2013 Freshwater EIONET workshop
Water data flows: quality – structure – purpose

19-20 September 2013, Copenhagen

DRAFT MINUTES v.0.4 – open for MS comments

An [agenda of the meeting](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/eionet-freshwater-workshop-2013/draft-agenda_2013-freshwater-eionet-workshop_19-20sep2013_cph), including links to all background documents and presentations can be found in the workshop folder on the EIONET Forum[[1]](#footnote-1).

Welcome and introduction

The meeting was opened by **Beate Werner**, head of EEA water group, giving a short introduction to recent developments at EEA and an overview of the aim and structure of the workshop:

* since June 2013 EEA has a new executive director;
* a new Multi Annual Work Programme (MAWP), focussing further on policy implementation (stressing the importance of the priority data flows) and a continued close cooperation with the European Commission;
* the preparation for the State of Environment Report (SOER) 2015 has started.

Session 1: Use of the data, integration and DPSIR assessment, towards decentralised reporting system

**Anita Künitzer**, ETC/ICM Manager chaired this session.

First presentation, “[Lessons learned from the WFD](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-1-use-data/i_wfd-lessons-learned.pdf)”, was given by **Jacques Delsalle,** European Commission DG Environment. Key issues from the study of “lessons learned in the first WFD reporting cycle” were presented. After 12 years of implementation work on the Water Framework Directive (WFD) the 2012 Water Blueprint stresses the enhanced information needs on all levels, quality as well as water resource issues.

Actions on the short term to improve the implementation of the WFD, are some review of guidance documents and reporting sheets for the WFD (by end of 2013) to shape efficiently the next reporting cycle. The working group on data and information sharing (DIS, replaces the former group D on reporting) in the Common Implementation Strategy 2013-2015. On the longer term WISE2.0 and the decentralised reporting under the Structured Implementation and Information Framework (SIIF) will bring forward more of the principles of SEIS (shared environmental information systems), and more INSPIRE compliance.

Streamlining of the WFD reporting and focus on the EU level products will serve a better knowledge base. Information is needed on how best to implement the WFD, including the cost and benefits of measures. This process is highly relevant for the WISE revision.

The second presentation, “[The right data? – for what?](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-1-use-data/ii_water_assessments)”, was given by **Beate Werner.** The presentation started with a general introduction on collecting and processing information towards EEA products as graphs (indicators), assessments (reports), and maps and a short overview of the history of the SOER and structure of SOER 2015.

WFD and SoE are both needed to build up the EU level knowledge base. SoE can be described as a success, but more integration with the WFD data is needed. The needs have to be focussed on the water assessment products, using both data flows in an integrated way. The data quality and consistency (over time and across countries) is key. Therefore the input, processing and visualisation of the information in the new WISE 2.0 need additional efforts on both system architecture and data quality assurance.

Further details on the visualisation in the future WISE development was given with the presentation “[Visualisation of spatial and tabular data of the Water Directives and the SoE data in WISE](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-1-use-data/iii_visualization)” (**Agnieszka Romanowicz,** EEA). Currently all new SoE data sets are prepared for visualisation with ArcGIS online. As all water directives are reported via ReportNet these will be included as well step-wise over time. With that it will be possible to combine topics in future, also across different information flows, or add own information so the user can make the assessments most relevant for his/her situation. Some examples of new improvements, like the time slider, were shown.

Even though in other area EEA follows an “open source policy”, the ArcGIS online tool best served the needs of EEA. The known thematic viewers for the general public will be built from the ArcGIS online and updates can be made easier on the basis of the existing templates. There are no license needs for EIONET members to view and download data; licenses are only needed for the production side.

