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

Johannes Grath

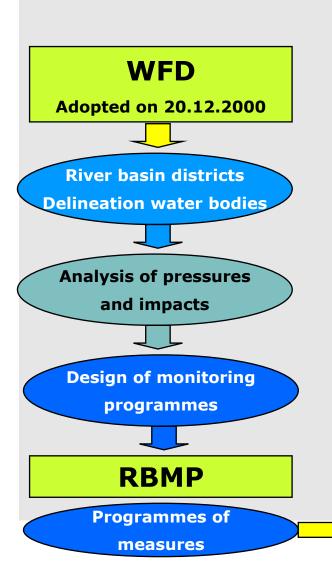


## **Outline of the presentation**

- Common implementation strategy GW related activities in the past
- Blueprint to safeguard EU Waters GW related issues
- Common implementation strategy new structure for 2013–2015
- Elements of next mandate for WG Groundwater
- Way forward next steps



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#### **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)

No 26: Risk Assessment and the Use of Conceptual Models for Groundwater (2010)

### **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)





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## **Blueprint to safeguard EU Waters**

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

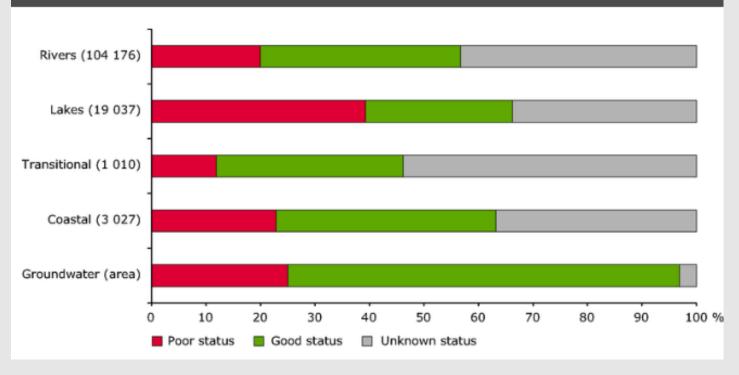
- 1. Analysis of the WFD's river basin management plans:
  - giving information on how Member States have improved their water management.
- 2. Review of the 2007 policy on water scarcity and drought:
  - including water efficiency measures.
- 3. The evolution of water resources:
  - water's vulnerability 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**

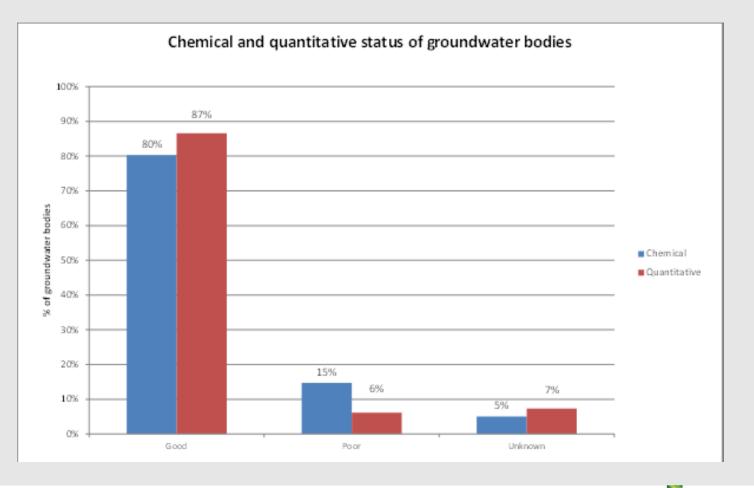
Distribution of chemical status of groundwater, rivers, lakes, transitional and coastal waters.







