and Potential Vulnerable Zones. Additionally

Here you can create and download the technical specifications for the NiD dataset in .pdf format.

Here you can create and download templates for the dataset tables in various formats.

!! It is strongly advised to use the Excel (or XML) templates, provided in the DD, for filling with data and uploading, else the automatic QA procedures will not be carried out after uploading the digital data on CDR and the data providers will not receive an immediate feedback.

Some explanation for other formats which are available:

- An XML Schema is a description of a data structure and is only expected to be parsed by computers or IT professionals.
- The comma-separated code-lists: the first line displays valid values for the Validity column in the NVZ_DES_GIS table in the NiD_Water dataset. It is used by some computer applications to verify that data is entered correctly.
- The Get the codelists in XML format is just another way to provide the same data. It is used by Reportnets QA system.

Direct link to the definition and the templates for the NiD dataset

http://dd.eionet.europa.eu/dataset.jsp?mode=view&ds_id=2592

3. How to download the templates for the summary tables from the Data Dictionary of Reportnet.

Summary tables can help to summarize water quality data in the Member States at national level. Furthermore the tables can help as a control of the results once a (geo) database has been compiled.

The templates for the summary tables which were in Part 2 of the annex of the NiD reporting guidelines can also be downloaded from the "View dataset definition" page, (<u>http://dd.eionet.europa.eu/dataset.jsp?mode=view&ds_id=2592</u>), "NiD Templates Summary tables on water quality.doc".

These templates are not implemented in the DD, but just available in a Word document. You can fill the tables with your results and upload the file in your NiD folder in EEA's Central Data Repository.

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4. How to find and download other files, helpfiles, documents, GIS and other information

General helpfiles can be found on: <u>http://cdr.eionet.europa.eu/help</u> This technical document will be available under "Dataflow specific instructions"



GIS helpfiles

The "Backgrounddocument on GISspecifications for reporting under NiD" is available at:

http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/nitrates_directive&v m=detailed&sb=Title

Topics in this document are:

- 1. Coordinate reference system
- 2. Data accuracy
- 3. Format / structure / geometry of datasets \rightarrow Data Dictionary
- 4. Data quality
- 5. Data documentation (Metadata)

♦ Other Guidelines on Geographical Information (GIS) are available on:

http://www.eionet.europa.eu/gis/

There you will find:

<u>EEA Guide to geographical data and maps</u>: version 2.0. Guideline for handling and delivering geospatial data, maps and the related metadata. It includes descriptions of how to create standardised maps and metadata. The "EEA Guide to geographical data and maps" should be consulted before using standards and templates. Guidance on geospatial data reporting for national experts:

a short description of the information that is expected from countries delivering GIS data

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 User directory Roles NFP/Eionet IG Meils to NFPs SERIS Elonet Wiki Workplan/planner Latest updates Priority dataflows Find a person	GIS - Geospatial data - Maps This web page contains links to guidelines, templates, services for use in EEA - EIONET when handling geographic information systems, maps and geographic spatial data. General guideline Image: Service of the service of	
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5. How to deliver data under the Nitrates Directive (91/676/EEC) through Reportnet

Step 1: User accounts and access permissions

In order to report, an Eionet account with user name and password is required as well as permission to upload the national delivery. Please inform DG Environment about who will be the person(s) responsible for the reporting, so that the necessary arrangements can be made.

Step 2: Enter the Central Data Repository, login to your folder and create an envelope

When preparing for the Nitrates Directive (NiD) delivery, you first have to go to the respective NiD folder in EEA's Central Data Repository, see the links below.