The presentation “[A Member State perspective on the use and visualisation of different data flows – example of Austria](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-1-use-data/iv__at_perspective)” was given by **Edith Hödl-Kreuzbauer** of the Environment Agency Austria as asked for by EEA. In Austria there is not one central database, and databases are linked to each other in different ways for different obligations (EEA SoE, WFD, OECD, Eurostat, …). The QA procedures are mainly automatic, and for the water quality database a manual control is performed. For stable data requests (so e.g. not yet for the WFD reporting) a query tool on the WISA data warehouse selects, aggregates and formats the data for the different requirements, different policy questions (and timelines) and different end products (parameters), all generated from the same datasets. There are no resources to update the query tool every time the DD changes.

After this presentation, there was the first break-out session. Results of the discussions can be found at the end of these minutes, in the section on session 4 where the rapporteurs summarized the outcomes of the discussions in the different groups.

Session 2: Data quality and aggregation

**Anita Künitzer**, ETC/ICM Manager chaired the first part of this session.

The presentation “[Automatic and manual SoE data quality and representativity, country reviews (and consequencies for reporting and data publication)](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-2-quality-and-aggregation/i_wise-soe_dataqa_hazarsubs)” was prepared with input from many partners in ETC/ICM and presented by **Lidija Globevnik and Vit Kodes**. In the SoE workflow, an automatic QA check is done when MS upload data, followed by a manual check of outliers. Consistency of time series is important for trend analysis and a loss of stations as time series get longer reduces the representativity and the applicability in the assessments. There was a strong plea towards countries to look into detail to these QA/QC issues and to provide answers on the questions as well as information on broken time series.

The second part of the presentation focussed on the hazardous substances dataflow and the recent [ETC/ICM Technical Report](http://icm.eionet.europa.eu/ETC_Reports/HazardousSubstancesInWater_2013). Different QA/QC issues were given as examples (further discussed in breakout groups), like LOQ which cannot be “0” but has to be a value “smaller than” (<) or “larger than” (>) and the necessity of some supporting determinants like hardness to interpret the values. The ETC preference for disaggregated data was supported by an example of atrazine in groundwater where the aggregated national data gave a different image compared to the station information.

“[The German SoE Reporting – National structures versus European Requirements](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-2-quality-and-aggregation/ii_freshwater_visionde)”, given by **Falk Hilliges** of the Federal Environment Agency Germany (UBA) explained the various national legal bases for the different data flows that all need a harmonised data transfer from the Länder to the federal level and the need for a well-structured CDR at national level. Changing formats and code lists (not in the explanation fields) provoke high adaptation needs (as they also cause changes in the data provided by 16 Länder). It was questioned how comparable the reported data from different member countries are - and so in the trends in Europe – as the data are very heterogeneous and include different parameters.

Before sending out the next data request, EEA will as far as possible make the changes compared to the previous versions more visible, have one set of tables with codes for countries, CAS etc. and only change/add data fields where necessary in the view of a sustainable data flow.

**Beate Werner**, EEA Head of Water Group chaired the second part of the session.

“[Quality and representativity of different State-of-Environment (SoE) dataflows: Nutrients and Biology](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-2-quality-and-aggregation/iii_quality-and-representativity-nutrients-biology)” was presented **Anne Lyche Solheim**, ETC/ICM freshwater team lead. When using nutrients data for indicators (in this case CSI [019](http://www.eea.europa.eu/data-and-maps/indicators/oxygen-consuming-substances-in-rivers/ds_resolveuid/a6b6460107594344bcde0c36566d8e91) and [020](http://www.eea.europa.eu/data-and-maps/indicators/nutrients-in-freshwater/ds_resolveuid/6828a8a337d7481cb751a957b79cfb2e)) the choice of the length of time series influences the trends detected, where only the really long series (> 40 years) tell the full story. The longest time series available are not representative for Europe and should not be aggregated to European level. For Europe as a whole trends are rather flat over the last decade. It was suggested to aggregate stations by their nutrient concentration classes as one way to improve the indicator assessment. When linking the different dataflows, like nutrients and WFD ecological status, causal conclusions have to be made with care and caution as other pressures (e.g. invasive species, hydromorphology …) can explain as well why a water body is not in good ecological status.

