



Summary of Member State Questionnaires on HMWB

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HMWB workshop preparation

1. **HMWB questionnaire to all MS (Dec 08-Jan 09)**
 - **Gather up-to-date information on status of HMWB designation & GEP definition in MS**
 - **Replies: 21 MS + NO (missing: FI, DK, PL, IT, EL, MT)**
2. **Drafting of WS discussion paper**
 - **Questionnaire summary to support WS discussions**
 - Simple statistics on HMWB
 - Summary of criteria and methods used across EU
 - **Proposal of questions for discussion**



Content of presentation

- **HMWB designation**
 - % of HMWB & main uses; interpretation of key terms of designation tests Art. 4.3a & 4.3b (e.g. „wider environment“, „significant adverse effects“, „other options“)
- **GEP definition**
 - Use of 2 approaches
- **Objective setting**
 - Use of main types of exemptions for HMWB

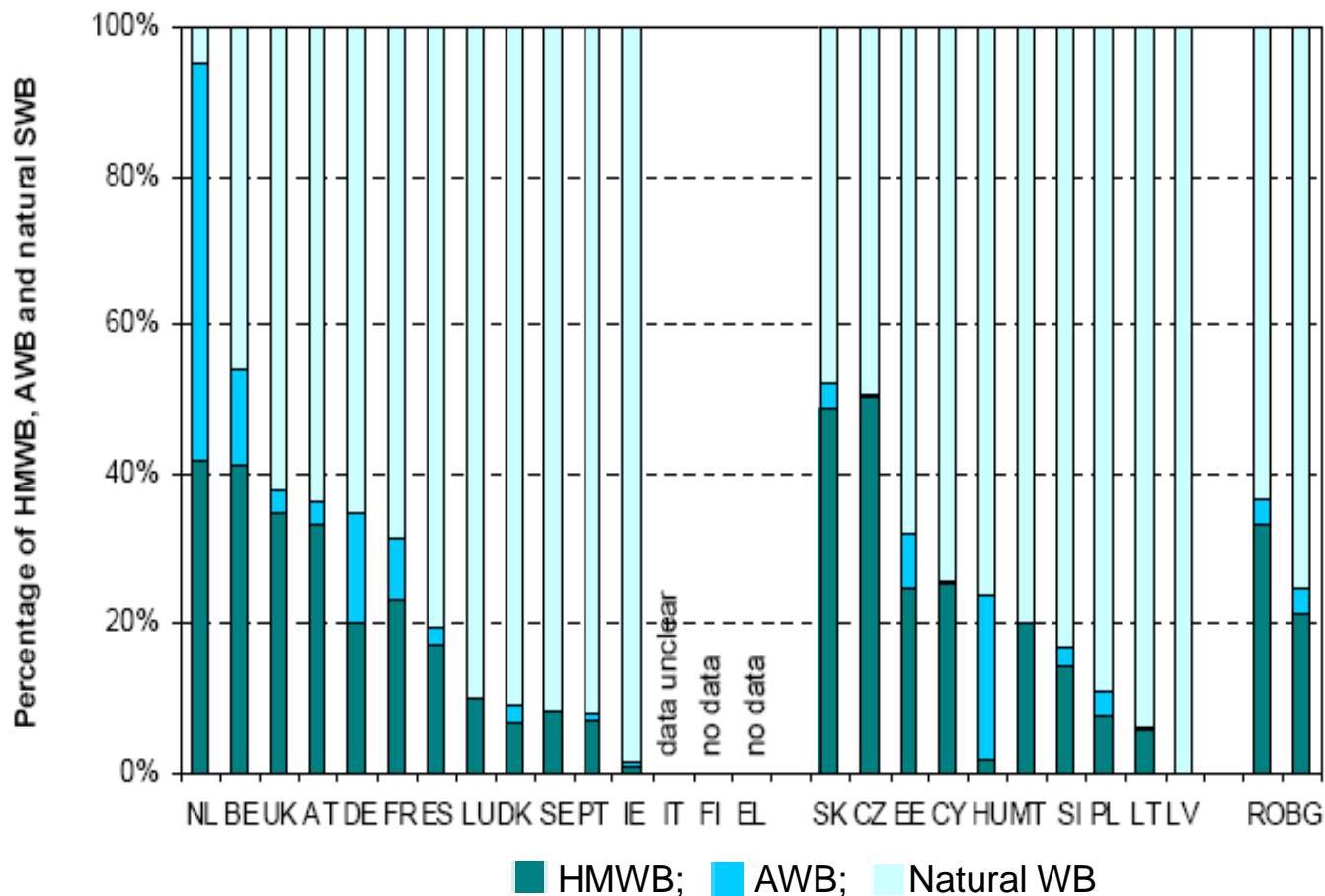


HMWB designation



HMWB provisional identification

- **> 50%**
HMWB/AWB
NL, BE, SK,
CZ
- **Other MS**
average
16%
HMWB/AWB
- **< 2%**
HMWB/AWB
IE, LV

