



Document Annex 6: Reporting on the River
Basin Management Plans - a user
manual

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Development of Tools and Services for the Water Information System for Europe

(WISE) and the implementation framework

Client



European Commission Directorate-General Environment

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1 Introduction

These guidelines explain how to use Reportnet, the European Environment Agency's electronic infrastructure for data collection (http://www.eionet.europa.eu/menureportnet) for finding information and reporting information to the EU Commission in pursuance of the Water Framework Directive (WFD) - River Basin Management Plans - 2016 Reporting. The reporting is organised in collaboration between DG Environment and the European Environment Agency (EEA). The guidelines addresses the whole reporting process involving:

- Identifying the reporting obligation in Reportnet (http://rod.eionet.europa.eu/),
- Downloading data definitions, reporting templates and supporting documents,
- Uploading the data in Reportnet (http://cdr.eionet.europa.eu/).

2 How to find the reporting obligation in ROD

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.

This is the direct link to access to the details of the WFD 2016 reporting obligation:

http://rod.eionet.europa.eu/obligations/715

Finding WFD2016 reporting obligations

- Go to: http://rod.eionet.europa.eu/
- Select issue: Water
- Select organisation: DG ENV (EC)
- Click on GO icon
- Scroll to find WFD2016

Water Framework Directive - River Basin Management Plans - 2016 Reporting Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy as amended by Decision 2455/2001/EC and Directives 2008/32/EC, 2008/105/EC and 2009/31/EC.

DG ENV (EC) 2016-03-

3 How to find the data definitions, reporting templates and supporting documents

The reporting guidelines can be found in the Water Framework Directive reporting resources page (http://cdr.eionet.europa.eu/help/WFD/WFD_521_2016/):

- UML with the data specifications,
- Links to XML schemas;
- Supporting documents:
 - WFD Reporting Guidance 2016



- GIS Guidance
- Helpdesk Log
- Tools for data transformation:
 - Conversion tool from Access to XML, for the tabular data;
 - Conversion tool from Shape files to GML, for the spatial data.
- Data quality assessment tools:
 - Supporting document;
 - Within schema checks.

4 How to deliver data in CDR

Step 0: Reporting of Annex0 (if relevant)

Those Member States that are not able to report all the data as required in the WFD Reporting Guidance 2016 must upload a explanatory note (a 'Read me first' document) identifying the information the Member State is unable to report and the reasons why (see sections 1.2 and 1.6 of the WFD Reporting Guidance 2016). This explanatory note should conform to the contents of Annex 0 to the WFD Reporting Guidance 2016.

The template available Water Framework Directive reporting resources page (http://cdr.eionet.europa.eu/help/WFD/WFD_521_2016/) must be used. The template must be submitted via email to the WFD helpdesk (wfd.helpdesk@eionet.europa.eu). The subject of the email should be "Annex 0 submission for [name of country or RBD]". The files should be submitted at least one month in advance of reporting, in Word format and in English. This early warning is essential to allow the Commission handling the QA/QC.

The reporter of the Annex 0 will receive feedback from the Commission on the contents of the document within a week of its submission. The feedback may include advice to facilitate reporting and the QA/QC validation. Omissions that may put at risk the integrity and consistency of the dataset will not be accepted.

The data reporter will then be asked to upload in Reportnet this version of Annex 0, as commented by the Commission, together with the XML/GML datasets (see step 3 below). If the Annex 0 is filled in at national level (meaning same justifications are applicable to all RBDs), it should be reported in the Folder National RBDSUCA (see below). If the Annex 0 is filled in at RBD level it should be reported at the relevant River Basin District folder.

The name of the Annex 0 file should conform to the following file naming convention:

AnnexO_CountryCode(2 characters).docx (for national Annex 0)

AnnexO_CountryCode(2 characters)_EURBDCode.docx (for RBD Annex 0)



Step 1: User accounts and access permissions

In order to report, an Eionet account with user name and password is required as well as the permission to upload the national delivery (authorised Data Reporters are listed http://rod.eionet.europa.eu/contacts?roleId=extranet-wfd-data).

Please request user accounts and access permissions for the person(s) responsible for uploading the files through your National Reporting coordinators for water directives (http://rod.eionet.europa.eu/contacts?roleId=extranet-wise-nfp).

