

Part 1: Relating to pressure-response relationships in general and approaches used by MS

- Focus on TP and TN for most countries
- Mainly for Phytobenthos, plankton and macrophytes
- linear regressions , categorical approaches, modelling,, even multivariate approaches;
- Often in combination with expert judgement
- Often other factors besides nutrients looked at in parallel
- Databases often insufficient to establish satisfactory relationships
 - expert judgement, especially at the beginning
 - “Evolution” of approaches in most countries (from Expert judgement through various statistical approaches)
- Lakes easier than rivers (rivers often problematic →solved by expert judgement)
- Political/communication issues involved in some cases
- International collaboration proved to be helpful (like IC)
- Changes in types sometimes call for revisions of nutrient relationships

Part 2: Relating specifically to the findings of the report on pressure-response relationships

- What is the opinion of the participants on the approaches proposed in the report?
 - Focus on regression
 - No inclusion of references
 - More details on categorical approach needed
 - “Biased” by lakes; more difficult for rivers (more scatter)
 - Further approaches for non linearity or low R relationships needed
 - Main question: What to do with the boundary values not covered yet
 - Instead of Top down (starting with boundaries to what to do), Bottom up needed (what are the values needed for)
 - Differentiation between assessments and actions needed
 - Statistics are descriptive – more emphasis on the underlying causes and mechanisms needed
 - Circularity is possible but mostly not influential (BQR boundaries set by biological approaches)
 - More work needed for rivers
- Can these approaches be used to set nutrient boundaries to “good” biological boundaries?
 - Generally yes but other approaches needed for weak relationships
→ especially when more detailed typology is applied with fewer points
 - Data might be of limiting quality representativeness needed – not achieved yet by all countries
 - More emphasis on special situations/types instead of statistics to get more precise results (results inherently imprecise anyway)
Biology is always a reflection of nutrients + **other factors** -> nutrient boundaries not directly comparable

Part 3: the way forward ...

- To establish working group on harmonization ? (developing / testing approaches)
 - Principally yes
 - Capacity building is important (increase the knowledge of everyone)
 - Should be a more technical group than a harmonization group
 - Two goals:
 1. supply method manual to support the work within countries,
 2. central data processing to get further with the general ideas / problems
 - Solution for all cases needed (e.g. low R), last resort might be expert judgement, but still a common view would be needed)
- Should we consider the option of setting standard across countries?
 - More data will have to be compiled
 - Inclusion of how the boundaries are used by the countries is necessary
 - Collaboration between countries needed, but mandatory harmonisation (like for IC) is problematic (e.g. due to specific situations), should be initiated by the countries (bottom up instead of top down);
 - Top down recommendations are welcome nevertheless
 - ➔ Control should remain within the countries
- Are you prepared to contribute to and participate in these exercises?
 - Principally yes, but depends on commitment needed
 - Further results should be achieved within 1 year (manual), 1 more year for applying it and 1 more year for looking at the consequences