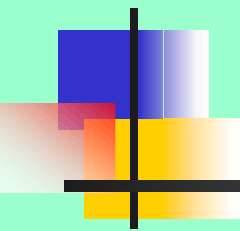


How close are we in the Water Framework Directive's Implementation ?

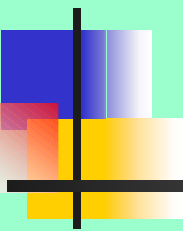


Paul C.M. Frintrop

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Ministry of Transport, Public Works and Water
Management – The Netherlands

Pilot Program for the Implementation of the UN/ECE – Guidelines on Monitoring and Assessment of Transboundary Rivers



Identification and review of
Water Management Issues

Bug – Morava – Mures/Maros

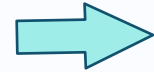
Identification of
USES/FUNCTIONS

CRITERIA / TARGETS
for functions/uses and issues

WATER LEGISLATION
incl. classification systems

INVENTORY
of available information

SURVEYS
if information is lacking



**ANALYSIS OF WATER
MANAGEMENT ISSUES**



**INFORMATION
NEEDS**



STRATEGIES
for Monitoring and Assessment



RECOMMENDATIONS
for improvement





WFD - consideration 35

This directive is to contribute to the implementation of ... , notably the **UN Convention on the protection and use of transboundary water courses and international lakes**



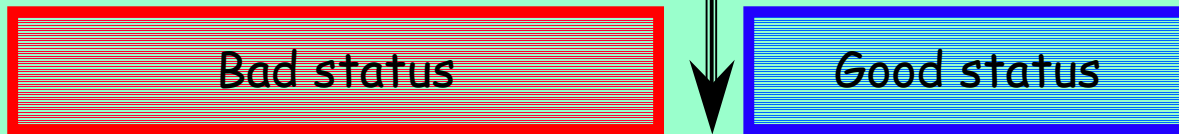
EU-WFD in a nutshell

- Goal: Ecological restoration of river basins
- Measures:
 - reducing of discharges
 - morphological adaptations
- Action: River Basin Management Plans
- Progress: Monitoring of relevant parameters
- Ready: 2015-12-22

Ecological assessment (EU Water Framework Directive) classification & presentation

Water-quality status = Chemical status + Ecological status / potential

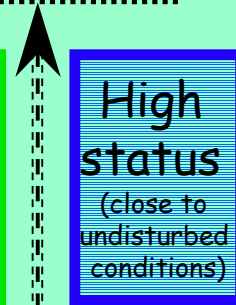
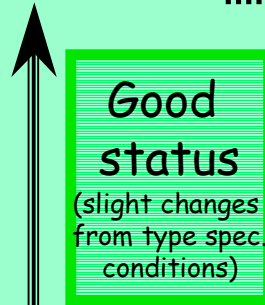
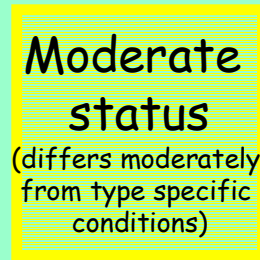
Chemical status



yardstick →

biotic elements →

abiotic elements →



Ecological status

target status

max. ecol. potential

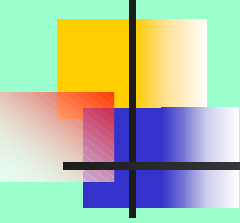
reference



Good Chemical Status

Compliance with **all** the **E**nvironmental **Q**uality **S**tandards (= **EQS**):

- **Annex 9** (= Hg, Cd, HCH, + Dangerous Substances Discharges Directive)
- **Annex 10** (= Priority (Hazardous) Substances)
- **Other** chemical pollutants discharged in significant quantities



Physico-chemical Quality Elements

Specific synthetic pollutants:

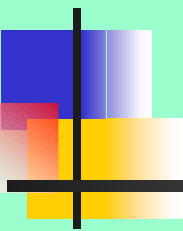
- **Good status:** concentrations not in excess of the Environmental Quality Objectives
- **High status:** concentrations close to zero and **at least** below the limits of detection of the most advanced analytical techniques in general use (Annex 5)



Shifting targets ?

The Commission shall review the adopted list of priority substances at the latest **4** years after the date of entry into force and at least every **4** years thereafter

How close are we in the
Water Framework Directive's
Implementation ?



How close are we to the
Horizon ?



Some results of the 3 pilots

- Good co-operation between the riparian countries in writing their combined reports
- Consensus about the ecological function
- Clear descriptions of the main problems and causes



Some results of the 3 pilots

The main problems are:

- insufficient (collection and) treatment of waste water
- diffuse input of N and P
- in some cases also the discharges of heavy metals (mining)



Some results of the 3 pilots

- Incomplete picture of the occurrence of priority (hazardous) substances, due to time differences of the surveys (1999) and the proposal for Annex X (2000)

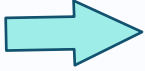
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Conclusions

- The established good co-operation between the riparian countries for implementing the UN/ECE – Guidelines is a solid basis for implementing the Water Framework Directive



Conclusions

- The UN/ECE – Guidelines on Monitoring and Assessment of Transboundary Rivers offer much more than its title suggests:
- The water management analysis is also a backbone for the WFD – River Basin Management Plan.