

TRANSBOUNDARY COOPERATION AMID CHALLENGES OF CLIMATE CHANGE

IDA SÓS NAGYNÉ
MINISTRY OF INTERIOR OF HUNGARY





“Water is the driving force in nature.”
Leonardo da Vinci



2030 Agenda for Sustainable Development



This Agenda is a plan of action for people, planet and prosperity.

17 Sustainable Development Goals and 169 targets

SDG 6: “Ensure availability and sustainable management of water and sanitation for all”.



Sustainable Development Goal 6.



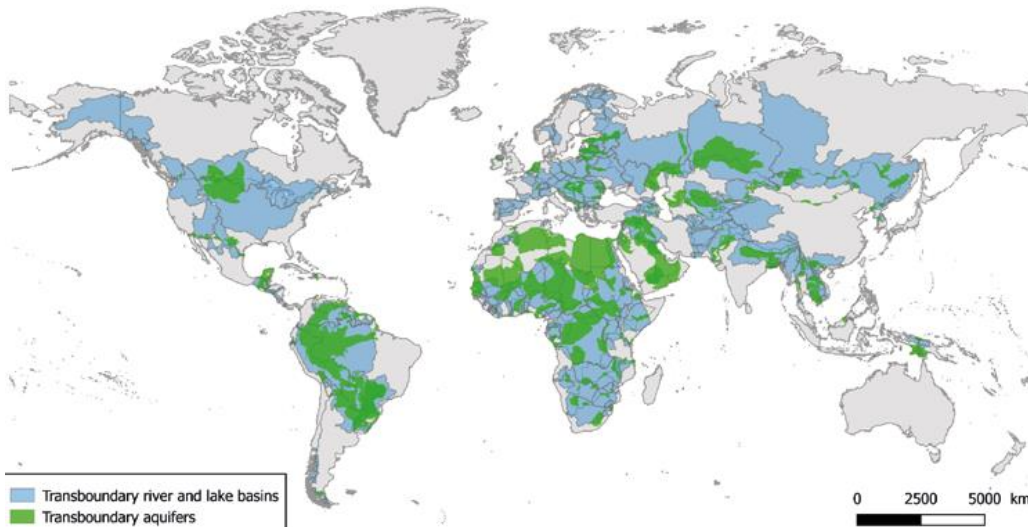
Targets

- By 2030, achieve universal and equitable access to safe and affordable drinking water for all
- By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
- By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
- By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
- By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
- By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
- By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
- Support and strengthen the participation of local communities in improving water and sanitation management

Sustainable Development Goal 6.



Transboundary river and lake basins, transboundary aquifers and international borders



Source: UNESCO-IGRAC (aquifers); GEF-TWAP (river and lake basins)

- 40 % of the world's population lives in river and lake basins that comprise two or more countries
- 90 % lives in countries that share basins
- 263 transboundary lake and river basins cover nearly one half of the Earth's land surface
- 145 States include territory within such basins 30 countries lie entirely within them
- 2 billion people worldwide depend on groundwater, which includes approximately 300 transboundary aquifer systems