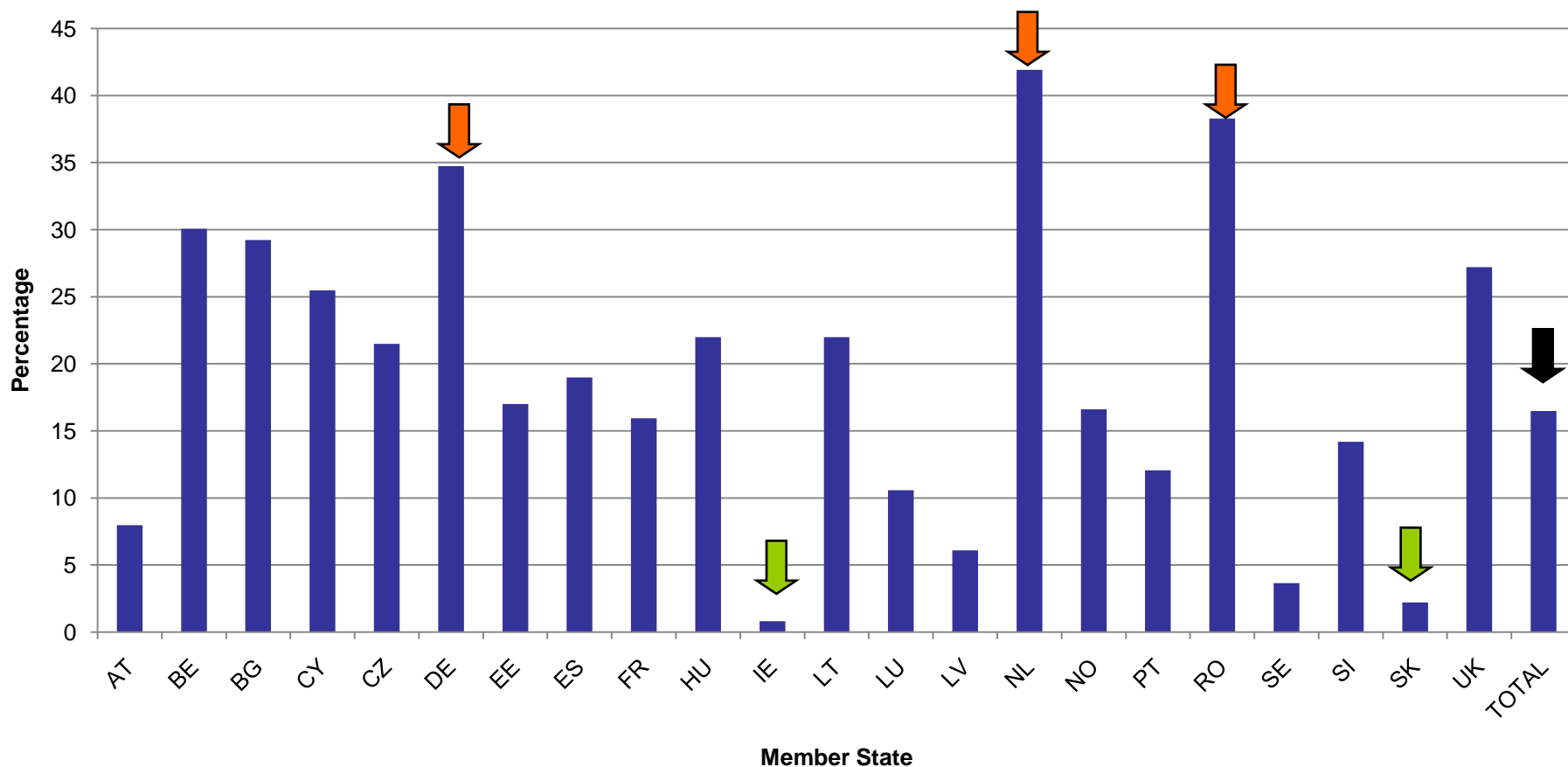


Source: EC (2007) WFD Implementation Report



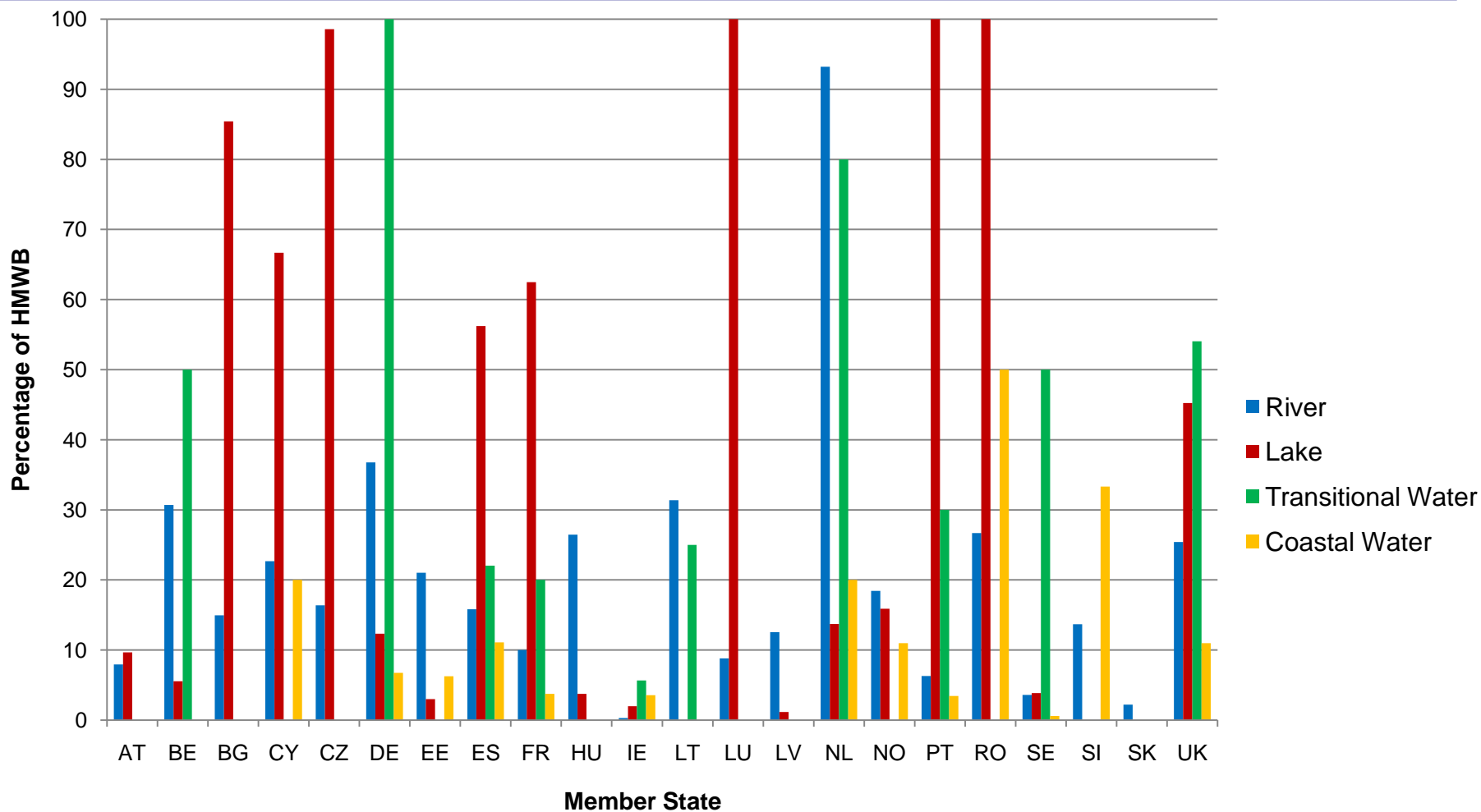