The reporting of biological data misses several countries, the station density differs significantly between countries and the representativity of the stations can be discussed. To have more information available, the status class instead of EQR can give a first insight, however for a trend analysis the normalised EQR values are needed. When comparing SoE data with WFD ecological status up to half of the stations is lost because of missing codes on the water body.

 “[Water quantity data reporting and streamlining with Eurostat, indicators and water accounts](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-2-quality-and-aggregation/iv_water-quantity)”, was presented by **George Karavokiros** of ETC/ICM. Beate Werner (EEA) first introduced the history of [CSI 018](http://www.eea.europa.eu/data-and-maps/indicators/use-of-freshwater-resources/ds_resolveuid/1187781a1582ae689ad29d812bc1ae5b) and the aim of EEA to have water balances and a meaningful Water Exploitation Index (WEI) on seasonal and RBD level (instead of yearly and on national level). In Europe there are many data flows on water quantity, including the WISE SoE#3, which is more detailed than the Joint Questionnaire of OECD and Eurostat. For the ‘smiley-system’ not only the number of time series is taken into account but also the spatial and temporal scale of the reporting and the number of reported parameters. In relation to outliers it is suggested that MS mark outliers that are correct to limit the number of questions afterwards.

An analysis of the reported values in WISE SoE#3 and the Joint Questionnaire OECD/Eurostat shows that among those parameters having identical definitions in both datasets over 20% of the parameter values differ more than 10% (of which over 13% differ more than 50%). There can be plenty of reasons for these differences, including different wording, different rapporteurs, different methodology, different interpretation of the parameter definition and further streamlining is needed.

Session 3: WISE reporting process

**Beate Werner**, EEA Head of Water Group chaired this session.

“[Data Dictionary and resource pages, Use of CDR and future developments – consequences of developments towards decentralised and future WISE developments](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-3-wise-reporting/i_dd-and-towards-decentralised-systems)” was presented by **Anita Künitzer**, ETC/ICM Manager. In the presentation an overview of the current data dictionaries (SoE dataflows, except water quantity having a web tool instead of a DD) and the Resource pages for WFD and other water directives reporting can be found. To avoid duplicated data and double workflows, options for decentralised reporting and [Inspire](http://inspire.jrc.ec.europa.eu/) compliant dataflows were presented with the UWWTD SIIF pilot approach as an example for the different steps at national and European level. For the further WISE development, the actual ReportNet will be kept in place for the ‘classical reporting’ and stepwise transformed towards use in a distributed / decentralised system.

“[WISE SoE data reporting: cycle of business processes](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-3-wise-reporting/ii_wise-soe-data-reporting)” was presented by Marek Staron, data operator at EEA, and explains the WISE SoE data flow cycle and timeline with the tasks executed at the MS level and those done by EEA and ETC/ICM. The end product is an update European dataset for the different data flows published as part of Waterbase.

Besides the different data quality issues (see earlier presentations) there are several operational issues like reporting in outdate templates so QA issues are not addressed, late deliveries, not closed CDR envelopes, late or no replies to QA/QC feedback given. Combination of the data quality issues and operational issues leads to delays in data processing, leaving less time for preparation and improvement of the different data flows. An improved communication, including a history of all messages on QA/QC issues is under preparation. The ROD will be kept updated as a primary overview of all reporting obligations.

“[GIS reference datasets as basis for WISE and object version history](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-3-wise-reporting/iii_gis-reference-datasets)” was presented by **Lidija Globevnik** (ETC/ICM). The European Catchments and Rivers Network System (ECRINS) is used as the basic hydrographical spatial reference for all reporting streams. To build connectivity between datasets the use of the same object IDs in WISE datasets and WISE GIS reference layers is needed and has to be consistent over time. These unique IDs are not developed yet. Currently interlinking of datasets can be based on identifiers of River Basin Districts with relatively minor corrections but interlinking based on water bodies or monitoring stations cannot be done without significant corrections of the datasets. In a decentralised reporting system, the newest version of the spatial data becomes available at the European level at any time but requires an agreement with member countries on the procedures for using web feature services and an implementation of the Inspire requirements.

