

## **Note to the National Focal Points (NFPs) and National Reference Centres (NRCs) on freshwaters.**

As an outcome of the recent EIONET Freshwater workshop 26-27 June a number of steps have been identified to improve the water data flows

To further confirm those proposals, discussions and decisions in an institutional framework this note to NFPs has the purpose to inform about the agreements and the next steps in a more focused way than by the minutes of the EIONET Workshop itself.

The minutes, with more details will however be provided later in August.

## **WISE SoE data flows and priority data flows in the water area 2014-2016**

The key elements that were agreed with representatives at the EIONET Workshop were the following:

- Suspension of the 2014 freshwater data request (WISE-SoE groundwater, rivers, lakes, emissions and water quantity);
- Consultation with countries on country data quality factsheets, to clarify issues related to the data that has already been reported, and to improve its temporal and spatial coverage;

The EIONET workshop started the process of review of the WISE SoE water data flows, which will be performed from second half of 2014 onwards.

The aims of this content related review of the SoE data flows are:

- To reduce the reporting burden for member countries;
- To adjust the data flows content according to a list of products (e.g. indicators, maps, graphs, assessments) required by the EEA's forthcoming water assessments.
- To improve integrated assessments with Water Framework Directive and other Water Directives;
- To ensure a stable and well defined reporting of the "high priority" parameters currently used in the EEA products (such as European, pan-European and regional integrated environmental data and indicator sets, assessments and thematic analyses);
- To ensure that the relevant information and data are available at the EEA, for the EEA water assessments to be carried out during 2016 – 2018.

It is envisaged that the review process will result in:

- A revised and simplified Data Dictionary for each of the WISE SoE data flows – consolidated with other data flows to avoid double reporting of the same information, and focused on data directly used in existing and planned products.
- A consolidated and stable set of code lists to facilitate the reporting process and the quality control process (both at national and at EEA level), as requested by member countries.

- Decoupling of the reporting of temporal data (time series) from the reporting of spatial data (e.g. monitoring stations).
- A consolidated registry of monitoring stations, reusable across different data flows.
- Stepwise alignment of the reporting of spatial data with the provisions of the INSPIRE Directive – with the aim of moving from a reporting process based on deliveries to a Central Data Repository towards data harvesting of data available at member country level.
- Revised Guidance Documents and increased support to member countries during the Reporting Process with shorter response times and improved tools and feedback to trace and correct eventual data quality issues.

### **Suspension of the 2014 freshwater data request**

The WISE SoE dataflow – i.e. the EIONET priority data flows on water – needs a thorough review and restructuring of the reporting, the data handling and the quality assurance and quality control (QA/QC) procedures. The review will take into consideration the necessary alignment with the upcoming reporting under the Water Framework Directive (WFD), due in 2016<sup>1</sup>, and the ongoing developments of the Water Information System for Europe (WISE 2.0).

This review requires resources both from the EEA and from member countries, so the data reporting need to be suspended for one year (i.e. there will be no EIONET freshwater data request in 2014). The next data request will be issued in the second half of 2015 and will cover data monitored over two years (2013 and 2014). The reporting and the QA/QC procedures will be revised meanwhile, to support an improved and faster data processing, so that the updated indicators will again be available according to the normal schedule, in 2016.

The temporary suspension of the data exchange will allow the EEA/ETC-ICM and the NRCs to allocate the necessary resources for the activities related to:

- The improvement of the quality of the data already reported, guided by the issues identified in the country data quality fact sheets (to be done by the EEA/ETC-ICM and member countries,
- The improvement and update of the QA/QC and data handling procedures (to be done by the EEA/ETC-ICM, with the input and feedback from members countries, until the next data request).

In September/October 2014, there will be an EIONET consultation with respect to the freshwater indicators (CSI19 and CSI20) – used in the SOER2015 part B fiche (Freshwater) and Part C country comparison (Freshwater quality) – that are currently being updated with 2012 data collected on the 2013 WISE-SoE dataflow.

### **Data Quality Factsheets**

The EEA Waterbase data sets contain information reported by EEA member countries over the last two decades (water quality in groundwater, rivers, lakes; emissions of pollutants and water quantity).