HMWB designation

Percentage of HMWBs designated in Member States



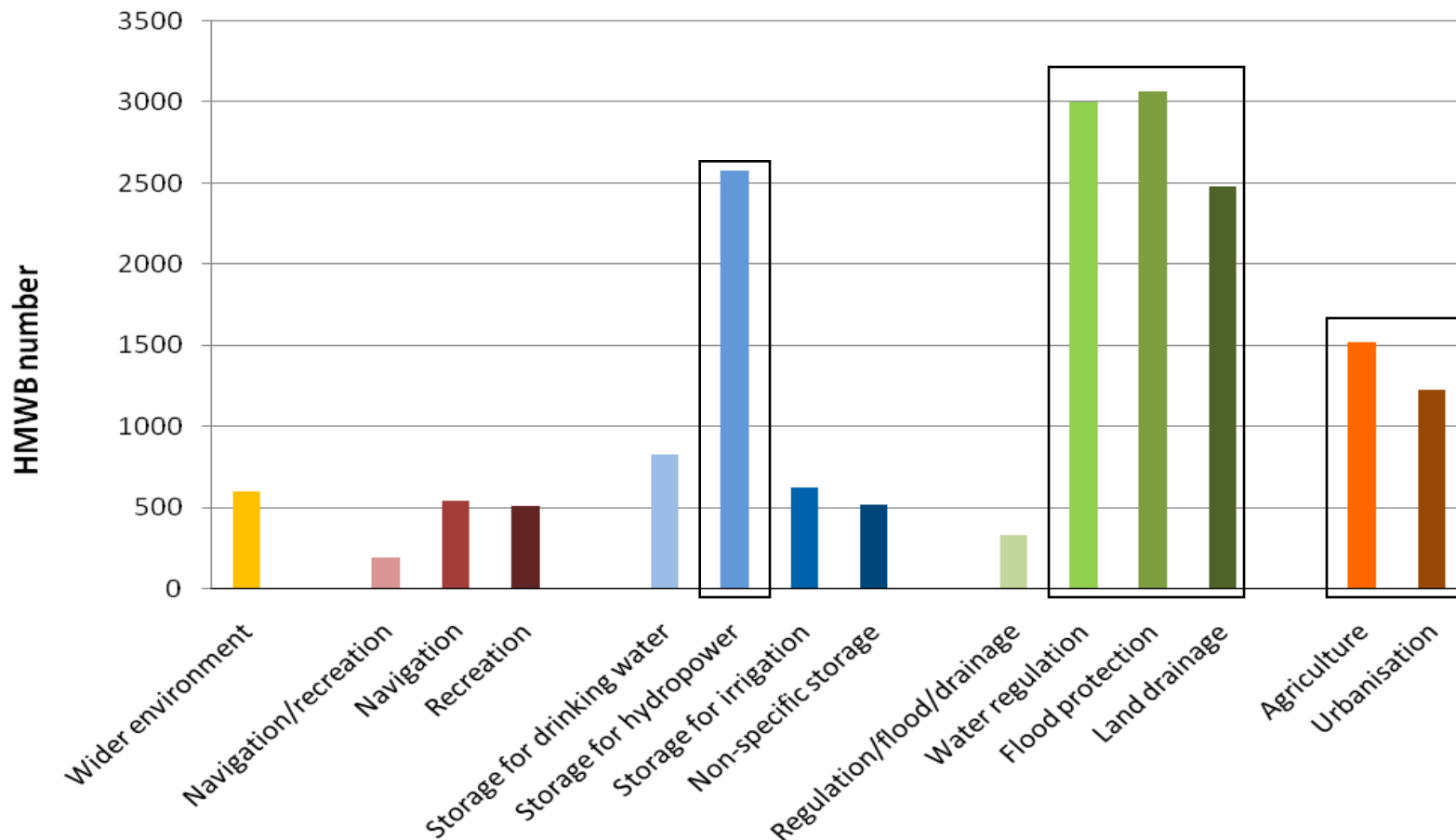


HMWB designation per water category





Water uses of designated HMWB





Regional variation of HMWB uses (I)