Session 4: Concluding session

**Beate Werner**, EEA Head of Water Group chaired this session.

This session has 4 reports from the breakout sessions, where statements, open questions and recommendations from the different discussions can be found:

* [first report](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-4-feedback/biology), presented by **Jannicke Moe** (ETC/ICM)(green group, focussing on biology elements for the dataflow specific discussions)[[2]](#footnote-2);
* [second report](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-4-feedback/hazardous-substances-and-emissions), presented by **Vit Kodes** (ETC/ICM)(yellow group, focussing on hazardous substances and emissions for the dataflow specific discussions).
* [third report](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-4-feedback/water-quality-nutrients), presented by **Kari Austnes** (ETC/ICM)(red group, focussing on general water quality issues and nutrients for the dataflow specific discussions).
* [fourth report](http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-4-feedback/water-quantity), presented by **George Karavokiros** (ETC/ICM) (blue group, focussing on water quantity issues for dataflow specific discussions).

From some participants or member countries more detailed answers on the questions in the background documentation were received and forwarded to the relevant ETC/ICM partner(s) and included in the actions below.

Recommendations for the EU-level

* Go for sustainable data flows with an absolute minimum of changes in DD and data formatting and highlight the DD changes very clear (clear rules for reporting are a necessity);
* Provide correctly filled-in examples of templates and where possible include code lists in the templates;
* Where possible and relevant apply different thresholds for detecting outliers for different countries in the automatic QA/QC procedures;
* Make it possible for reporters of SoE data to see what was reported in previous years so they can complement information more easily;
* Clean up reference datasets of SoE and WFD and establish linkages on the basis of the WFD;
* Make use of the WISE Technical Group for the development towards a decentralised reporting system, informing them about the INSPIRE[[3]](#footnote-3) implementing rules and the WFD reporting schemas under development.

Dataflow specific recommendations

* Biology
	+ Evaluate if reporting can be simplified by only reporting normalised EQR values instead of national values and the classification system[[4]](#footnote-4).
* Hazardous substances
	+ Work with CAS-codes[[5]](#footnote-5) instead or in addition to names of substances and work with a common SoE ID code list for all data flows;
	+ Keep aggregated data in published information but make disaggregated data available for EIONET review.
* Water Quantity
	+ Work together with institution (like Eurostat) to streamline/reduce the number on WQ questionnaires.

Recommendations for the national level

* Enhance coordination between reporting SoE data and WFD (and other water directives) reporting and identify the data sources actually used for the different reporting streams.
* Look into detail to QA/QC issues and to provide answers on the questions from EEA and ETC/ICM as well as information on broken time series;
* For all monitoring stations provide the information on the water body (EUSurfaceWaterBodyCode of WFD into WaterBodyID field of SoE) they belong to and inform EEA about changes of stations that represent the same location /environmental conditions (field to be added in DD);
* Select monitoring stations for the SoE data flows that are representative (spatially and across pressure gradients) to allow good European assessments[[6]](#footnote-6);
* Inform EEA on developments towards implementing decentralized systems of reporting and the implementation of INSPIRE in the preparation of the 2014 Eionet freshwater workshop;
* Report national threshold values for groundwater (where relevant).

The meeting was summarized by **Beate Werner**.

The purpose of collecting water data is dedicated to derive feasible (core set) indicators and assessments. The preference to report less for SoE dataflows and for water directives has to meet the expectations member countries have from policy relevant reports prepared by EEA. The final aim for all is “we want a better European water environment”. Indicators and assessments are providing insight in policy effectiveness and help a better EU policy implementation.

