



**Do we have comparable hydrological data
for transboundary co-operation?**

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Ministry of Environment and Water, Hungary

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Gotland
Baltic Sea
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Gdańsk
Poznań
Lódź
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Kraków
Warsaw
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National and International River Basin Districts

Submissions in accordance to Article 3 of the Water Framework Directive
Draft December 2005

- River Basin Districts ⁽¹⁾
- International River Basin Districts (within EU25) ⁽²⁾
- International River Basin Districts (outside EU25) ⁽³⁾
- Coastal waters ⁽⁴⁾
- No River Basin Districts submitted ⁽¹⁾
- EU25 boundary

Map produced by WRc, UK on behalf of European Commission, DG Environment, 2005.

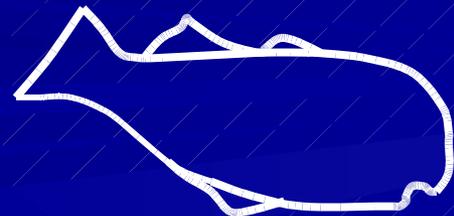


Without Greece and Italy:

- 27 IRBDs (69 national RBDs)
- 65% of EU surface is part of IRBD

Different levels of co-operation

- 
- National level
 - Transboundary level
 - Catchment level
 - International level



WMO RA-VI Hydrological WG

Survey related to standards used in field measurements and data processing

■ Surface waters

- Water level,
- water temperature,
- discharge,
- suspended and bottom sediment

Groundwaters

- Water level
- Water temperature

WMO RA-VI Hydrological WG

Survey related to standards used in field measurements and data processing

- hydrological guidelines
- National standards
- ISO standards
- CEN standards
- others

Summary of the survey I.

- 14 countries responded :
- Croatia – Czech Republic – England – Estonia – Finland
- Germany – Hungary – Iceland – Latvia – Macedonia –
Poland – Slovakia – Spain - Sweden
- Basicaly hydrological and national standards both for
field measurements and data processing

Summary of the survey II.

- **Use of international standards for measurements**
 - 10 countries for discharge international standards,
 - 6 countries for surface water ,
 - 1 country for water temperature,
 - 1 country for groundwater level and temperature
- **International standards for data processing**
 - **Surface waters – 3 countries ISO for discharge and water level**
 - **Groundwater – any countries indicated ISO**

Suspended sediment measured by 8, bottom sediment by 4 countries

Summary of the survey III.

Most frequent used ISO standard is :

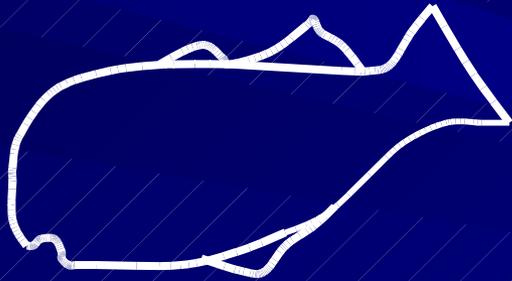
- 748 Measurement of liquid flow in open channels. Velocity-area methods – 7 countries
- 6416 Hydrometry. Measurement of discharge by ultrasonic (acoustic) method – 4 countries
- 772 Hydrometric terminology. Terms, definitions and symbols – 3 countries
- 2537 Liquid flow measurement in open channels. Rotating element current-meters – 3 countries
- 4373 Measurement of liquid flow in open channels. Water-level measuring devices – 3 countries
- 3475 Hydrometric determinations. Cableway systems for stream gauging – 3 countries

ISO Hydrometry TC 113

Velocity area methods	23 items
Flow measurement structures	17 items
Terminology and symbols	3 items
Instruments, equipment and data management	13 items
Sediment transport	10 items
Groundwater	5 items

WMO and ISO strengthen partnership on international standardization

- **Geneva, 16 September 2008 – WMO/ISO :**
- **The World Meteorological Organization (WMO) and the International Organization for Standardization (ISO) have agreed to increase their cooperation in the development of international standards related to meteorological and hydrological data, products and services. ISO Secretary-General Alan Bryden and WMO Secretary-General Michel Jarraud today signed an agreement on Working arrangements in Geneva, Switzerland, to formalize the partnership.**



THANK YOU FOR YOUR ATTENTION