ECONOMIC ANALYSIS OF LOWER VISTULA WATER DISTRICT
Draft report on Step I

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**Introduction**

- Economic analysis of Lower Vistula water district has been done from May till August 2004

- Analysis was performed acc. to Guidance of Ministry of Environment from March 2004 and recommendations of the Consultative Group on Economic Analysis

- Analysis was based on data from 2002
- Analysis forms an integral part of Water Management Plan for River Vistula Basin acc. to WFD

**Targets of Step I**

- Economic significance of water uses
- Assessment of trends till year 2015
- Assessment of current cost recovery level
Economic analysis - the three-step approach

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<td>Assess financial implications of programme of measures</td>
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By 2004

By 2006

By 2007

By 2008

By 2009

By 2010
Main results of 1 step of economic analysis

- Identification of sources and availability of economic information
- Key indicators of economic significance of different water uses
- Development of baseline scenario and forecast for year 2015
- Assessment of current cost recovery level
- Valuation of current pricing policy
General conclusions

• Organisational and legal system of water management in Poland comply fully with Acquis Communautaire

• System of fees and penalties is formulated on central level
• Water pricing rules are set on central level in accordance with full cost recovery principle

• Prices of water services are updated yearly by local governments (gminas) in compliance with pricing rules set on central level

• Pragmatic system of financing of water sector enabled its steady and significant development during last 15 years
Lower Vistula Water District

- Area - 34 466,1 sq.km (11% of territory of Poland)
- Population – 4 039,9 thousand (10,5% of population of Poland)
- Total water use – 463,7 mln cub.m/year (4.3% of water use in Poland)
- Surface water resources – 10 970 cub.m/year/person (Poland – 1900 cub.m/year/person)

- Land use similar to country’s average:
  - arable land 62,1%
  - forests 31,5%
  - urban areas 2,3%
  - other, incl. waters 4,1%
Areas of economic analysis

Lower Vistula water district was divided into four areas:

• **DW-1** - Lower Vistula to mouth of Osa and Wda Rivers
• **DW-2** - Lower Vistula to Baltic Sea
• **DW-3** - rivers flowing into Vistula Estuary
• **DW-4** - coastal rivers
Areas of economic analysis – designation criteria

- Hydrography – group of catchments
- Economy - taking into account:
  - structure of economy (GDP per sector)
  - development level (GDP per capita)
  - social development (unemployment level, personal income)

Conclusions:
- Areas are relatively homogenous
- Water use and wastewater generation correspond to economic development level
- In the next step the number of areas should be reduced to two: 1. Lower Vistula River with Gdańsk, Gdynia, Sopot and Elbląg cities.
  2. The remaining part of Lower Vistula water district
Source of information and its availability

Water services

• Regional Data Bank of Central Office for Statistics (GUS)
  - quantities (paid, direct access)

• Provincial Offices - fees (free of charge, limited access)

• Water service providers – prices and costs (restricted access)

Recommendations

• The RZGW module should be added to Regional Data Bank of Central Office for Statistics

• Geographical Information System for Vistula River Basin should be developed
Water use in Lower Vistula Water region

Water use per sector in mln cub.m/year

- communal - 181 (45%)
  incl. service sector - 38 (9%)
- industry - 166 (41%)
- agriculture and forestry - 54 (14%)

Gross Added Value per sector in mln PLN

- Services - 42 189 (65%)
- Industry - 20 968 (32%)
- Agriculture and forestry - 2 278 (3%)

Lower Vistula region share in national GDP amounts to 9.9%
Projection of trends 2002 - 2015

Water use per sector in year 2015 in mln cub.m

- Total: 484 (+21%)
- Households: 162 (+10%)
- Services: 75 (+100%)
- Industry: 166 (0%)
- Agriculture: 81 (+50%)

Water use per capita

Year 1990 - 68.5 cub.m/year
Year 2002 - 35.6 cub.m/year
Year 2015 - 41.0 cub.m/year
Current pricing policy in Lower Vistula region

• **Price for water services are set according to Act on public water supply and wastewater discharge dated June 7th 2001**

• **Price for water:** 1,60 – 1,70 PLN per cub.m (87% of national average)
• **Price for wastewater:** 2,00 – 2,20 PLN per cub.m (117% of national average)

• **Loss on water services amounts to 2% (total for Lower Vistula region)**
• **Only 40% of water services providers are profitable**

• **During last 5 years a steady increase of price in water services sector is observed amounting to 10-15% above inflation level**
Condition for implementation of full recovery costs principle

• Conformity of pricing procedure with Act on public water supply and wastewater discharge from June 7th 2001

• Continuation and improvement of pricing policy at central level

• Reintroduction of fees for irrigation water use

• Effective monitoring of water permit’s compliance and functioning of fees collection system

• Gradual elimination of communal subsidies for water and wastewater services

• Consolidation of water services sector