It was stated that the GIS developments are a good basis, also to check information provided. The visualisation makes it understandable for public and policy makers. The evolutions of INSPIRE, WISE, developments of the WFD reporting structure etc. need support of and discussion with the member countries. The WISE technical group is one of the forums where these discussions have to happen. One of the possible topics for next year’s EIONET freshwater workshop is to go into more detail on spatial data and information. EEA will evaluate the likeliness and possibility of an EIONET workshop organised back to back with the INSPIRE conference 2014 in Aalborg (DK).

The meeting was closed by thanking everybody who joined the workshop and for the active involvement in the discussions. Special thanks to the chair of the 4 groups leading the discussions, the rapporteurs and the presenters and to Laura Gutiérrez Burgosfor all practical organisation work.

Annex 1: Meeting Agenda

*2013 Freshwater Eionet Workshop*

*19/20 September 2013, Copenhagen*

**Water Data flows:**

**Quality – Structure – purpose**

**2013 Freshwater Eionet Workshop**

**19/20 September 2013, Copenhagen**

**Final Agenda (version 1.7) – after workshop, with links to the presentations**

**Background and rational:**

This year’s EIONET workshop will concentrate again on the very core business of the data and information flows between EEA and Member States. Over the years a complex system of reporting stream developed and at EEA we think it is time to undergo a more in-depth analysis of the strength and weaknesses of the information exchange as it is structured at the moment.

The wider objective of this discussion is to let the results be guidance for the further improvement and update of WISE towards its full development of an information system of the second generation. Next to the improvement of access and dissemination this should entail a better application of the SEIS principles with a simplified reporting and a better transparency for Member States, European Commission and all users.

The Workshop will not go through the single thematic data flows, but rather address the issues at more aggregated level horizontally across all data streams (e.g. SoE, rivers and lakes, nutrients, quantity, emissions, biology, Water directives etc.).To however facilitate this horizontal approach, single examples in each of the areas from specific data flows, (e.g. how is data quality handled for established SoE data like rivers &lakes nutrients versus new SoE reporting streams of WFD reporting) will be presented to introduce the topics of discussion.

In order to provide the optimal preparation we provided you with a group of background documents, which should exemplify the issues with more concrete cases from the existing data exchanges. The links to these documents are included again in this agenda. We hope that this supported you in the preparatory discussions with your national colleagues and experts to help the participants to contribute to a fruitful discussion.

A large part of the discussion with participants will take place in the 3 breakout sessions throughout the work shop. These breakout sessions will be organised into 4 groups and will be chaired by member states representatives. We will have stable groups and chairs for each of the breakout sessions.

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| ***1st Day – 19 September*** |
| **Time** | **Title** |
| **10:30 – 10:50** | **Welcome and introduction***by Beate Werner, EEA Head of Water Group* |
| **10:50 – 12:00** | **Session 1: Use of the data, integration and DPSIR assessment, towards decentralised reporting systems***Chair: Anita Künitzer, ETC/ICM Manager*The objective of session 1 is to show, how the reported data are being used for data products, indicators and assessments. There are some lessons learned from the recent round of reporting under the WFD and other directives. The session will clarify which are the right data to answer the indicator key questions, allowing for DPSIR assessments. ?  |
| 15’ | 1. Lessons learned from the WFD

*by Jacques Delsalle, European Commision DG Environment*Document 1a: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/documents/background-documents/1a-wfd-lessons-learned-document>Presentation: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-1-use-data/i_wfd-lessons-learned.pdf>  |
| 15’ | 1. The indicator assessments linked to the DPSIR framework and the development of impact and response indicators. Do we have the right data?