Member State	URL to NiD folder in EEA Central Data Repository
Austria	http://cdr.eionet.europa.eu/at/eu/nid
Belgium	http://cdr.eionet.europa.eu/be/eu/nid
Bulgaria	http://cdr.eionet.europa.eu/bg/eu/nid
Cyprus	http://cdr.eionet.europa.eu/cy/eu/nid
Czech Republic	http://cdr.eionet.europa.eu/cz/eu/nid
Denmark	http://cdr.eionet.europa.eu/dk/eu/colqyikgg
Estonia	http://cdr.eionet.europa.eu/ee/eu/nid
Finland	http://cdr.eionet.europa.eu/fi/eu/nid
France	http://cdr.eionet.europa.eu/fr/eu/ni
Germany	http://cdr.eionet.europa.eu/de/eu/nid
Greece	http://cdr.eionet.europa.eu/gr/eu/nid
Hungary	http://cdr.eionet.europa.eu/hu/eu/nid
Ireland	http://cdr.eionet.europa.eu/ie/eu/nid
Italy	http://cdr.eionet.europa.eu/it/eu/nid
Latvia	http://cdr.eionet.europa.eu/lv/eu/nid
Lithuania	http://cdr.eionet.europa.eu/lt/eu/nid
Luxembourg	http://cdr.eionet.europa.eu/lu/eu/nid
Malta	http://cdr.eionet.europa.eu/mt/eu/nid
Netherlands	http://cdr.eionet.europa.eu/nl/eu/nid
Poland	http://cdr.eionet.europa.eu/pl/eu/nid
Portugal	http://cdr.eionet.europa.eu/pt/eu/nid
Romania	http://cdr.eionet.europa.eu/ro/eu/nid
Slovakia	http://cdr.eionet.europa.eu/sk/eu/nid
Slovenia	http://cdr.eionet.europa.eu/si/eu/nid
Spain	http://cdr.eionet.europa.eu/es/eu/nid
Sweden	http://cdr.eionet.europa.eu/se/eu/colqub7dg
United Kingdom	http://cdr.eionet.europa.eu/gb/eu/nid

a) Log into the NiD folder for your country by using your Eionet user name and password

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SERVICES	REPORTNET	TOOLS	TOPICS		
You are here	: Eionet» CDR» Au	stria» Europe	ean Union (EU),» Nit	rates Directive	
» Search		Overv	iew		
» Global	worklist	Nitrot	es Directive B	an art (01/4	76/550)
» Notifica	ations	nitrat	es Directive R	ebour (ar/ d	576/EEC)
» Help		Obligat	tions <u>Annex V Nitra</u>	ates Report	
		Envelo	opes and subco	ollections	

- b) Now create a new envelope which will contain your data.
 Add a meaningful title for the envelope and the year to which the data relate. Envelope description and coverage note fields are optional.
 → Proposed name for the envelope: Nitrates Directive Report 2008
 - c) Open the new envelope by clicking on its title.
 - d) Activate the task, by clicking on the related button.

Activating means that you have reserved the envelope for yourself to work on. Other users will not be able to modify it. Your new envelope is now in *Draft* status and files can be added.

Step 3: Upload your NiD documents and data and make them available

Upload your report from your own system using the "add file" option.	1
The uploading menu provides you with a check box to restrict a file	_
from public access should this be necessary. Files with access	
restriction can only be downloaded by privileged users.	F

There are three groups of data to be uploaded; documents, tabular information and Shapefiles (GIS information).

For reporting <u>Geographical information</u>, please read also the "<u>background document</u> <u>GISspecifications for reporting under NiD</u>" which can be downloaded from <u>http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/nitrates_directive</u> <u>&vm=detailed&sb=Title</u>

a) Documents to be uploaded are:

- Main report (following the reporting guidelines)
- Maps in graphic format (.jpg, .gif etc.) for visualisation of the results (if not depicted in the main report)
- Document with summary tables on water quality (the Word document with the templates downloaded from the "view dataset definition" page, see chapter 3)
- Background documents



Add file	
Release envelope	

b) Tabular information on point features (template)

To report information on the point features (the locations of the groundwater- and surface water monitoring stations), it is strongly recommended to use the template (.xls) which is available in the DD of Reportnet (see chapter 2).

Tabular information on point features to be uploaded is:

- Water quality tables (templates in DD)
 - 1. List of groundwater monitoring stations table
 - 2. NO3 concentrations in groundwater table
 - 3. List of surface monitoring stations table
 - 4. NO3 concentrations in surface water table
 - 5. Eutrophication parameters in surface water table
 - 6. Trophic state of surface water table

> Upload tabular information in the excel template.

