

The exemptions regime of the EC Water Framework Directive: A method for justifying „less stringent environmental objectives“ with „disproportionality of costs“



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Overview

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Introduction: Problem and Objectives

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Method: “The New Leipzig Approach”

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A Case Study from Germany

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Summary and Outlook

Art 4.5 WFD: Exemptions

- WFD general objective: To achieve “good status” in all surface and groundwater bodies by 2015
 - “Extension of deadline” beyond 2015 (by 2021, 2027)
 - “Less stringent environmental objectives” if the achievement of good status is technically “infeasible” or “disproportionately expensive”.
- **Current situation of European waters**
 - Germany: Only 18% of surface waters will reach “good status” by 2015 (BMU 2010)
 - Europe: Less than 50% (EEA 2012)
- **The question is:**
 - How to define and justify disproportionality of costs in the context of Art. 4.5 WFD?

German research project 02/2014-01/2015

- Commissioned by LAWA-German Working Group on Water Issues of the Federal States and the Federal Government
- Conducted by UFZ Leipzig
- **State of research**
 - Currently no well-established, wider applicable method for testing disproportionality exists in Europe (Klauer et al. 2015).
- **Research objective**
 - To develop a method for justifying less stringent environmental objectives with disproportionality of costs for **surface water bodies**

How to interpret „disproportionality“?

?