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<sup>1</sup> See also WISE-SOE data flows 2014 onwards <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-freshwater-workshop-2014/freshwater-eionet-workshop-2014/wise-soe-data-flows-and-priority-data-flows-water-area-2014-2016>

The WISE-SoE data flows have successfully provided a solid basis of information for several of EEA indicators and water assessments<sup>2</sup>:

- The current Waterbase data sets contain a vast amount of water quality information covering more than 15000 river stations in 38 countries, 4200 lake stations in 36 countries, and around 24200 groundwater stations in 36 countries.
- For rivers, around 1000-1700 time series (dependent on the pollutant) are available, covering the period from 1992 to 2012 (with some longer time series and many shorter time series).
- The Waterbase data sets also include data on emissions and loads and on freshwater resource availability, abstraction and use. The data on emissions and water quantity have been collected annually since 2009 and are used as basis for EEA indicators and assessments.
- The data in Waterbase are the basis for the EEA's water quality indicators and the WISE interactive maps that provide European overviews.

However, during the many years of reporting, some inconsistencies and errors have been introduced and persist in the Waterbase data sets: the EEA would use the suspension of the 2014 data request to consult with countries, clarify the issues detected on already reported data and solve such errors as may exist.

As basis for the discussion at the EIONET workshop, the EEA / ETC-ICM produced draft Data Quality Factsheets, providing an overview of the data reported six countries and the data quality issues that require clarification and eventually will require correction<sup>3</sup>.

The approach of Data Quality Factsheets was appreciated by several NRCs; and EEA got good comments and inputs to improve the draft version.

It was agreed that the EEA / ETC-ICM would produce Data Quality Factsheets for all 39 countries and consult with each NRC during the period from October 2014 onwards.

The consultation phase from October to December 2014 will focus on clarifying questions related to metadata about the data already reported.

To ensure an effective consultation on the issues identified in the country's Data Quality Factsheet, the NFP and NRC need to set up a process so that the relevant data providers are consulted on their respective parts of the data. Many of the questions on data are simple and can be easily answered by the countries: the EEA estimates that the overall time needed to clarify the issues in the Data Quality Factsheets will be, on average, a week per country (in most cases only a few days of work are needed).

The next objective the Data Quality Factsheets is to correct any errors in the data. Some errors have been introduced during data handling at the EEA or ETCs; others are

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<sup>2</sup> See also background note on content related WISE-SoE review <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-freshwater-workshop-2014/freshwater-eionet-workshop-2014/background-documents/content-related-soe-review>

<sup>3</sup> Draft country fiches (12/06/14) <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-freshwater-workshop-2014/freshwater-eionet-workshop-2014/background-documents/draft-country-fiches/>

errors present in the data reporting by member countries that were not detected by the QA/QC procedures in place.

The final objective is to improve the spatial and temporal coverage and to ensure that the relevant parameters are reported.

If the correction of any errors – or the improvement of spatial, temporal and thematic coverage – should require a resubmission of data observed prior to 2013, such reporting can take place during the next data reporting phase in 2015.

### Time table and next steps

2014, June 26-27	EIONET freshwater workshop. Draft minutes of the workshop will be available during August.
2014, July	Note on the suspension of the 2014 data request and the consultation of countries on the Data Quality Factsheets (this note) to be distributed to NFPs and Freshwater NRCs (mid-July).
2014, September	EIONET consultation on updated water indicators (CSI19, CSI20 and CSI24).
2014, August to September	NFPs and NRCs to appoint a coordinating <b>NRC</b> (in most cases NRC on Water Quality and Ecological Status) on the Data Quality Factsheets. NRC to contact the national data providers so that resources are available to clarify the questions pertaining to the data already reported.  <b>EEA / ETC-ICM</b> to revise and improve the Data Quality Factsheets per country. In October 2014, the 39 Data Quality Factsheets to be ready for the consultation procedure.
2014, October to December	<b>EEA / ETC-ICM</b> consultation with each <b>NRC</b> on issues related to already reported data.
2014, September until 2015, August	<b>EEA</b> and <b>ETC-ICM</b> to improve and update the data handling procedures.  <b>EEA</b> in consultation with member countries ( <b>NRCs</b> ) to adjust the different data requests with focus on the data required for the next EEA water assessment (i.e. the data request will be driven by the need of information for existing and planned EEA products). The review of the data request will result in the removal of some parameters that were present in previous data requests, but that are not directly required by existing or currently planned products.  <b>Restart of the WISE SoE data flows</b> - Data request to be issued  Member countries to prepare data reporting for the 2013 and 2014 data. If needed, report data (prior to 2013) to improve the spatial and temporal coverage for the priority parameters.
2015, September to December	WISE SoE data flow - Data reporting and QA/QC procedure
2015-2020	<b>Reviewed WISE SoE data flow in production.</b> Stable Data Dictionary and Reporting Data Structures.

Data request aligned with data requirements on EU Water Directives.

Maintenance and improvement of the data reporting processes  
and the support and communication mechanisms with MS.

Maintenance and improvement of the internal QA/QC procedures.