- **Hydropower generation:**

NO, SE, DE, AT, UK

ca. 76% of hydropower-storage-HMWB

- **Navigation & ports:**

UK, DE, ES, FR, NL

ca. 77% of navigation-HMWB



Regional variation of HMWB uses (II)

- **Flood protection:**

UK, DE, AT, CZ, NO - ca. 79% of flood-protection-HMWB

- **Land drainage:**

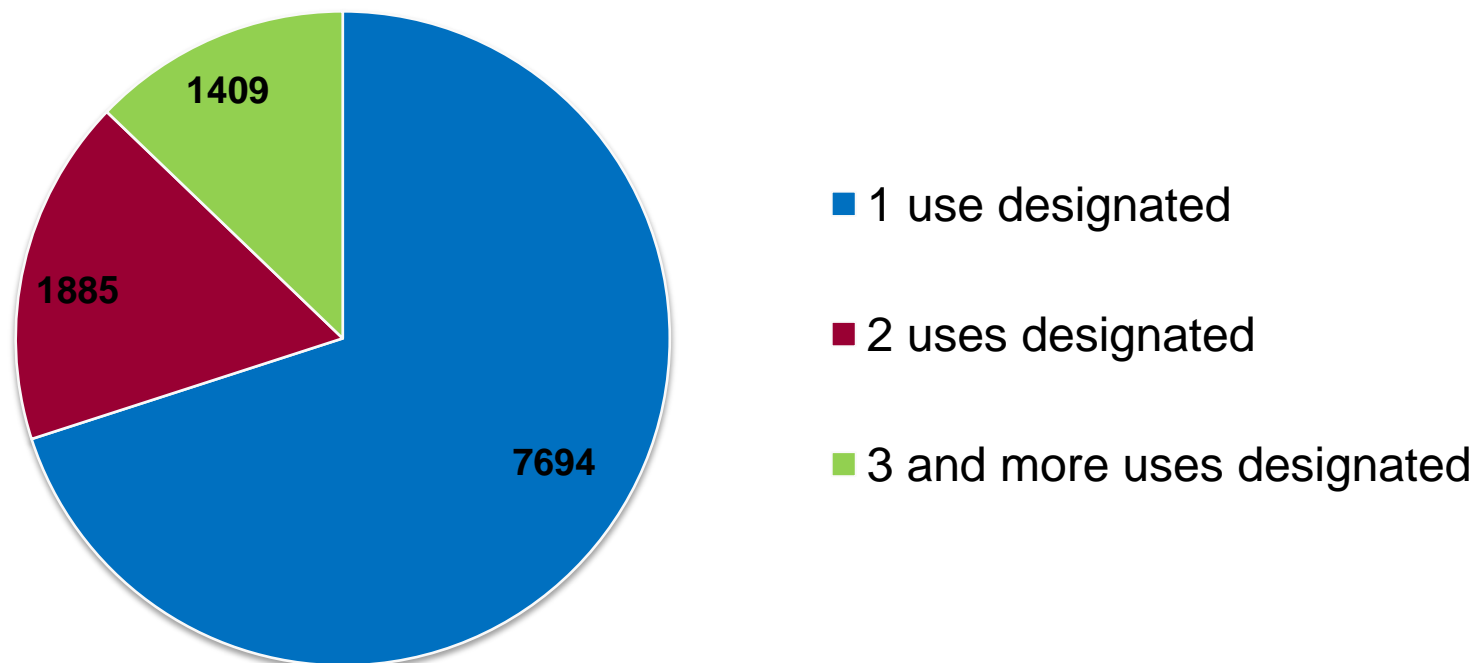
DE, UK, LT, EE - ca. 96% of land-drainage-HMWB

- **Agriculture/forestry:**

DE - 96% of HMWB due to agriculture/forestry

Multiple water uses of HMWB

Number of HMWBs differentiated according to number of uses designated





When is a WB **substantially changed in character** (Art.2.9)?

