

11th International Conference
“EUROPE-INBO 2013”
ON THE IMPLEMENTATION OF THE WATER FRAMEWORK DIRECTIVE
15 November 2013 - Plovdiv, Bulgaria.
Water governance in transboundary basins.

Problems, activities and cooperation on water management within transboundary Lusatian Neisse basin

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CEENBO
Central and Eastern European Network of Basin Organisations



**Сеть водохозяйственных организаций стран
Восточной Европы, Кавказа и Центральной Азии**

Water governance in transboundary basins.

Institute of Meteorology and Water Management - National Research Institute (IMGW-PIB) is a research and development unit established in 1972.

IMGW-PIB since 90 years operates in support of public sector as well as commercial firms and offers various services and expertises in the field of meteorology and hydrology. The meteorological and hydrological network covers over 2300 measurements and observing stations located across the country.

The Institute fulfils governmental tasks in forecasting and warning against hazardous meteorological and hydrological general support, that for civil aviation, water management and fishery and other national economy sectors.



Water governance in transboundary basins.



The geographical situation of Poland causes, that about 42 % of state border runs by boundary waters, dominate boundary rivers, which length is 1281 km. The Republic of Poland (RP), cooperates on the boundary waters with all seven neighboring countries: Federal Republic of Germany, the Czech Republic, the Slovak Republic and Ukraine, the Republic of Belarus, the Republic of Lithuania and the Russian Federation.