These National coordinators are registered and authorised to make the permission requests to the WFD helpdesk (wfd.helpdesk@eionet.europa.eu). The subject of the email should be "WFD2016 data reporter registration request for [name of country]". In the mail body it is mandatory to provide the following details of the data reporter to be registered:

- EIONET User ID (in case exist)
- First name
- Last name
- E-mail
- Telephone number
- Job title
- Organisation

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

When preparing for the WFD2016 delivery, you first have to go to the respective WFD2016 country folder in EEA's Central Data Repository (CDR) by using your EIONET user name and password. Your country folder will follow this path:

http://cdr.eionet.europa.eu/<pur country two-digit ISO code>/eu/wfd2016/

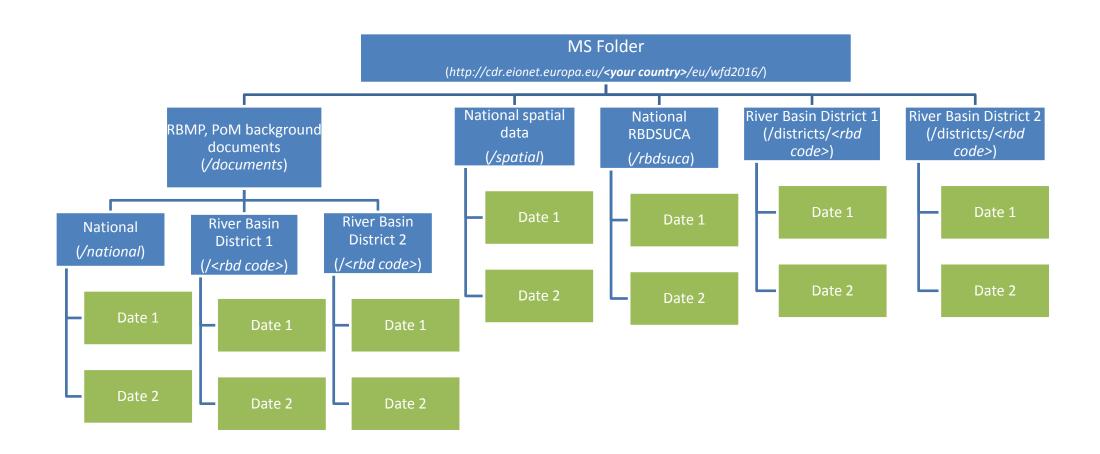
Once you are on your country folder:

a) Go to the specific pre-created folder/collection where you will upload your data or documents.

See in the graph below the hierarchy of folders you will find in your country folder. In blue the pre-created folders and in green the envelopes you should create where it is allowed to report data (e.g. XMLs, GMLs) and documents (e.g. PDFs, DOCs).

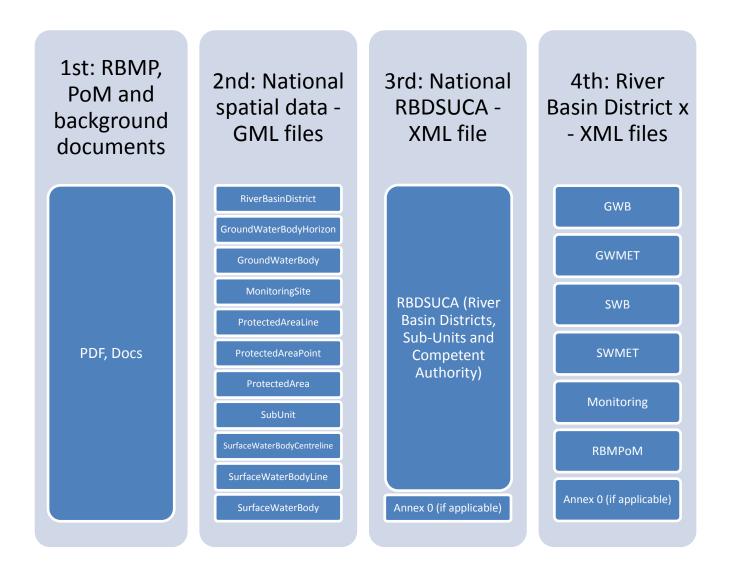
If there is only one RBD in your country you are still requested to use this structure and upload the XML files (except the RBDSUCA file) under "River Basin District 1 (name of the RBD)" folder. The RBMP, PoM and background documents can be uploaded in the folder "RBMP, PoM background documents\National".