- **Very broad range** of criteria & **mix of criteria types** used (pressure-related; impact-related; use-related)
- Simple **presence of structures** as criterion, e.g. the presence of dams, dikes or ports
- **Thresholds or ranges of values**, e.g. % of WB length at worse than good status, length/area of impoundments etc
- **HyMo structure class systems** to assess alterations and substantial changes as failure of a specific class

Designation test Art.4.3a

MS may designate a WB as HMWB when:

- (a) The changes to the hydromorphological characteristics of that body which would be necessary for achieving GES would have **significant adverse effects** on:
- (i) the **wider environment**;
 - (ii) navigation, including port facilities, or recreation;
 - (iii) activities for the purpose of storage (...);
 - (iv) water regulation, flood protection, land drainage;
 - (v) **other equally important sustainable human development activities**.



What is defined as **wider environment**?

- **Natural environment:**

E.g. Protected areas (international or national); Wetlands; River ecosystems; Landscape, nature, geomorphology

- **Human environment:**

E.g. Historical heritage landscapes; (Archaeological) monuments (e.g. ancient water mills); Sites with patrimonial interest; Buildings; Social problems in case people might be affected by floods; Sanitary protection areas around water supply intakes



Equally important sustainable human development activities?

“Equally important sustainable human development activity” for which HMWB are to be designated [Art.4(3)(a)(v)]	Total number of HMWBs
Urbanisation	1517
Agriculture & forestry	1222
Other (not defined)	176
Industry	131
Coastal protection (incl. flood protection in one MS)	119
On-shore transportation	117
Non-drinking water supply	98
Infrastructure, transport (highways, railways)	86
Canalisation	71
Urban residential and commercial land use	63
Fisheries, aquaculture, agriculture (as a group)	56



Significant adverse effects (Art.4.3a)

- **8 MS developed specific criteria for assessing adverse effects of measures**
 - AT, DE, EE, HU, LV, NL, PT, RO
- **Criteria development in progress in LU, SK**
- **Expert judgment used in CZ, SI, UK**



When are adverse effects significant?

- **On wider environment**
 - **Endanger environmental status of protected areas**
 - **Reduction of area of protected habitats**
 - **Losses of wetlands**
 - **Endanger national heritage and cultural monuments**



When are adverse effects significant?

- **On specific uses**
 - **Complete loss of use**, esp. in case of storage uses
 - **Significant reduction of use**, e.g. % loss of cargo; reduction of passenger traffic; any reduction of peak load energy production
 - **Production loss or socioeconomic loss**, e.g. % loss of agricultural lands and production, increase of flood risk



Designation test Art.4.3b

MS may designate a WB as HMWB when:

- (b) The beneficial objectives served by modified characteristics of the water body cannot, for reasons of technical feasibility or disproportionate costs, reasonably be achieved by other means, which are a significantly **better environmental option**.

Better environmental options (Art.4.3b)

- **Replacement of existing use** with a better alternative
e.g. navigation with other env-friendly transport options, hydropower with other renewable energy (national level decision)
- **Displacement of existing use** to another water body
e.g. relocation of properties (flood protection), movement of recreation activities to other WBs, navigation to alternative port
- **Reduction of environmental impact** of existing use
e.g. reduction of impact of water storage by means of compensatory and ecological discharges
- **In several cases, reported that no better options could be found although alternatives were considered**



GEP definition

Approaches for GEP definition in MS

- **20% of replies:** Use of approach based on **biological quality elements** (BE, ES, LT, RO in progress)
- **30% of replies:** Use of **Prague approach** (IE, UK, NO, AT, EE, BG)
- **30% of replies:** Use of **both approaches** (FR, NL, CZ, PT, SK, DE)
- **5 MS:** **No info** relevant to GEP definition yet (LU, SI, CY, HU, SE)



Working with **biological methods**

- Mainly **existing methods adapted** for HMWB classification
- Some examples of **principles** used:
 - Adaptation of classification method by reducing class boundaries or modifying metric calculation method
 - Systems developed for most resembling natural water body type
 - E.g. good status of natural lakes=GEP of reservoirs; moderate status of natural river types=GEP of HMWB rivers