### **Blueprint – selected results**

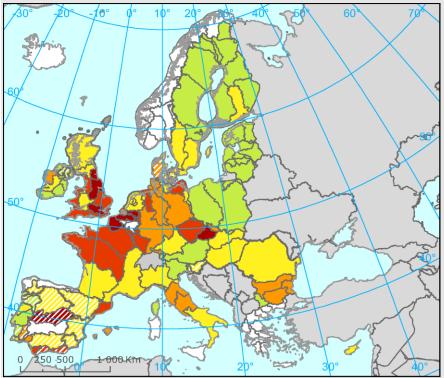


**Figure 8.8.1**: Percentage of GWBs achieving good, poor or unknown chemical and quantative status **Source:** WISE

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#### Percentage of GWB area per RBD not achieving good chemical status



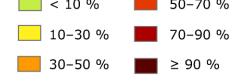
### Percent of classified groundwater bodies with poor chemical status < 10 % 50-70 % No data

RBDs with unknown area of

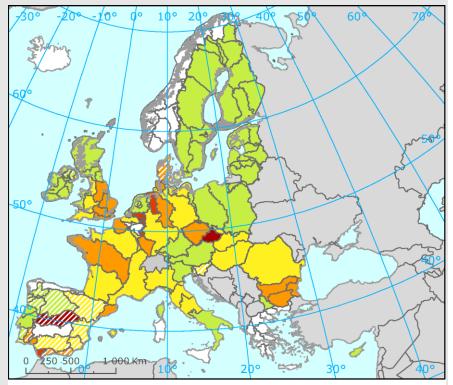
groundwater bodies (count

instead of area used) are

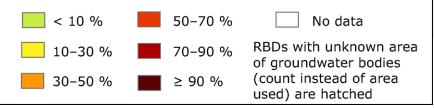
hatched



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



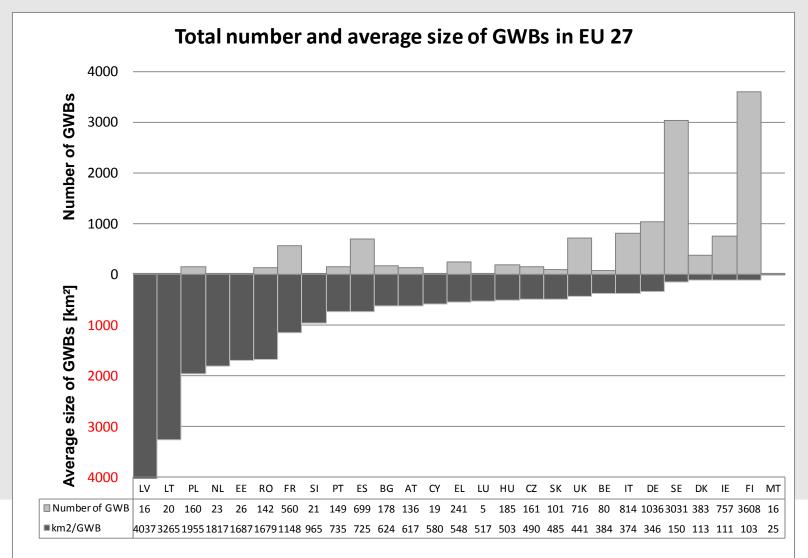
#### Percent of classified groundwater bodies with poor chemical status due to nitrates





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### **GW-Bodies in Europe**





# 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





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# **II. Blueprint recommendation (GW)**

#### Threshold values

 Methodologies transparent and better harmonised among Member States

#### Drinking water protected areas

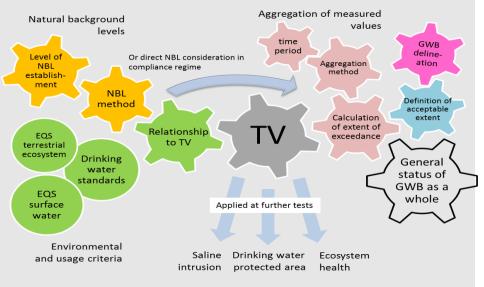
 information on the status should be included in the RBMPs