- a) You downloaded the Excel template from the DD (see chapter 2)
- b) You added data to the templates:
 - 1. NiD_GW_Stat
 - 2. NiD_GW_Conc
 - 3. NiD_SW_Stat
 - 4. NiD_SW_Conc
 - 5. NiD_SW_EutroMeas
 - 6. NiD_SW_E\$utroStat

Fill in the data, row by row and according to the column headings. Do not change the structure by merging rows or columns, or something similar and do not delete the DO_NOT_DELETE_THIS_SHEET-sheet.

- c) You saved it in Excel format:
- d) Now you can upload the template filled with data.

Remark: You should have saved your data in one file, with the separate worksheets containing data on the stations, measurements and trophic state.

Remark: You can combine this information with the information on the NVZ areas.

After uploading, your Excel data will automatically be converted to XML format in preparation for being run through the automatic validation routine.

c) Tabular- (template) and geographical information (shapefiles) on polygon features. To report the tabular information on polygon features (WTA table and – meta tables), it is strongly recommended to use the template (.xls) which is available in the DD of Reportnet (see chapter 2).

To report <u>Geographical information</u> on the polygon (area) features (the designated NVZ areas and Potential NVZ areas), it is recommended to use the "**shapefile**" (**ESRI Standard**) data exchange format for vector data because it is compatible with systems operated by the Commission. This vector data format stores the location, shape and attributes of geographic features. A shapefile is stored in a set of related files (.shp, .shx, .dbf, .prj, .xml) and contains one feature class.

Attribute information for shapefiles

The recommended attributes for each NiD geographic shapefile can be found in the Dataset Definition and in the template in the Data Dictionary. For each attribute the column name, column definition, the methodology and the data specifications (datatype, length, data restrictions) are provided.

Metadata tables for shapefiles in the template

In the dataset definition and template of the NiD dataset in the Data Dictionary you will find next to the tables with the attribute information some tables with metadata elements for the GIS files: NVZboundaries-meta, NVZ_Pot_GIS-meta and ND_WTARiskAreas-meta (Optional)). These metadata elements concern only some technical aspects of the polygon features and are especially important if you did not use the recommended data format and coordinate reference system.

Tabular- (template) and geographical information (shapefiles) on polygon features to be uploaded are:

o <u>Tabular information</u>

9. WTA - Whole territory approach table

- $\circ \underline{NVZ \text{ GIS tables} \rightarrow \text{shapefiles} + \text{metadata}}$
 - 7. Designated Nitrate Vulnerable Zones GIS boundaries
 - 8. Potential Vulnerable Zones GIS boundaries
 - 9a. Risk areas WTA GIS boundaries (optional)

> Upload tabular information in the excel template.

- a) You downloaded the Excel template from the DD (see chapter 2)
- b) You added data to the templates:
 - 1. WTA_ND
 - 2. NVZBoundaries-meta
 - 3. NVZ_Pot_GIS-meta
 - 4. ND_WTARiskAreas-meta

Fill in the data, row by row and according to the column headings. Do not change the structure by merging rows or columns, or something similar and do not delete the DO_NOT_DELETE_THIS_SHEET-sheet.

- c) You saved it in Excel format:
- d) Now you can upload the template filled with data.

Remark: You can combine this information with the information on the monitoring stations.

> Upload the shapefiles with metadata.

Please read the "**background document GISspecifications for reporting under NiD**" that can be downloaded from

http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/nitrates_directive&v m=detailed&sb=Title

Releasing envelope

Once you are satisfied that you have uploaded the correct file(s), complete your delivery by releasing the envelope. The purpose of envelope release is to signal that the data have been delivered. Your NiD report is now publicly available in the Reportnet Central Data Repository (CDR) unless you have applied access restrictions as explained above.

Add file

Release envelope

Finish or go back to drafting?

There is a possibility to re-open the envelope so that you can make corrections e.g. upload a missed file or remove a wrong one. In order to do so, click on the link "Redeliver or finish" which brings you back to step 2 d). You will have to activate the task (as before), add or remove files and eventually release the envelope again. Top

6. Confirmation letter after completing the submission of the data

Confirmation

After uploading the authorized NiD Data provider confirms that the submission is completed. Following this confirmation he/she will receive an **automatic message** from the system to confirm that the files haven been accepted.