Working with **the Prague approach**

- **Generic checklists** & WB-specific mitigation measures developed for all uses of HMWB
- **Generic checklists target:**
 - HyMo pressures, e.g. impoundments, continuity (AT, DE)
 - Specific uses (UK)
- **Water users** involved in applying the Prague approach in several MS (NL, UK, DE, ES, NO, EE)



Working with **both approaches**

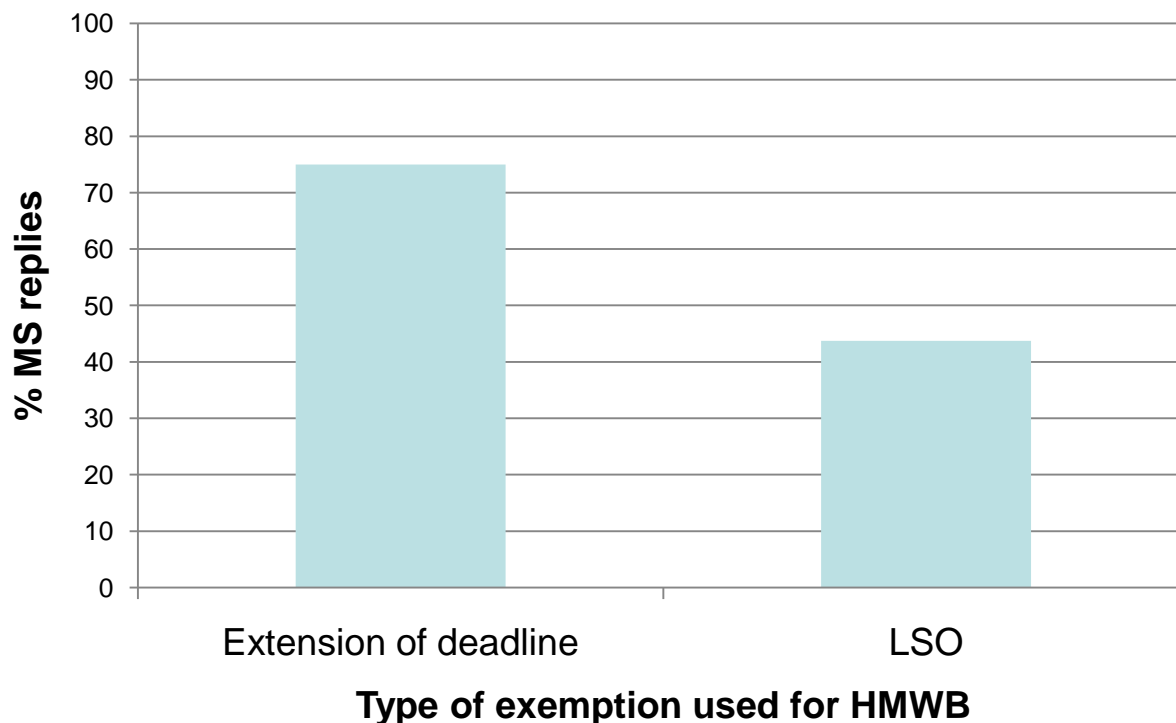
- Both approaches in separate with **regional differentiation**, e.g. DE federal states
- Both approaches in a **combined way** (some DE methods)
- Both approaches in a **testing** phase (NO) or to **compare** results of both approaches (NL)
→ *Details in Workshop presentations of DE, NL, NO*
- **FR, CZ, PT, SK** use both approaches but no further details given in their questionnaires



HMWB objective setting



Exemptions for HMWB in dRBMPs



CZ, IE, LV reported that they do not use **any of the two exemptions** for HMWB



Justifications of HMWB exemptions

- **Long time of measures to come into effect;** not feasible to achieve GEP for all HMWB by 2015
- **Technical feasibility**, e.g. some measures only possible to implement in steps
- Other reasons: **Disproportionate costs, natural conditions**



Some final remarks

- **Positive feedback to HMWB questionnaire**
- **Wide variation in the extent of HMWB designation & methods/criteria used**
- **Use of both GEP definition approaches; Methodology in progress in several MS**
- **Exemptions used for HMWB as for natural WBs in the process of objective setting**



Comments on discussion paper

- **Written comments welcome:**
 - **By 23 March 2009**
 - **To eleftheria.kampa@ecologic.eu**



Thank you for listening

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