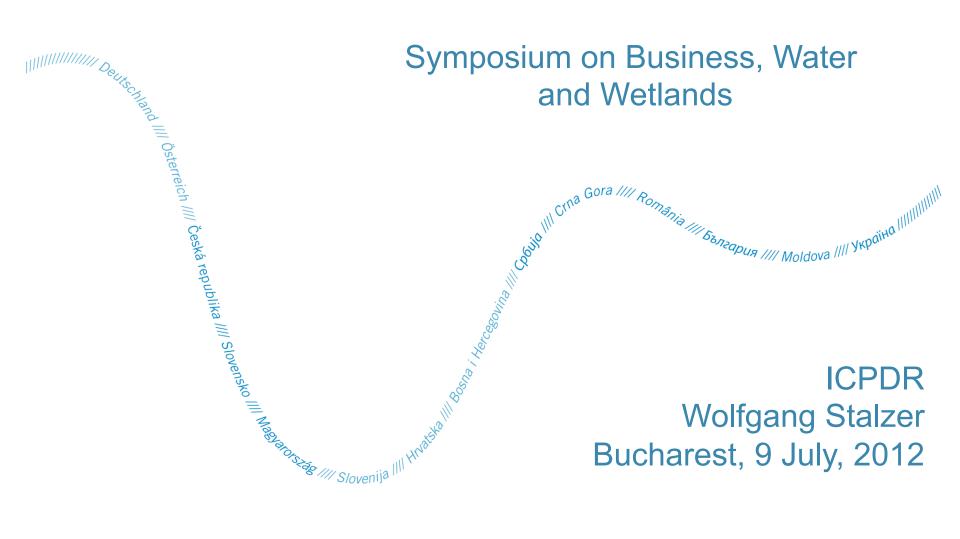
The Water Crisis from the Regulatory Perspective





Challenge Water Crisis



Water and Health -

Watersupply, Sanitation, Hazards, Urbanization

Water and Energy

Renewable Energy, CO₂ Emission, Economic Development, Climate Change

Water and Foodsecurity

Population growth and Ressource distribution, Climate Change

Strategic message

NEXUS – Approach

Interlinkage of Sectors and Actors

Water Crisis and the Regulatory Perspective



- UN Level several Conventions and Actions as well as support and financing Models
 (Transboundary River Conventions etc.)
- **EU Level** Directives, e. g. WFD, FD, ND, UWWD... Support and financing Regulations, (Cooperation and coordination Systems)
- **Regional Level** Conventions, Treatees, Contracts etc. **National Level** - Water related regulations and acts

The Danube as an Example





Mosco lost international River Basin in the World,

81 M inhabitants
19 Countries the European Lifeline

Danube River **Protection Convention**



Based on the UNECE

Convention on the Protection and Use of Transboundary Watercourses and **International Lakes**

29 June 1994

- Sofia Bulgaria
 Protection of water / ecological resources
- Sustainable use of water in Danube River Basin
- Reduce inputs of nutrients and hazardous substances (Black Sea)
- Control floods and ice hazards
- Strengthen international cooperation

Contracting Parties





Germany



Austria



Czech Republic



Slovakia



Hungary



Slovenia



Croatia



Bosnia & Herzegovina



Serbia



Montenegro



Romania



Bulgaria



Rep. of Moldova



Ukraine



European Union

Observers to the ICPDR













Navigation Commission







Œſ



Friends of Nature



Die Donau -Tourism Commission













Europ. Angling Ass.



GWP CEE







Main Tasks



Primarily the implementation of specific pieces of environmental treaties and regulations within the Danube River Basin e. g.

- the Danube River Protection Convention (a multilateral treaty)
- the Water Framework Directive
- the Floods Directive

From this, a range of activities can be derived e.g.