These are the specific resources and data files that need to be reported for each reporting envelope inside the folder types depicted above. Annex 0 only needs to be included if applicable (see step 0 above). As regards uploading of files, it is mandatory to follow the order shown below to ensure the proper functioning of the automatic QA/QC:





b) Now add a new envelope, which will store all the data files or documents from a delivery. Add a title for the envelope based on the submission date, following this convention:

Title: YYYYMMDD

Envelope description and coverage note fields are optional.



Add Envelope

Fill out the fields in this report profile and click Add. This will create an envelope into which you make the delivery.



Step 3: Upload your WFD2016 data

a) Get to the folder level and open the new envelope you have created by clicking on its title. 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.



b) Upload your data from your own system using the "add file" option in the envelope. You can always interrupt your work and continue your contribution at a later time without losing data. You can also upload your data files in a single Zip file. The zip file upload makes it possible for you to add a large number of files in one upload. The zip file will be uploaded and unwrapped.

The naming convention to be used for the files (GML and XML) is the following: NameOfSchema(DataSetType) CountryCode(2 characters) YYYYMMDD.xml/gml



Where NameOfSchema(DataSetType) is one of the following options:

GML schema names	XML schema names
RiverBasinDistrict	RBDSUCA
GroundWaterBodyHorizon	GWB
GroundWaterBody	GWMET
MonitoringSite	SWB
ProtectedAreaLine	SWMET
ProtectedAreaPoint	Monitoring
ProtectedArea	RBMPPoM
SubUnit	
SurfaceWaterBodyCentreline	
SurfaceWaterBodyLine	
SurfaceWaterBody	

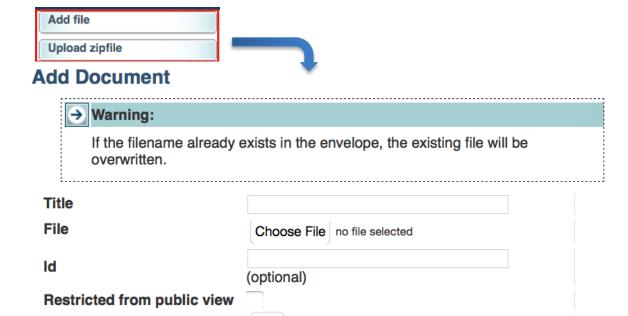
Some examples:

SWB_NL_20160322.xml

RBDSUCA_EE_20160315.xml

SurfaceWaterBodyLine_FR_20160320.gml

SubUnit_RO_20160301.gml



Note: In the Reporting guidance and in the GIS guidance is specified that the descriptive data needs to be uploaded as XML files and the spatial data as GML files. You can use the online conversion tools provided at http://cdr.eionet.europa.eu/help/WFD/WFD 521 2016 to convert from Access to XML and Shape files to GML.

Add



For the Access to XML tool you just need to upload the Access DB as MS Access 2003 format following the structure given at the CDR reporting page.

For the Shapefile to GML you need to upload a ZIP containing the different files required (.dbf, .prj, .sbn, .sbx, .shp, .shx)

See below captures of these existing tools.

Page updated on April 26th 2016

Access2XML: Conversion tool for the WFD Access database



Use this tool to convert the WFD Access database to a XML file

EEA Reportnet works best with Google Chrome (recommended) or Mozilla Firefox. The use of Internet Explorer is not recommended.

Instructions:

- Click the "Choose File" (or "Browse...") button to select the Access database you want to convert.
- Click the "Upload File" button to upload the Access Database (please be patient, some files may take a while to upload). Click the "Refresh File List" button to see the list of files (please be patient, some files may take a while to upload).
- Provide a valid e-mail address and click the "Execute" button.
- When the conversion is ready, the system will send you an e-mail, with a link to the converted file.
- You can then download the file.

