What kind of pressure-response relationships were used?

- YES:
 - regression: NO (PP: lakes, PB&MZB: rivers), NL (PP: lakes, PB&MZB: rivers), UK (PB&MP: rivers),
 - categorical: IE (only MZB), LT (PP, MZB, FI: lakes; PB&MP, MZB, FI: rivers)
- NO:
 - BE (WL) \rightarrow statistical
 - BE (FL) \rightarrow expert judgement
 - UK \rightarrow expert judgement for lakes
 - HU \rightarrow expert judgement (refinement process using biological data)*
 - PL \rightarrow expert judgement (plans to use pressure-impact relationships)*
 - LV \rightarrow expert judgement
- *Validated (how?) by biology: Hungary, Poland
- Lumping biological types (to increase the pressure gradient, assuming similar pressure-impact relationship)
- 2 step process: setting thresholds, interpreting WB score (from observed values)

What are the main obstacles for not using pressure-response relationships ?

- lack of data, short pressure gradient
- Political reasons: convenience (referring to old, established standards)

What are the main difficulties to using pressure-response relationships ?

- Noisy datasets (due to multiple pressures)
- → R² above a certain value to use pressure-impact relationships; equivalent necessary for categorical approach

If pressure-response relationships were used, how can the results be interpreted?

How to deal with uncertainty, particularly for rivers?

- Define uncertainty (incl. critical R²-values)
- MS should chose value within this range of uncertainty
- Document reasons of choice
- Our guidance should provide arguments for pros and cons of different nutrient boundary setting

Part 2: Relating specifically to the findings of the report on pressureresponse relationships

•What is the opinion of the participants on the approaches proposed in the report?

- Can these approaches be used to set nutrient boundaries to "good" biological boundaries?
- Can these approaches be used to check the correspondence of the MS boundaries to "good" biological boundaries?
 - <u>Need for guidance</u>: no comparison of national boundaries but devising methodological approach
 - Comments by end of February to be amended for April ECOSTAT
 - Paragraph in the conclusions (summary of main principles towards designing a guidance)

\rightarrow Keeping the momentum !

Part 3: the way forward ...

- Finalize current report until ECOSTAT in April 2016
- Produce guidance (setting up working group incl. volunteering MS) in 2016
- Provide tools (e.g. R scripts) to implement guidance
- Helping MS to apply guidance (in the context of a technical workshop) in 2017

Additional consideration

Do not forget to define appropriate nutrient values for reference (high status)!