*by Beate Werner, EEA Head of Water Group*Document 1b(1): <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/documents/background-documents/1b-1-csi_assessment> Document 1b(2): <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/documents/background-documents/1b-2-bioindicator-incl-integrated-dpsir-assessments>Document 1c: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/documents/background-documents/1c-resource-efficiency-indicators>Presentation: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-1-use-data/ii_water_assessments>  |
| 15’ | 1. Visualisation of spatial and tabular data of the Water Directives and the SoE data in WISE

*by Agnieszka Romanowicz, EEA Water Group*Document 1d: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/documents/background-documents/1d-arcgis_online_maps>Presentation: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-1-use-data/iii_visualization>  |
| 15’ | 1. A member state perspective on the use and visualisation of different data flows

*by Austrian Eionet delegate*Presentation: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-1-use-data/iv__at_perspective> followed by questions and information on break-out groups |
| **12:00 – 13:00** | **first break out session** Questions to be discussed on the basis of the more detailed information provided in background documents:* How are the SoE and WFD reporting streams related in the member countries and how can the data jointly being assessed?
* Looking at all parameters in SoE and WFD reporting, where can synergies been found to simplify the reporting stream as a whole (SEIS), enabling the most efficient input to indicator assessments? And how can the added value of SoE data in terms of frequency (yearly data reporting) be used in trend analysis.
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| 13:00 – 14:00 | ***Lunch break*** |
| **14:00 – 15:00** | **Session 2: Data quality and aggregation** *Chair: Anita Künitzer, ETC/ICM Manager*The objective of session 2 is the clarification of the quality needs for SoE and WFD data. We will discuss the quality check of the reported data by country reporters as well as by ETC staff with regard to outliers, treatment of mistakes, data aggregation, length of time series and the challenges of analysis of data of different quality. We will consider the need for updating of SoE reporting sheets. |
| 30‘ | 1. Automatic and manual SoE data quality assurance and representativity. Country reviews and consequences for reporting and data publication. Including examples and lessons from the recent Hazardous Substances data report.

*by Lidija Globevnik and Vit Kodes, ETC/ICM*Document 2a: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/documents/background-documents/2a-soe-qa>Document 2c: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/documents/background-documents/2c-soe-hazardous-substances-data>Presentation: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-2-quality-and-aggregation/i_wise-soe_dataqa_hazarsubs>  |
| 30‘ | 1. Member State perspective by a DE on national work flows and quality assurance of data

*by German Eionet delegate*Presentation: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-2-quality-and-aggregation/ii_freshwater_visionde>  |
| 15:00 – 15:30 | ***Coffee break*** |
| **15:30 – 16:30** | **Session 2: Data quality and aggregation (continued)***Chair: Beate Werner, EEA Head of Water Group* |
| 30’ | 1. Quality and representativity different SoE data flows (nutrient/BOD, biology, …), looking at length of time series, outliers, selection of parameters, station representativity, scales and national classification systems.

*by Anne Lyche Solheim, ETC/ICM Freshwater Team Lead*Document 2d: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/documents/background-documents/2d-soe-nutrient-bod-data>Document 2e: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/documents/background-documents/2e-soe-biology-data>Presentation: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-2-quality-and-aggregation/iii_quality-and-representativity-nutrients-biology>  |
| 30’ | 1. Water quantity data reporting and streamlining with Eurostat , indicators and water accounts

*by George Karavokiros, ETC/ICM*Document 2f: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/documents/background-documents/2f-soe-water-quantity-data>Presentation: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-2-quality-and-aggregation/iv_water-quantity>  |
| **16:30 – 17:30** | **second Break out session** Questions to be discussed on the basis of the more detailed information provided in background documents:* How can trends over time be maintained and made comparable on a larger scale?
* What is the right level of spatial aggregation for different data flows to enable meaningful EU level assessments?
* How to ensure a reliable QA/QC in each data stream and comparability between different highly aggregated member country packages of information?
* For a specific data flow, which are the most important issues on data quality, aggregation and validation? And how can these be improved?
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| *19:00 - ??* | ***Joint dinner*** *(on own expenses)* |
| ***2nd Day – 20 September*** |
| **Time** | **Title** |
| **09:00 – 10:30** | **Break out on session 2 (continued)** |
| 10:30 – 11:00 | ***Coffee break*** |
| **11:00 – 12:00** | **Session 3: WISE reporting process***Chair: Beate Werner, EEA Head of Water Group*The objective of session 3 is looking at the reporting process itself and its stability within WISE. We will discuss the frequency of updating Data Dictionaries, the stability of GIS reference datasets and their updating; and any items that NRCs might want to address. |
| 20’ | 1. Data Dictionary and resource pages, Use of CDR and future developments – consequences of developments towards decentralised and future WISE developments