Destination Microsoft Access Database File: Choose file No file chosen Upload File In addition, please provide us a valid e-mail address. The system will deliver in your mailbox a link to the generated XMLs (zipped): File List Refresh File List Execute

Page updated on June 7th 2016

Shape2GML: Conversion tool for the RiverBasinDistrict shapefile



Use this tool to convert the RiverBasinDistrict shapefile to a GML file. Note that the shapefile must be prepared according to the valid RiverBasinDistrict shapefile template. Create a ZIP file containing the files that compose the Shapefile (SHP, SHX, DBF, PRJ and CPG). Please make sure that all the above files are included

Note:

EEA Reportnet works best with Google Chrome (recommended) or Mozilla Firefox. The use of Internet Explorer is not recommended.

Instructions:

- Click the "Choose File" (or "Browse...") button to select the ZIP file with the Shapefile you want to convert.
- Click the "Upload File" button to upload the ZIP file (please be patient, some files may take a while to upload). Click the "Refresh File List" button to see the list of files (please be patient, some files may take a while to upload).
- Provide a valid e-mail address and click the "Execute" button.
- When the conversion is ready, the system will send you an e-mail, with a link to the converted file
- You can then download the file and add the GML to your data delivery envelope in CDR.

Zip: Choose file No file chosen Upload File	
File List Refresh File List	
ail address:	
Execute	



Step 4: Quality assessment of data files uploaded

Once the data files have been uploaded, they could be assessed based on the following quality assurance validations:

- Schema checks: these will be able to be executed just after the uploading of each data file.
- Within schema checks: these will be able to be executed just after the uploading of each data file.
- Cross schema checks: for these checks to run it is required to upload all the files in advance as the checks use data reported in different files.
- Statistics: these validations provide an overview of the data delivered in terms of counts of elements reported by each schema.
- Registry: these validations check descriptive data against reported spatial data and the spatial data against the identifiers in the first RBMP reporting exercise.

The description of these quality checks are included in an excel sheet "QA specification" available in the CDR (http://cdr.eionet.europa.eu/help/WFD/WFD 521 2016).

You have to run all the QA validations for all your data files by clicking "Run automatic QA"; this will take several minutes. See below the button for the QA validations execution.

Run automatic QA

Corresponding error reports will be displayed at the envelope level. Errors identified as "blockers" will not allow you to run successfully the next step, which is the release of the envelope. Blockers are obtained when the data files delivered have missing or erroneous elements that may corrupt the integrity of the European database or undermine the consistency of the reported data.

The analysis of the errors will allow you to update your files as necessary and run the QA again until there are no blocking errors (see Step 6b below). In the next step, which is the release of the envelope, all the quality assessments will be run automatically again for all of the data files finally uploaded. The statistics of the data delivered will also be generated.

<u>It is strongly advised to run all the QA routines first and to try to release the envelopes only when all blocking errors have been solved</u> (or only Annex 0 related errors remain – see steps 0 and 6c).

Note that if you report very large files, some QA validations may take a lot of time for their finalisation (over 4 hours) or they were not successfully processed. In those cases, you will receive the following message in the Data Quality tab at the schema level as blocking error:

"The QC process failed. Please try again. If the issue persists please contact the dataflow helpdesk."

For these cases, please wait several hours (suggested time is 8 hours) and then click again on "run automatic QA". The results of your previous request will have been stored in the server and will be delivered very quickly.



For this to happen, however, the second request has to be made for exactly the same files as the first one. Any change to the files, no matter how small, means that the server will recognise the second request as a new one and will need to launch again the QA validations.

In summary, here are the steps you need to follow to run the automatic QA:

- 1) Click on "Run automatic QA"
- 2) If the QCs take less than 4 hours you will receive the results in the "Data quality" section and there is no other action needed
- 3) Otherwise, you receive a message asking you to try again
- 4) Do not change your files
- 5) After 8 hours click once more in "Run automatic QA"
- 6) Check the results in the "Data Quality" section

This procedure is identical in CDR and in CDR-Sandbox. Please do not hesitate to contact WFD Helpdesk if you face any problems with this procedure.

Step 5: Releasing the envelope

a) Once you are satisfied with the data files delivered and no blocking errors have been found in the quality checks, complete your delivery by clicking on the release envelope button.

Release envelope

The purpose of release is to signal that the data have been delivered and will automatically deactivate the envelope for further processing by the Commission and the EEA representatives.

b) Once you click on "Release envelope", the quality assessment rules are run automatically for all the data files uploaded.

