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

## Session 1: Use of the data, integration and DPSIR assessment

### Document 1b(2): Assessment of biological data and integration with other data flows in a DPSIR-framework by Anne Lyche Solheim, ETC/ICM

###  Background

The State of Environment (SoE) biological data reported since 2011 include status and ecological quality ratio for the biological quality elements phytobenthos and macroinvertebrates in rivers and phytoplankton and macrophytes in lakes. In addition, selected metrics from lakes are included (e.g. proportion of cyanobacteria). WISE maps based on these data are available at (<http://www.eea.europa.eu/themes/water/interactive/biological-water-quality-in-rivers>), and a first draft assessment has been produced and will be updated and made available before the EIONET workshop. The draft assessment will include discussions related to the WFD biological quality elements, in terms of geographical data coverage, and what the indicator can tell compared to the WFD ecological status reported in the RBMPs.

The added value of the biological indicators is the links to specific pressures (e.g. nutrients or organic pollution), and that they can illustrate trends after some more years of reporting. Moreover, coupling to other types of data (e.g. emissions, nutrients, organic matter, bathing water quality, resource efficiency) can be used to explore pressure-status-impact-response relationships, in which the biological indicators represent the status and impact part. The biological data can also be further explored in terms of links to biodiversity and ecosystem services.

### Items for discussion and questions to NRCs

1. Are you familiar with the current WISE maps showing the biological indicators, and if relevant, do you have comments and suggestions for improvements of the indicators?
2. Are the biological results shown for your country compatible with relevant national assessments?
3. Do the spatial differences across Europe make sense relative to pollution pressures and water quality?