Groundwater Common Implementation Strategy for the WFD – Current status and prospects

Johannes Grath
Outline of the presentation

- Common implementation strategy – GW related activities in the past
- Blueprint to safeguard EU Waters – GW related issues
- Elements of next mandate for WG Groundwater
- Way forward – next steps
Groundwater CIS Guidance

No 02: Identification of Water Bodies (2003)
No 15: Groundwater Monitoring (2007)
No 16: Groundwater in Drinking Water Protected Areas (2007)
No 17: Preventing or Limiting Direct and Indirect Inputs (in context of GWD) (2007)
No 18: Groundwater Status and Trend Assessment (2009)

Groundwater Techn. Reports

No. 1: Groundwater trends (2001)
No. 2: Groundwater characterisation (2004)
No. 3: Groundwater monitoring (2004)
No. 4: Groundwater risk assessment (2004)
No. 6: Groundwater Dependent Terrestrial Ecosystems (2012)
Blueprint to safeguard EU Waters

The Blueprint’s policy recommendations are based on the results of the following assessments.

1. Analysis of the WFD’s river basin management plans:
   - giving information on how Member States have improved their water management.

2. Review of the 2007 policy on water scarcity and drought:
   - including water efficiency measures.

3. The evolution of water resources:
   - water’s vulnerability to climate change and man-made pressures such as urbanisation and land use.

4. Outcome of the fitness check of EU freshwater policy:
   - a gap analysis to identify any uncovered areas and assess the adequacy of the current framework.
Blueprint – selected results

Distribution of chemical status of groundwater, rivers, lakes, transitional and coastal waters.

- **Rivers** (104,176)
- **Lakes** (19,037)
- **Transitional** (1,010)
- **Coastal** (3,027)
- **Groundwater (area)**

Legend:
- Poor status
- Good status
- Unknown status
Figure 8.8.1: Percentage of GWBs achieving good, poor or unknown chemical and quantitative status
Source: WISE
Percentage of GWB area per RBD not achieving good chemical status

- < 10 %
- 10–30 %
- 30–50 %
- 50–70 %
- 70–90 %
- ≥ 90 %
- No data

RBDs with unknown area of groundwater bodies (count instead of area used) are hatched

Percentage of GWB area per RBD not achieving good chemical status due to nitrates

- < 10 %
- 10–30 %
- 30–50 %
- 50–70 %
- 70–90 %
- ≥ 90 %
- No data

RBDs with unknown area of groundwater bodies (count instead of area used) are hatched
GW-Bodies in Europe

Total number and average size of GWBs in EU 27

Number of GWBs

Average size of GWBs [km²]

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I. Blueprint recommendation (GW)

*Groundwater dependent ecosystems and Groundwater associated surface water bodies*

- MS should share and exchange experience gathered so far regarding:
  - interconnections between groundwater and the ecosystems
  - the needs of the ecosystems

- Knowledge gaps - to be filled with appropriate studies to inform the RBMP process
II. Blueprint recommendation (GW)

Threshold values
- Methodologies transparent and better harmonised among Member States

Drinking water protected areas
- Information on the status should be included in the RBMPs

Trend assessments
- Should be completed in the second RBMP cycle

Trend reversal assessment
- Should be implemented as far as data series allow
Groundwater threshold values

Figure 8.8.2: Different approaches for deriving groundwater threshold values (TV) considering natural background levels (NBL) and criteria values, leading to considerably different TVs.

Note: Criteria value is the concentration of a pollutant, not taking into account any natural background concentrations, that if exceeded may lead to a failure of the good status criterion concerned.

Source: Background document "In-depth assessment of the differences in groundwater threshold values established by Member States"
III. Blueprint recommendation (GW)

*Improve datasets on water quantity, water availability and demand trend projections*
- to be able to develop **coherent** and **effective sets of measures**

*Water pricing policies*
- Ensure the transparency and fairness and base them on **metering**

*Balance between recharge and abstraction of groundwater*
- **Methodologies** for calculation should be **transparent** and **better harmonised** between Member States. **Ecological flow** should be **considered**.

*Delineation and reporting of groundwater bodies*
- Should be better harmonised
- Reasons for different approaches should be clarified and related guidance documents should be improved, if necessary
CIS Organisation 2013-2015

Water Directors
Steering of implementation process
Chair: Presidency, Co-chair: Commission

Strategic Co-ordination Group
Co-ordination of work programme
Chair: Commission and MS (tbc)

Prep-SCG
Science-Policy Interface activity
Lead: COM, FR

Art. 21 Committee

Working Group “Ecostat”
Lead: COM, DE, UK

Working Group “E-flows”
Lead: COM, ES, FR

Working Group “Groundwater”
Lead: COM, AT, UK

Working Group “Chemicals”
Lead: COM, IT, RO

Working Group “Programmes of measures”
Lead: COM, MT, EL

Working Group “Floods”
Lead: COM, IE, SE

Working Group “Agriculture”
Lead: COM, UK

Working Group “Data and Information Sharing”
Lead: COM-EEA, DE

Working Group “Economics”
Lead: COM, FR, UK

Knowledge Integration and Dissemination Cluster

WG Groundwater Mandate Period 2013–2015

Main Tasks

i. Continuous consultation on the review of GWD Annexes I and II.

ii. Groundwater (GW) -dependent ecosystems – to continue discussion of GW dependent terrestrial ecosystems and to start discussion of GW-dependent aquatic ecosystems – elaboration of recommendations

iii. Drinking water – better integration in River Basin Planning and Management. Risk assessment in the catchment area (contributing to water safety plans), monitoring and data access/exchange in collaboration with Drinking Water Committee.
WG Groundwater
Mandate Period 2013–2015

Other Tasks

iv. Groundwater threshold values derivation – approaches and criteria under particular consideration of relevant receptors;
v. Information exchange on MS trend assessment and reversal methodologies
vi. Exchange of information related to groundwater use, groundwater availability and groundwater abstraction, e-flows (considering water scarcity and droughts), metering, water efficiency, water pricing etc.
vii. Proposal on future reporting of delineation & assignment of GW-bodies to horizons

Interlinkages with other WGs: Ecological Status, Chemical, Agriculture
Way forward – next steps

- GWD Annex I & II review
  - Public consultation – Online questionnaire (until 2013, 22nd Oct)
    http://ec.europa.eu/yourvoice/ipm/forms/dispatch?form=GWDdirective
  - Conference in Brussels: 2013, 9th October
    - Registration until: 2013, 27th September
Contact & Information

Johannes Grath
Johannes.grath@umweltbundesamt.at