Status Task(s) in progress: Automatic quality assessment (Automatic quality assessment)

Only envelopes with NO blockers will able to be released. In this automatic quality assessment are considered blockers:

- ✓ Missing or erroneous elements that may corrupt the integrity of the European database or undermine the consistency of the reported data (mentioned above).
- ✓ An incomplete envelope. All the required data files need to be delivered in each envelope. For the XML and GML data files list please refer above in Step 2 of this section where is defined which files should be uploaded into each folder/envelope.

To have an overview of the quality assessment results please go to the "Data Quality" tab of the envelope, see below a captures of a QA a test sample.



Overview History Data quality

Results of automatic data quality checks

This page displays summary information from all automatic data quality checks for this envelope. If you want to see more detailed results, just follow the "Show more.." links to the individual feedback items.

GWB_UK_20160322.xml

- INFO: This delivery passed all checks without errors or warnings Show more...
- INFO: Statistics GWB Show more...
- INFO: WISE registry validations passed without errors. Show more...
- INFO: XML Schema validation passed without errors. Show more...

GWMET_UK_20160322.xml

- INFO: This delivery passed all checks without errors or warnings Show more...
- INFO: Statistics GWMet Show more...
- INFO: XML Schema validation passed without errors. Show more...

Monitoring_UK_20160322.xml

- INFO: This delivery passed all checks without errors or warnings Show more...
- INFO: Statistics Monitoring Show more...
- INFO: WISE registry validations passed without errors. Show more...
- INFO: XML Schema validation passed without errors. Show more...

RBMPPoM_UK_20160322.xml

- INFO: This delivery passed all checks without errors or warnings Show more...
- INFO: Statistics RBMPPoM Show more...
- BLOCKER: The file does not conform to the data model defined in the XML Schema and blocks your submission. The XML Schema data model specifies the element names, document structure and data types. Show more...

SWB UK 20160322.xml

- BLOCKER: 77 blocking errors found Show more...
- INFO: Statistics SWB Show more...
- WARNING: 3 warnings found Show more...
- BLOCKER: The file does not conform to the data model defined in the XML Schema and blocks your submission. The XML
 Schema data model specifies the element names, document structure and data types. Show more...

By clicking on "Show more..." you will see the details of each QA messages.

Feedback: AutomaticQA result for file Monitoring.xml: XML Schema validation

Back to envelope

Subject:	AutomaticQA result for file Monitoring.xml: XML Schema validation
Posted automatically on:	25 Sep 2015 07:44
Task:	Automatic quality assessment
Referred file:	Monitoring.xml

XML Schema validation

ELOCKER The file does not conform to the data model defined in the XML Schema and blocks your submission. The XML Schema data model specifies the element names, document structure and data types.

The file was validated against http://dd.eionet.europa.eu/schemas/WFD2016/Monitoring_2016.xsd

The following table lists the contradictions in document structure, elements using wrong data types or missing mandatory values.

Type	Position	Error message
ERROR	Line: 2, Col: 374	Cannot find the declaration of element 'Monitoring'.

Step 6a: Automatic release of the envelope

If there are no blocking errors, the envelope will be released successfully and a confirmation of receipt according to template in Annex 1 will be automatically provided. Only files in released envelopes are considered to be officially delivered. A copy of this confirmation of receipt should



be delivered to the Commission through the respective Permanent Representation in order to formalise the reporting obligation.

Step 6b: Replace file(s) of causing blockers

In case of blocking errors the envelope will not be released and will remain in draft, you will need to replace the files that provide blocking errors and release the envelope again.

Step 6c: ENV manual revision of the envelope according to Annex0

In case your blocking errors are solely related to your previously reported Annex 0 document, the Commission will perform a manual inspection of your data. For this purpose, the errors of the envelopes which data reporters have unsuccessfully tried to release will be compared to the justifications in the Annex 0 document that has been commented by the Commission and uploaded in Reportnet. If the errors are solely related to elements in the previously checked and accepted Annex 0, the Commission will release the envelope manually (step 6d) and the data reporter will receive the confirmation receipt. If there are other errors, you will receive a standard notification that these need to be solved before releasing the envelope. In that case the envelope will remain as draft for files to be updated (step 6b).