*by Anita Künitzer, ETC/ICM Manager*Document 3a: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/documents/background-documents/3a-datadictionary_cdr>Presentation: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-3-wise-reporting/i_dd-and-towards-decentralised-systems>  |
| 20’ | 1. SoE and Water Directives data reporting: cycle of business processes

*by Marek Staron, EEA Data and Indicators Group* Presentation: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-3-wise-reporting/ii_wise-soe-data-reporting>  |
| 20’ | 1. GIS reference datasets as basis for WISE and their updating and version history

*by Lidija Globevnik, ETC/ICM*Document 3b: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/documents/background-documents/3b-gis-reference-data-sets-and-object-life-history>Presentation: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-3-wise-reporting/iii_gis-reference-datasets>  |
| **12:00 – 13:00** | **third break out session** Questions to be discussed on the basis of the more detailed information provided in background documents:* How an efficient, sustainable and stable Reportnet structure and data dictionary does look like?
* How can INSPIRE facilitate stability in GIS reference data sets?
* How can decentralised systems simplify the reporting streams?
* How can the transition between centralized and decentralized systems be developed and how fast do member countries expect to go that road?
 |
| *13:00 – 14:00* | ***Lunch break*** |
| **14:00 – 14:30** | **Break out on session 3 (continued.)** |
| **14:30 – 15:45** | **Session 4: Concluding session***Chair: Beate Werner, EEA Head of Water Group*Report back from the breakout sessions by the rapporteursPlenary discussionpresentations of the 4 break out groups: <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/presentations/session-4-feedback>  |
| **15:45 – 16:00** | **Conclusions and AOB***by Beate Werner, EEA Head of Water Group* |
| 16:00 | End of meeting |