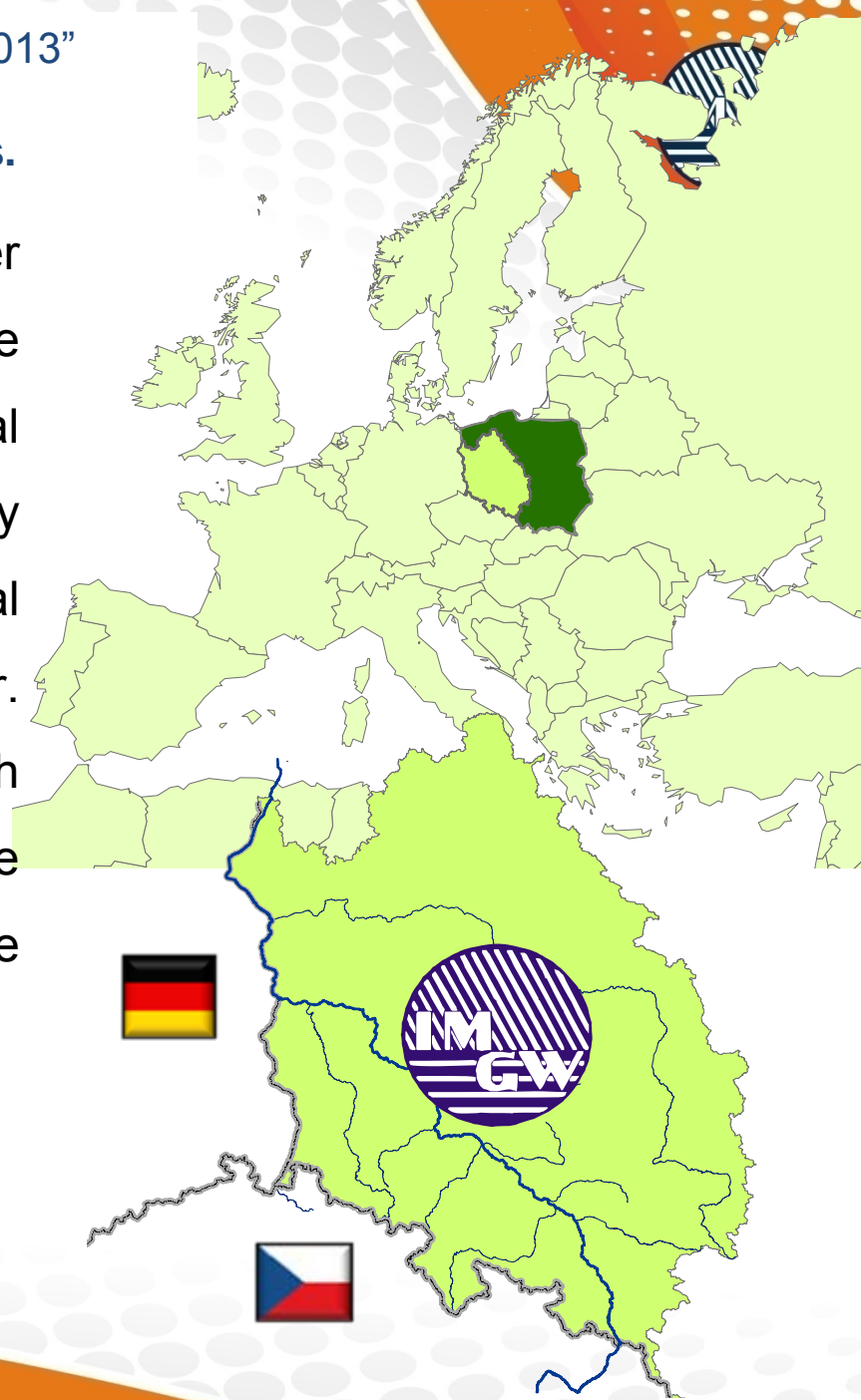


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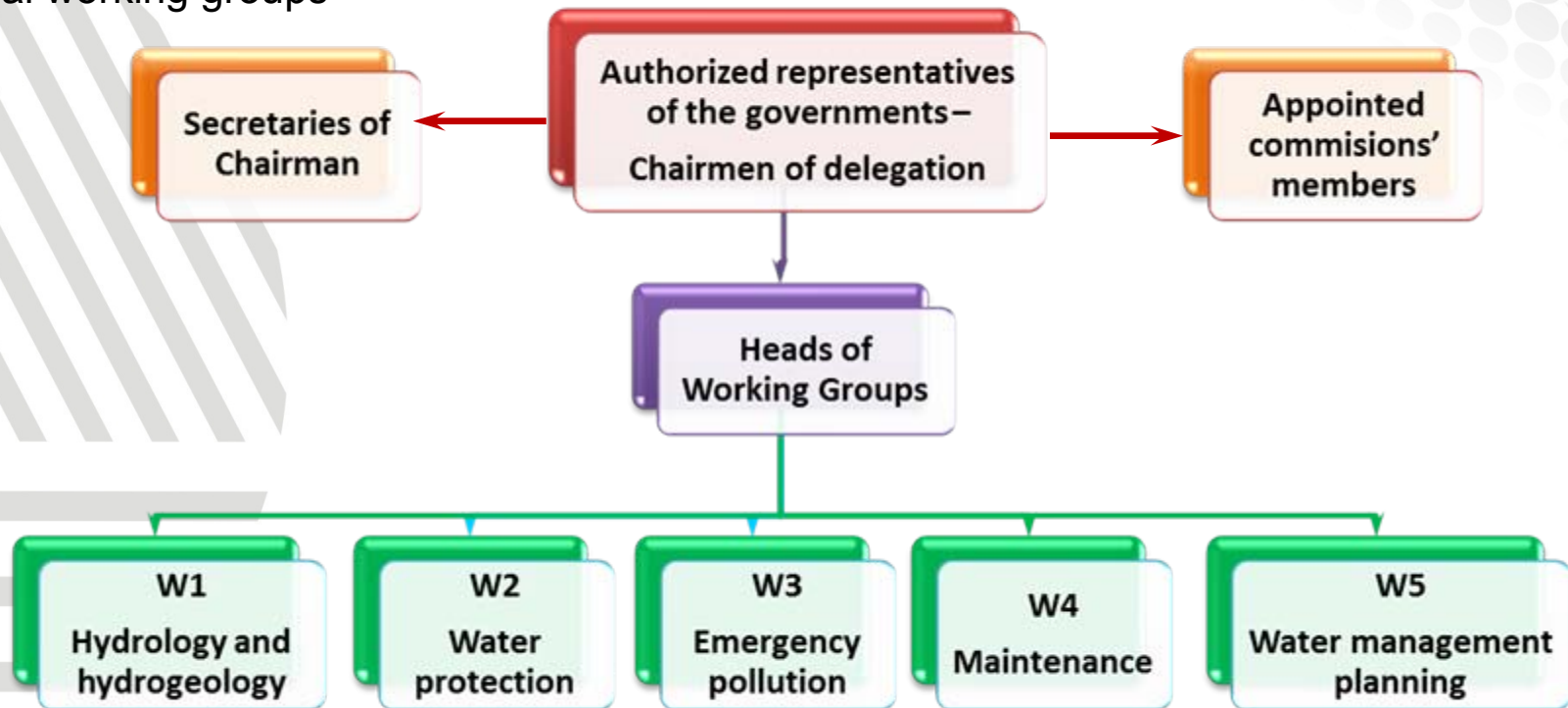
Institute of Meteorology and Water Management National Research Institute Wrocław Branch is actively involved in bilateral cooperation on boundary waters with Germany and the Czech Republic and International Commission for the Protection of the Odra River. Poland is interested in close cooperation with neighboring countries, which is also the responsibility of the country resulting from the Water Framework Directive.