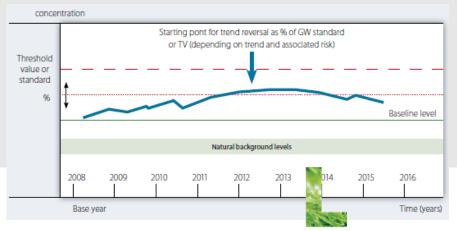
#### Trend assessments

 should be completed in the second RBMP cycle

#### Trend reversal assessment

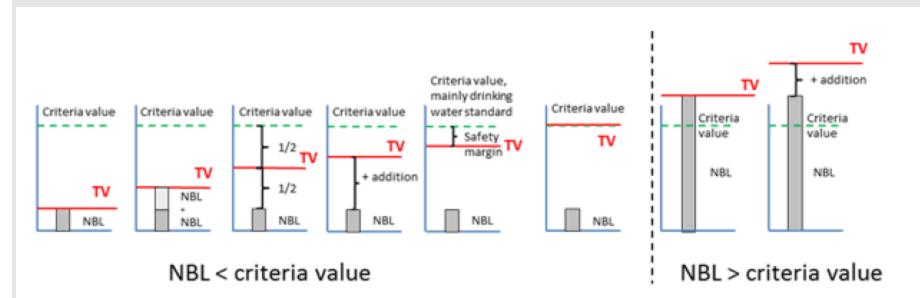
 should be implemented as far as data series allow





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### **Groundwater threshold values**



TV ... Groundwater threshold value; NBL ... Natural background level

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"

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# **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



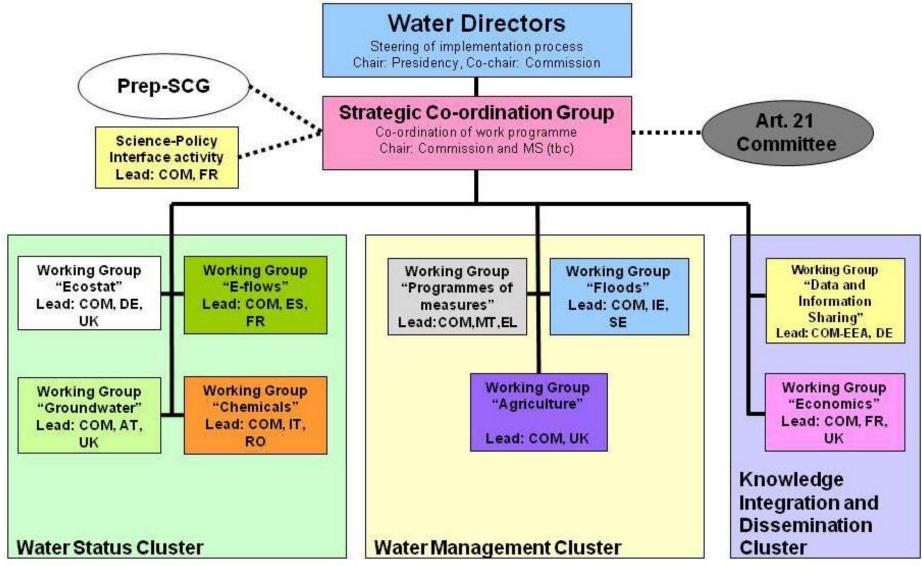
#### Balance between recharge and abstraction of groundwater

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
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### CIS Organisation 2013-2015



Source: http://ec.europa.eu/environment/water/water-framework/objectives/implementation\_en.htm

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### WG Groundwater Mandate Period 2013–2015

#### Main Tasks

- i. Continuous consultation on the review of GWD Annexes I and II.
- Groundwater (GW) -dependent ecosystems to continue discussion of GW dependent terrestrial ecosystems and to start discussion of GWdependent 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.



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### 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

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## Way forward –next steps

#### GWD Annex I & II review

- Public consultation Online questionnaire (until 2013, 22nd Oct) <u>http://ec.europa.eu/yourvoice/ipm/forms/dispatch?form=GWDdirective</u>
- Conference in Brussels: 2013, 9th October
  <u>http://bunch.arcadisbelgium.be/groundwater\_conference\_2013/</u>
  - Registration until: 2013, 27th September





## **Contact & Information**

Johannes Grath

Johannes.grath@umweltbundesamt.at

Umweltbundesamt www.umweltbundesamt.at Groundwater Systems in Europe Berlin • 22 August 2013



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