Annex 2: Meeting Participants

|  |  |  |
| --- | --- | --- |
| **Surname** | **Name** | **Country** |
| Alves | Maria Helena | Portugal |
| Andersson | Åsa | Sweden |
| Austnes | Kari | ETC/ICM |
| Baltaci | Fikriye | Turkey |
| Bamford | Deborah | United Kingdom |
| Bineri | Rozana | Albania |
| Bjerring | Rikke | Denmark |
| Blard-Zakar | Adeline | France |
| Bøgestrand | Jens | Denmark |
| Cabalska | Jolanta | Poland |
| Cazan | Dragos | Romania |
| DelSalle | Jacques | DG ENV |
| Demetriou | Charles | Cyprus |
| DominkovićAlavanja | Snježana | Croatia |
| Edwards | David | United Kingdom |
| Fanta | Miroslav | ETC/ICM |
| Förster | Jürgen | Eurostat |
| Frantar | Peter | Slovenia |
| Fronhoffs | Alistair | Belgium |
| GadeHolm | Anna | Denmark |
| Globevnik | Lidija | ETC/ICM |
| Gruszecki | Przemyslaw | Poland |
| Gustafsson | Mattias | Sweden |
| Hilliges | Falk | Germany |
| Hödl-Kreuzbauer | Edith | Austria |
| Jónsson | Gunnar | Iceland |
| Jovicic | Milorad | Serbia |
| Karavokiros | George | ETC/ICM |
| Kaspersson | Rasmus | Sweden |
| Kiss Hovathne | Ildiko | Hungary |
| Kodes | Vit | ETC/ICM |
| Künitzer | Anita | ETC/ICM |
| Kupusovic | Esena | Bosnia and Herzegovina |
| Lacouture | Laurence | France |
| LycheSolheim | Anne | ETC/ICM |
| Majovska | Andrea | Slovakia |
| Mehmeti | Merita | kosovo |
| Mikołajczyk | Anna | Poland |
| Milanova | Ivelina | Bulgaria |
| Moe | Jannicke | ETC/ICM |
| Orvomaa | Mirjam | Finland |
| Peyhe | Szabina | Hungary |
| Pfeiffer | Manuela | Germany |
| Piorkowski | Piotr | Poland |
| Poikane | Sandra | JRC IES |
| Pumputyte | Audrone | Lithuania |
| Richter | Sandra | UFZ |
| Sanchez | Raquel | Spain |
| Sangolt | Hege | Norway |
| Schaffner | Monika | Switzerland |
| Schiereck | Marloes | The Netherlands |
| Shakiri | Azemine | Republic of Macedonia |
| Soare | Florentina | Romania |
| Sonesten | Lars | Sweden |
| Thorling | Laerke | Denmark |
| Vannevel | Rudy | Belgium |
| VentosaSainz | Miguel | Spain |
| Versluijs | Kees | The Netherlands |
| Vincze | Gabriele | Austria |
| Vircava | Ligita | Latvia |
| Voet | Jan-Hendrik | Belgium |
| Vourdoumpa | Anastasia | Greece |
| Vukcevic | Milica | Montenegro |
| Webster | Peter | Ireland |
| Windhofer | Georg | Austria |
|  |  |  |
| Jacobsen | Bo | EEA |
| Romanowicz | Agnieszka | EEA |
| Staron | Marek | EEA |
| Vanneuville | Wouter | EEA |
| Werner | Beate | EEA |
| Zal | Nihat | EEA |

1. <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/eionet-freshwater-workshop-2013> [↑](#footnote-ref-1)
2. As clarified during the presentation, the suggestion (open question) to exclude records with less than 3 samples from assessment is for nutrients, chemicals and hazardous substances and not for biology data where one data record is enough. [↑](#footnote-ref-2)
3. Interesting information on INSPIRE, relevant for the water data can be found in the following presentations of the INSPIRE Conference 2013:

<http://inspire.jrc.ec.europa.eu/events/conferences/inspire_2013/pdfs/25-06-2013_AUDITORIUM_11.00%20-%2012.00_5-Hugo%20De%20Groof_Hugo-De-Groof.pdf> (and <http://inspire.jrc.ec.europa.eu/events/conferences/inspire_2013/index.cfm/page/plenary>)

<http://inspire.jrc.ec.europa.eu/events/conferences/inspire_2013/pdfs/25-06-2013_ROOM-3_14.00%20-%2015.30_318-Robert%20Tomas_Robert-Tomas.pdf> [↑](#footnote-ref-3)
4. The draft biology indicator report contains more information, e.g. on the normalisation of EQR values:

<http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/copenhagen-eionet-workshop-september-2013/documents/background-documents/biology-assessment> [↑](#footnote-ref-4)
5. Some national systems were also proposed as an alternative to the name of substances, but for the applicability on European scale a European system has to be in place. [↑](#footnote-ref-5)
6. See also the 2009 guidance document, where the more is information on the representativity of monitoring stations can be found in section 2: <https://circabc.europa.eu/sd/a/230cff2b-457e-4436-b9a2-3a467d181d5e/SOE%20guidance%20document%20final%20by%20NFPs%20Feb%202009.pdf> or <http://forum.eionet.europa.eu/nrc-eionet-freshwater/library/reporting_eionetwfd/guidance_2009pdf> [↑](#footnote-ref-6)