# 2013 Freshwater Eionet Workshop - 19/20 September 2013, Copenhagen

## Session 2: Data quality and aggregation

## Document 2c: Quality and representativity of SoE Hazardous substances: Hazardous Substances data report and country reviews – consequences for reporting and data publication by Vit Kodes, ETC/ICM

### Background

The [ETC/ICM Technical Report 1/2013](http://icm.eionet.europa.eu/ETC_Reports/HazardousSubstancesInWater_2013) is a complementary report to the European Environment Agency (EEA) Report No. 8/2011 – Hazardous Substances in Europe’s Fresh and Marine Water. This is the first attempt to compile the SoE data on selected hazardous substances ever written.

The aim of the report is to provide information on the status of the ETC/ICM hazardous substances database, SoE data availability and the occurrence of hazardous substances throughout Europe including spatial and temporal changes.

The report provides a systematic summary presentation of the data giving a quick overview of the state and availability of hazardous substances State of Environment (SoE) data, occurrence, concentrations levels and trends over time as well as “traffic light indicators” at country level by comparisons with quality standards, where applicable. These overviews are considered useful for a compact display of the thousands of data records for each substance, but should not be seen as an assessment of the situation between the reporting countries.

The SoE data reported to the EEA do not fully represent all of the national data to this topic, but they should provide a representative overview of the water quality in each member country of the European Environment Agency.

The groundwater and river data are solely based on SoE data and reflect the current status of the SoE dataflow and the resulting ETC/ICM database on hazardous substances. The marine chapter is partly based on SoE data, partly on Marine Conventions’ (OSPAR and HELCOM) data. Lake data were for the time being excluded from the compilation due to data quality issues.

This report is planned to be a periodical Technical Report updated every second year. The next issue of this report will cover the new period 2002–2011, including lake data. The quality of the hazardous substances data will be improved due to the on-going thorough QA/QC procedures within State of Environment (SoE) data reported to the European Environment Agency and communication with respective national reference centers (NRCs) from member countries.

### Comments provided by countries

13 countries participated in commenting in 2012:

AT, CH, CY, DE, FR, GR, LV, NL, PL, SE - rivers

AT, CH, CY, SE, - groundwater

HR, IS, PL, UK - marine

12 countries participated in commenting in 2013:

 DE, FI, FR, RO, SE, SI - rivers

 AT, CH, CY, DE, DK, FR, GR, IE, SI - groundwater

 DE, SE - marine

### Consequences for reporting

* Preference of disaggregated data - rivers, lakes
* Total x dissolved concentrations identification (metals) - rivers, lakes, groundwater
* Provision of supportive determinand for cadmium (hardness) - rivers, lakes
* LOQ specification in aggregated data - rivers, lakes
* Provision of threshold values - groundwater

### Consequences for data publication

* Assessment based on disaggregated data (preferably) and aggregated data where disaggregated data not available instead of aggregated data publication - rivers, lakes
* Separate assessment for total and dissolved concentrations (metals) instead of a combined assessment for both types of concentrations - rivers, lakes, groundwater
* How to handle missing supportive determinand for cadmium (hardness) - rivers, lakes?
* How to handle missing LOQ in aggregated data - rivers, lakes?
* Assessment based on either threshold values or drinking water standards - groundwater
* Station data presentation in the maps instead of country aggregated maps - groundwater

### Questions to NRCs

1. Are countries willing to report disaggregated HS data for rivers and lakes?
2. Are countries willing to report national threshold values for groundwater per station?
3. Are countries willing to update the HS dataset for rivers, lakes, groundwater with regard to total and dissolved concentrations of metals?

Questions 1 and 2 have consequences for SoE reporting sheets in case of positive NRC‘s answers.

### N.B. see also the more general document 2a with some examples on HS