Particularly important activities



- Danube-wide assessments through the Transnational Monitoring Network (TNMN);
- Building up an accident emergency warning system (AEWS) and risk spot inventories;
- modelling of nutrient pollution loads (Danube -Black Sea);
- maintenance of emission directories and GIS data management;
- definition of measures to fight hydromorphological alterations, organic and nutrient pollution as well as hazardous substances;
- protection of habitats and wetland restoration and development and maintenance of a network of protected areas;

Particularly important activities



- dialogue with representatives from sectors affecting water such as hydropower, navigation or agriculture;
- management of awareness raising campaigns such as the Danube Box, promoting of the Danube Day et c;
- collaboration in Danube sub-basins such as the Tisza, Prut, Sava or Danube Delta;
- exchange with other river commissions, such as ORASECOM of the Orange River;
- collaboration with private companies to promote the work of the ICPDR ("Business Friends of the Danube");

ICPDR- Principles



The ICPDR is the

- Executing Body of the objectives and tasks of the DRPC (Danube River Protection Convention)
- Competent Authority (coordinating and reporting EU WFD)
- Coordinating, not implementing Body
- Forum for Development of Projects like

GEF Pollution Reduction Program

Danube Strategy

Sturgeon Program 2020

Climate Change Adaption

Budget and Financial Rules

Sustainable Flood Protection: icpdr iksd Action programme & Plans





Action Programme on Sustainable Flood Protection in the Danube River Basin adopted in 2004;

17 flood action plans for the subbasins in the Danube catchment area prepared in 2009 based on 45 national plans;

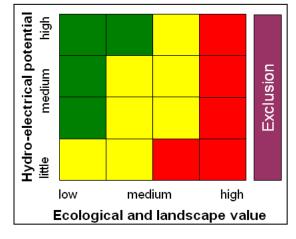
FAPs list hundreds of measures the Danube countries are going to take to keep their citizens safe against the flood danger;

Implementation of EU – Flood **Directive**

Ongoing activity Guiding Principles on Hydropower Development



- Planned <u>increase of hydropower</u> generation reported by Danube countries
- Strategic planning approaches required for sound WFD implementation (i.e. for placing of new facilities)



- Need for clear <u>technical requirements for</u> <u>mitigation measures</u> (e.g. fish migration aids, ecological minimum flows) highlighted by hydropower sector
- Work ongoing...



Agriculture and Land Use

affecting water quality

- e.g. balancing fertilizer application and nutrient consumption by crops
- Ban of fertilizer application during periods where uptake is not guaranteed (winter months)
- Provisions on required storage facilities
- Regulations on application of plant protection products
- etc.





Storage facilities for manure

Proper application?

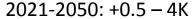


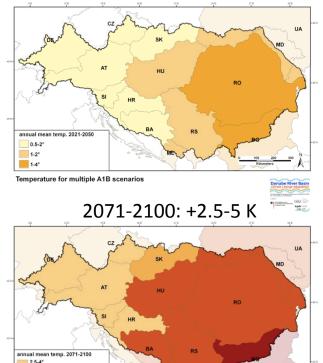
Credit: BMLFUW

Adapting the Danube River Basin to Climate Change



Temperature

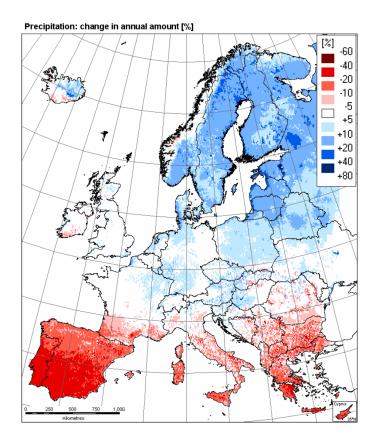




2.5-5

Temperature for multiple A1B scenarios

Precipitation



EU Danube Strategy



- High degree of political attention
- New impetus for projects
- Efficient prioritisation



Cooperation between business & governments

















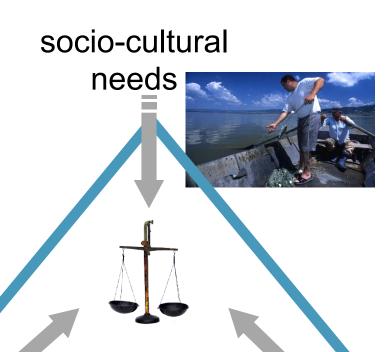






Balancing of interests











environmental needs

Thank you!





Further information: www.icpdr.org