Step 6d: Manual acceptance

In case the blocking errors are solely related to elements in the previously checked and accepted Annex 0, a Commission representative will release manually the envelope after assessment. The acceptance of the data will be communicated through Reportnet-CDR through a confirmation of receipt (see Annex 1 of this document) at the specific envelope level.

Step 7: Close envelope

Finally, the envelope released will be automatically closed.

The data will be subject to further processing and assessment. In case any serious quality issue is discovered during that further processing, the data reporter will be requested to resubmit data. In this case, the data reporter will be notified through the Reportnet-CDR using a standard message (see Annex 2).

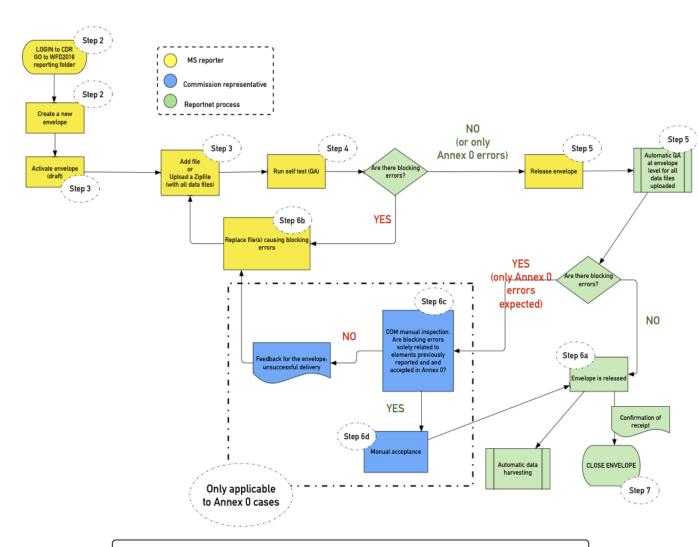
In order to receive the notification of the actions automatically by email, <u>it is strongly</u> recommended that the data reporter be subscribed to the CDR notifications in Reportnet.

In case resubmission, a new envelope will need to be created and all required files in that envelope will need to be uploaded again, even if only some of the files have been updated. Partial submissions in envelopes are not allowed. In addition, only full XML or GML files are accepted.



4.1 Workflow overview

See below a graph describing the different processes involved in a WFD206 reporting exercise.



Note: Annex 0 errors are blocking errors due to lack of reporting of required elements, previously communicated and accepted by the Commission (see Step 0 in the text)



5 Helpdesk and support

For support on the reporting activities and issues that may arise in the process, MS can email to the WFD helpdesk (wfd.helpdesk@eionet.europa.eu).

6 Annex 1. Template for the confirmation of receipt

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

Water Framework Directive - River Basin Management Plans - 2016 Reporting (http://rod.eionet.europa.eu/obligations/715)

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 delivery has been submitted for [Member State] and was released on [date of release].

Envelope: [Name of the envelope]
Location: [web link to envelope]

List of files:

- 1. [file name]
- 2. [file name]
- 3. [file name]
- 4. ...

The above-mentioned files were submitted by: [name of data reporter] (user name: [user name of data reporter])

This confirmation letter is electronically generated by the Reportnet system and therefore not signed.

According to the WISE Reporting Arrangements agreed at the WFD Regulatory Committee in March 2007, this cover letter is generated to be printed and sent officially to the European Commission as proof of reporting delivery.

This confirmation of receipt does not guarantee the completeness and/or the quality of the data. In a subsequent step the Commission will perform a completeness check and a more in-depth QA/QC of the data which can result in a request for resubmission. The potential request for resubmission will be communicated to the data reporter through Reportnet-CDR. In order to receive the notification of the action automatically by email, it is strongly recommended that the data reporter is subscribed to the CDR notifications in Reportnet.



7 Annex 2. Template for unsuccessful delivery

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 notification refers to the following data submissions to Reportnet:

European Reporting Obligation: Water Framework Directive - River Basin Management Plans

- 2016 Reporting (http://rod.eionet.europa.eu/obligations/715)

Submitted by: [Member State]
Date of release: [date of release].

Envelope: [Name of the envelope]
Location: [web link to envelope]

On behalf of the European Commission, DG Environment, the data submitted has been subject to a completeness check and **has been rejected** for its integration in the EU database and further processing.

You are kindly requested to solve the issues indicated below and replace the wrong datasets.