Water governance in transboundary basins.



The German-Polish transboundary water commission was founded in 1992 and is divided into several working groups



All issues and problems related to water management on the boundary waters are discussed during the annual plenary meetings which agenda includes the assessment of the works carried out in the previous years and works planned in the next year in individual groups.

Water governance in transboundary basins.



Main problems of cooperation on transboundary waters

- Different laws, policies and protected areas systems and powers of management authorities
- Different political and administrative structure
- Different stages of economic development and policy
- Difficult terrain, inaccessibility and lack of transport
- National, political, or cultural differences - misunderstanding
- Language barriers
- Different Know-How, technology and technical standards
- Different funding regulations



Water governance in transboundary basins.



An example of transboundary anthropogenically transformed basin exposed to hydroclimatic conditions changes is the Lusatian Neisse (A = 4 395 km², L = 246 km) basin.

Anthropogenic transformation is the result of:

- Intensive opencast exploitation of lignite
- Intensive use of water (water intakes and return flow)
- Several hydropower plants
- Hydrotechnical structures



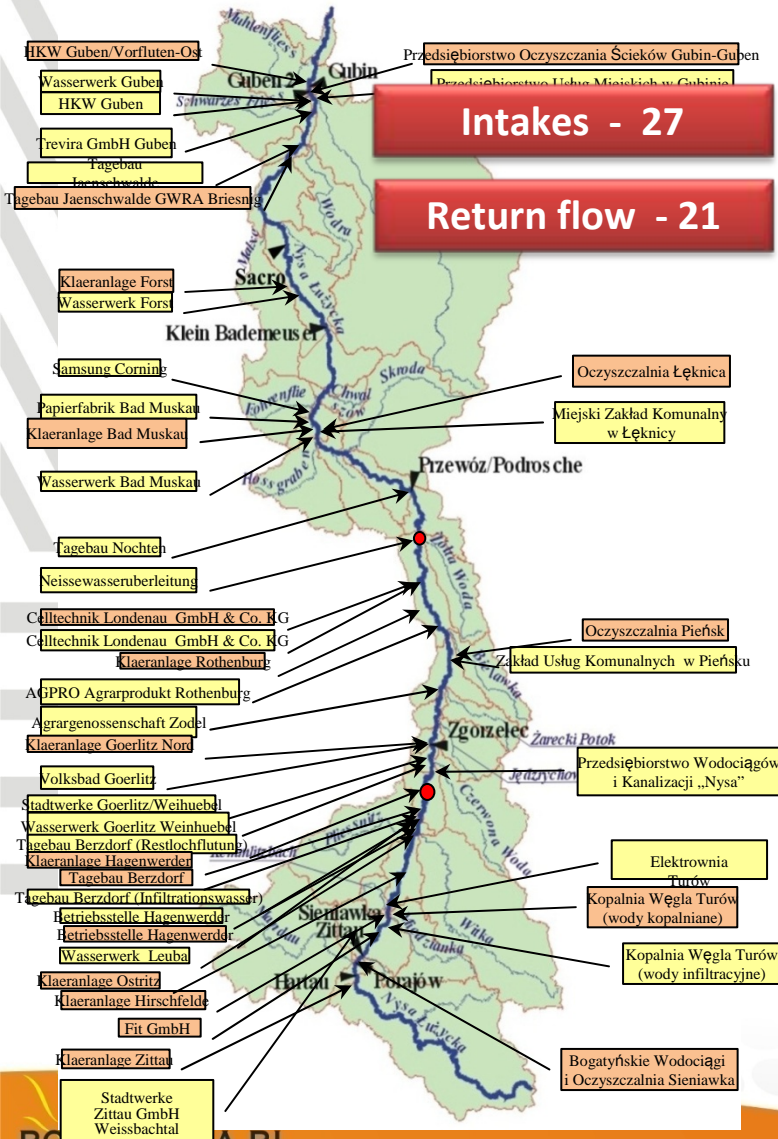
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In view of the long-term cooperation and carried monitoring in the Lusatian Neisse basin the following problems of water management were identified:

Changes in the natural hydrological regime of surface water

Lowering of the groundwater level

Gaps in the procedure of performing the water balance

Ecological flow is not preserved

No consideration of climate change in water resource balancing

Changes in the hydromorphological conditions, disruption of river continuity

Water shortages

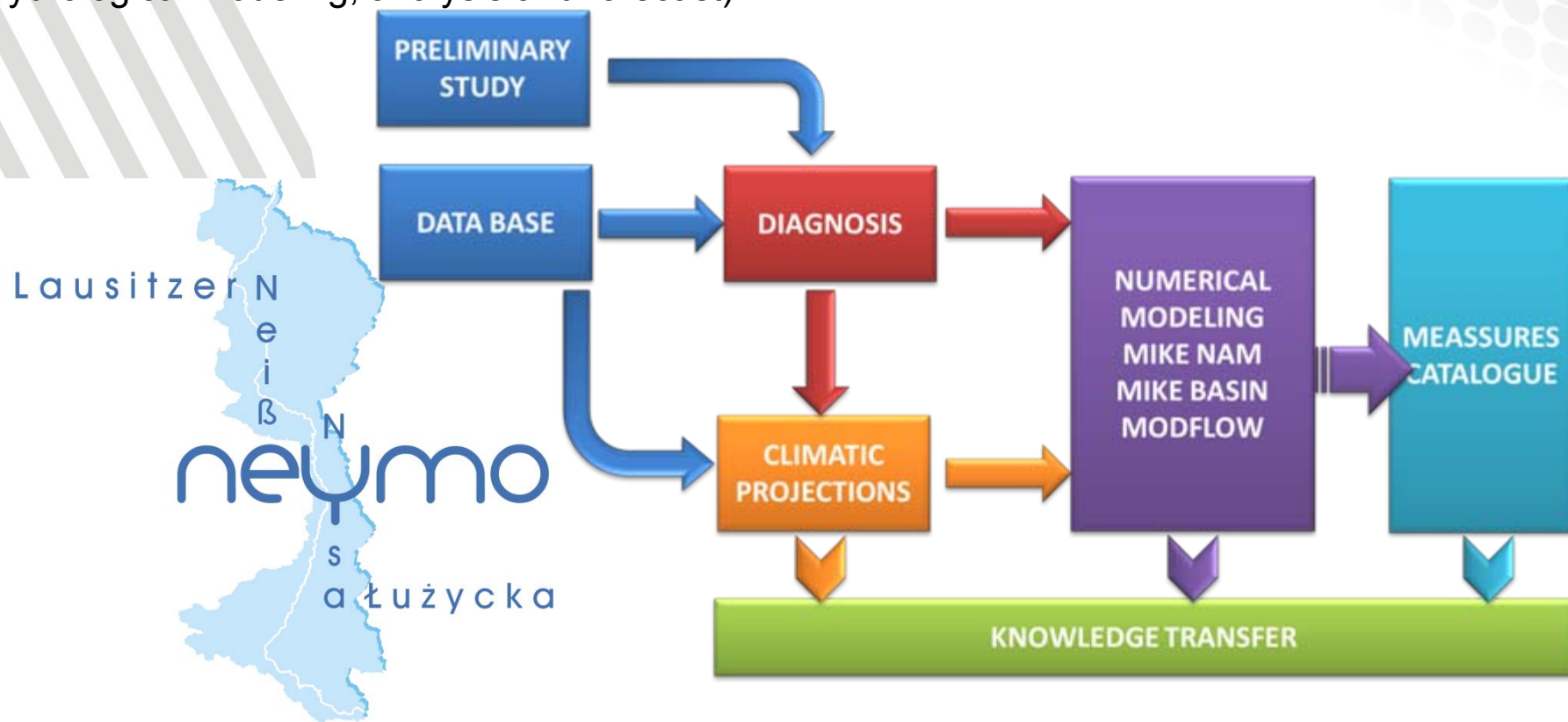
Gaps in existing legislation relating directly or indirectly to water management