In addition, Reportnet will issue an automated but official confirmation letter.

Notification

Member States can discharge their legal obligation to notify the reports to the Commission by submitting the above-mentioned official confirmation letter to the Commission via their Permanent Representation.



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EEA EnviroWindows		🕞 Logout (reporter) 🗛 🗖
EIONET CDR Testing		
RVICES REPORTNET	TOPICS Slovenia» European Union (EU),» Nitrates Directive Report» Data 2007 (Test envelope)» Confirmation of re	ceipt
Search Notifications	Feedback: Confirmation of receipt	Back to envelope
Help	Subject: Confirmation of receipt	
	Posted automatically on: 02 Dec 2007	
The login has been moved to the upper- right corner.	European Environment Agency Kongens Nytorv 6 DK 1050 Copenhagen K	
	To Whom It May Concern	
	This is a confirmation of receipt for national data submissions under the European Reporting Ob	ligation
	Annex V Nitrates Report (http://rod.eionet.eu.int/obligations/106)	
	The following delivery has been submitted for ${\bf Slovenia}$ to the Reportnet Central Data Reposite ${\bf 2007},$	ory (CDR) and was made available on 02 December
	Envelope: Data 2007 (Test envelope) Location: <u>http://cdrtest.eionet.europa.eu/si/eu/colrx9pna/envr1mq0g</u>	
	List of files:	
	testfile7.txt	
	The above-mentioned files were submitted by user: reporter	
	This confirmation is electronically generated by the Reportnet system and therefore not signed	əd.
ument last modified 2007/1	2/02. [validate HTML]	
		Internet

European Environment Agency Kongens Nytorv 6 DK 1050 Copenhagen K

In support of WISE - The Water Information System For Europe

To Whom It May Concern:

This confirmation letter shows the status of national data submissions to Reportnet based on the European Reporting Obligation

WFD monitoring programmes, summary report (http://rod.eionet.eu.int/obligations/520) The letter is automatically generated when the authorised national data reporter has released the respective reporting information inside the Central Data Repository (CDR).

The following files have been submitted for country *Germany* into the envelope *DE9610* - *Schlei/Trave* (*http://cdr.eionet.europa.eu/de/eu/wfdart8/de9610*) and are made publicly available on *16 April 2007*. List of files: •*RBD_DE9610_SWMonitoringStations.xml* (*http://cdr.eionet.europa.eu/de/eu/wfdart8/de9610/RBD_DE9610_SWMonitoringStations.xml*) •*RBD_DE9610_GWMonitoringStations.xml* (*http://cdr.eionet.europa.eu/de/eu/wfdart8/de9610/RBD_DE9610_GWMonitoringStations.xml*) •*DE_RBD_Monitoring_DE9610.html* (*http://cdr.eionet.europa.eu/de/eu/wfdart8/de9610/DE_RBD_Monitoring_DE9610.html*) •*RBD_DE9610_Monitoring.xml* (*http://cdr.eionet.europa.eu/de/eu/wfdart8/de9610/DE_RBD_Monitoring_DE9610.html*)

The above-mentioned files were submitted by: *busskral This confirmation letter is electronically generated by the Reportnet system and therefore not signed.*

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7. Quality Analysis after completing the submission of the tables

After submitting the water quality tables and NVZ GIS tables with the, an automatic quality assessment (QA) will be carried out to check and control the quality of the uploaded tabularand geographical data.

The quality assessment (QA) consists in a set of rules and they will cover:

- o presence of mandatory elements
- o correctness of values against codelists and min/max ranges
- correctness of uniqueness of primary keys (combination of CountryCode, StationCode and StationType for the monitoring stations)
- o correctness of station coordinates against country boundary box

The result of the QA will be saved in the feedback section of respective envelope.

!! This procedure will only take place if you have used the correct templates which are provided in the Data Dictionary.

More help is available...

More help on Reportnet Central Data Repository is available at: <u>http://cdr.eionet.europa.eu/help</u> In case of login problems or other technical problems with Reportnet, please contact Eionet Helpdesk: <u>helpdesk@eionet.europa.eu</u>

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