Costs

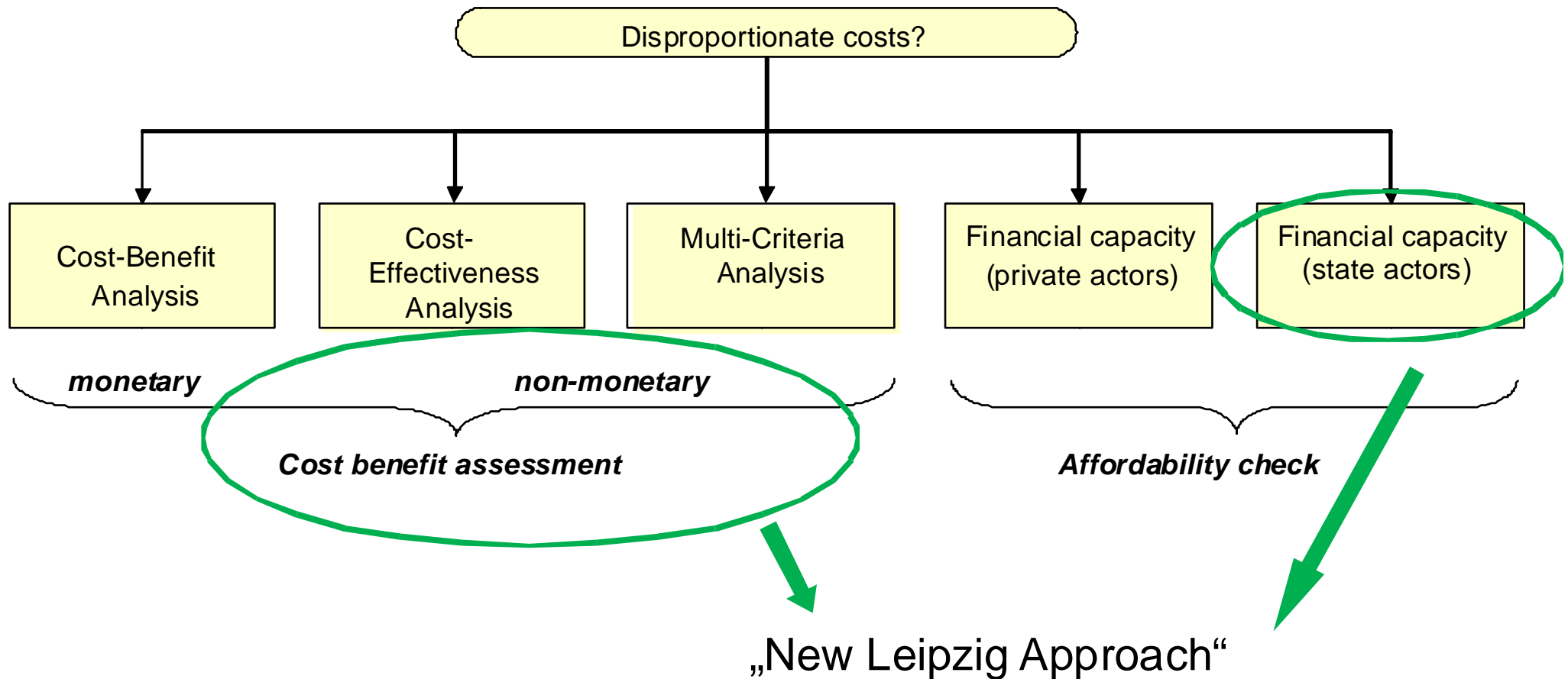


(i) Benefits

(ii) Affordability (ability to pay)

- of state actors (EU member states, German federal states)
- of private actors or sectors

Approaches for economic evaluation



Which types of benefits are considered?



“New Leipzig Approach”

Preliminary Steps (on the level of federal states or member states)

Step 0-1: Identification of water bodies to be checked for disproportionality of costs

Step 0-2: Calculation of nationwide longtime past average state expenditures for water protection [€/km²/yr] → reference cost threshold
(affordability)

Main Steps (on the level of water bodies)

Step 1: Estimation of **cost** of measures to achieve good status by 2027

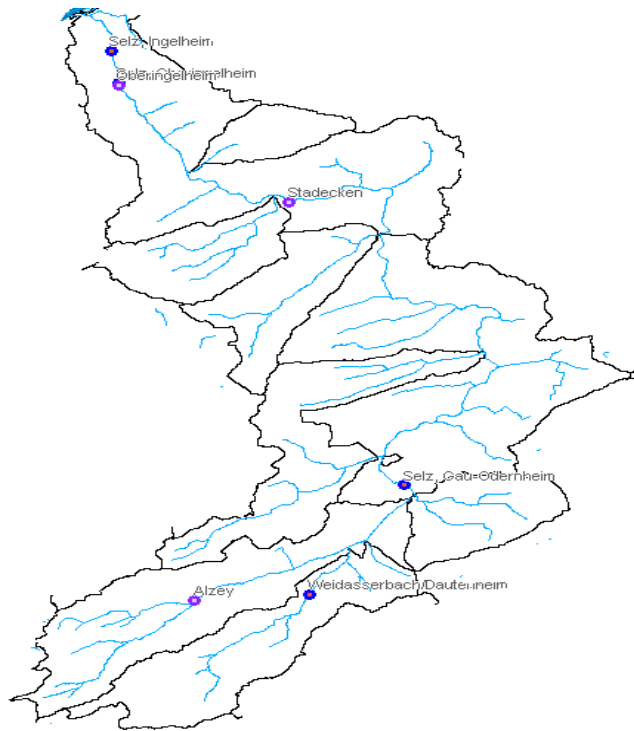
Step 2: Calculation of **cost threshold** for disproportionality:

- Relate the value of step 0-2 to specific water body area [km²]
- Increase this cost threshold according to the waterbody-related **level of benefit** of measures by the help of a “formula“

Step 3: **Comparison** of costs and threshold

→ Appraisal of (dis-)proportionality

River in Rhineland-Palatinate



- Tributary to Rhine river
- Catchment area: 375 km²
- 7 surface water bodies (thereof 6 HMWB)
- Main problems:
river morphology
phosphate → eutrophication
- **Costs** of programme of measures to achieve good status/potential by 2027: 79 Mio €
- **Cost threshold:** 58 Mio €
- Result: Disproportionality is justified



The „New Leipzig Approach“ is...

- applicable for all (groups of) surface water bodies
- pragmatic (low requirements regarding data and time/effort)
- transparent, comprehensible, verifiable
- a method (inherently consistent) which needs political agreement and determination

Outlook

- To test the „New Leipzig Approach“ on the basis of further case studies in Germany and Europe
- To develop a similar methodology for groundwater bodies

Thank you for your attention!

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