Water governance in transboundary basins.



During cooperations with Germany on transboundary water we have decided for hydrological and climatic modeling in transboundary Lusatian Neisse river basin within NEYMO project (Neymo Lausitzer Neisse / Nysa Łużycka - climatic and hydrological modeling, analysis and forecast).



Klimatische und hydrologische Modellierung, Analyse und Prognose

Modelowanie klimatyczne i hydrologiczne, analiza i prognoza

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Lead Partner Saxon State Ministry of the Environment and Agriculture
, Germany

LANDESAMT FÜR UMWELT,
LANDWIRTSCHAFT
UND GEOLOGIE



Project Partner Institute of Meteorology and Water Management National
Research Institute, Branch in Wrocław, Poland



This project is implemented under the Operational Programme of Cross Border
Cooperation Poland-Saxony 2007-2013



Implementation period 2012 -2014

- ❑ The main objective of the project is to develop a joint Polish-German methodological approach in forecasting of climate change and its impact on water resources in the transboundary basin.
- ❑ Existing climate and hydrological data from Saxony and Poland will create a common base, and afterwards will be verified and completed for the establishment of new joint solutions and applications.
- ❑ The results will allow to conduct sustainable activities in water management in accordance with the requirements of the Water Framework Directive, which will lead to the creation of a targeted action plan for cooperation in cross-border area.





Main benefits of the transboundary cooperation are:

- Economic growth. Reconcile the demands of different sectors for socio-economic development
- Environmental protection across ecosystems can be regarded as a whole and not partially
- More effective flood-drought management
- Achievement of ecological stability of transboundary water resources
- Facilitating more effective research in the field of biodiversity values, nature conservation and economic prosperity
- Bringing economic benefits to local economy,

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Experience has shown that in the development of cooperation, it is usually positive to adopt a step-by-step approach. This approach contributes to the establishment of mutual confidence. If cooperation seems a better alternative than non-co-operation, transboundary water management will progress. Traditionally, transboundary water resources management in Europe is started with the development and implementation of international “agreements”.





Thank you for your attention