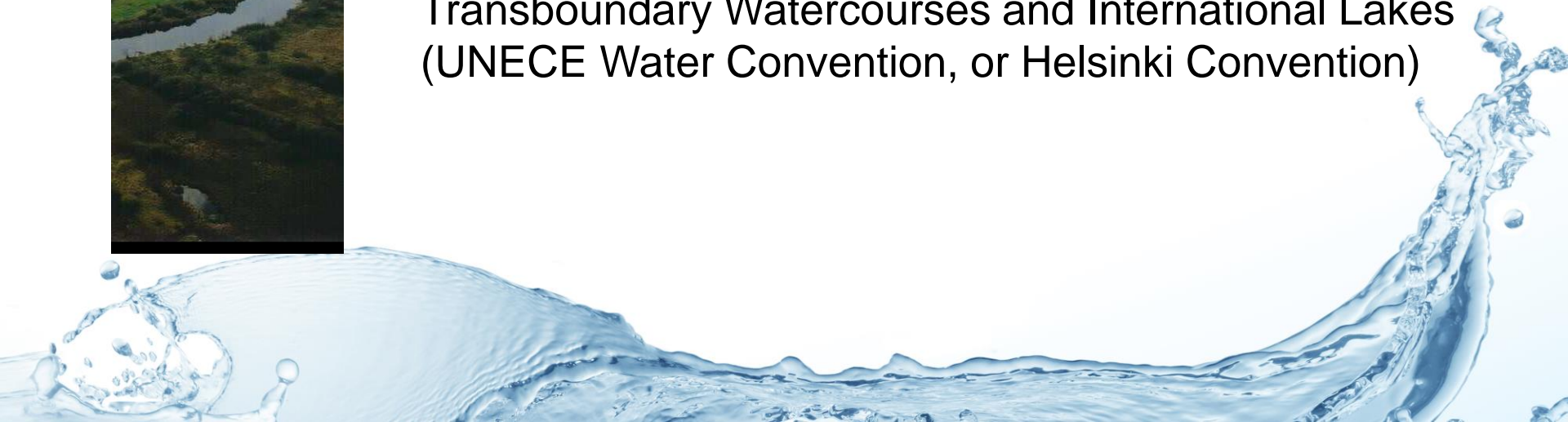
Legal Instruments



Two framework multilateral instruments



- 1997 Convention on the Law of the Non-navigational Uses of International Watercourses (UN Watercourses Convention, or New York Convention)
- 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UNECE Water Convention, or Helsinki Convention)



UNECE Water Convention



Objective: to protect and ensure the quantity, quality and sustainable use of transboundary water resources by facilitating cooperation

The Convention is based on three main pillars:

- Principle of prevention
- Principle of reasonable and equitable utilization
- Principle of cooperation

2015-2018 Hungarian Presidency

- global opening
- water allocation (Global Workshop on Water Allocation
16 - 17 October 2017)



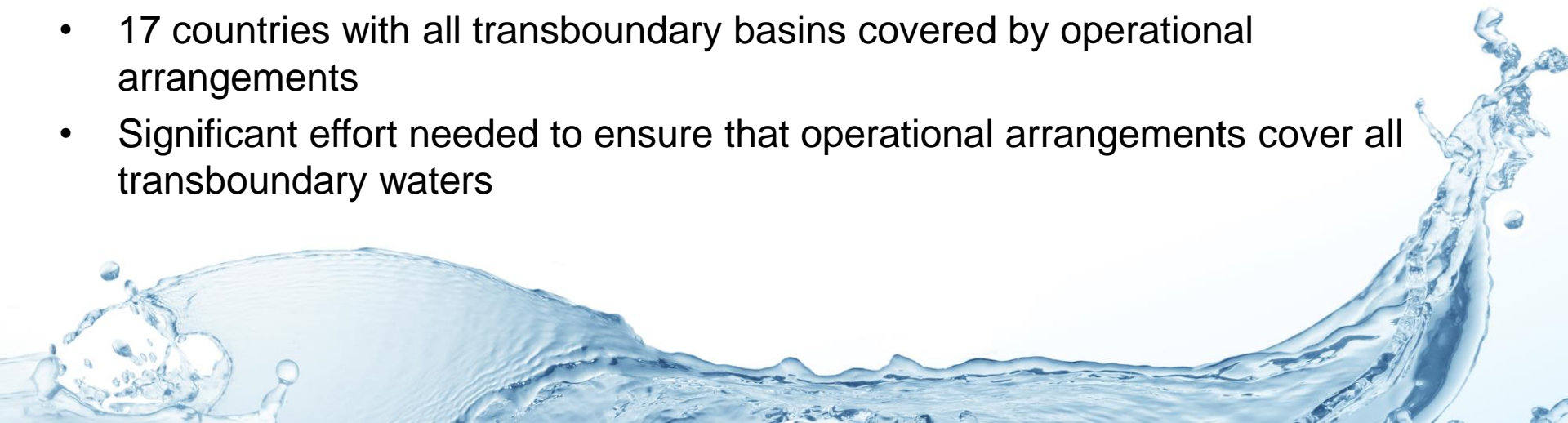
Progress on Transboundary Water Cooperation



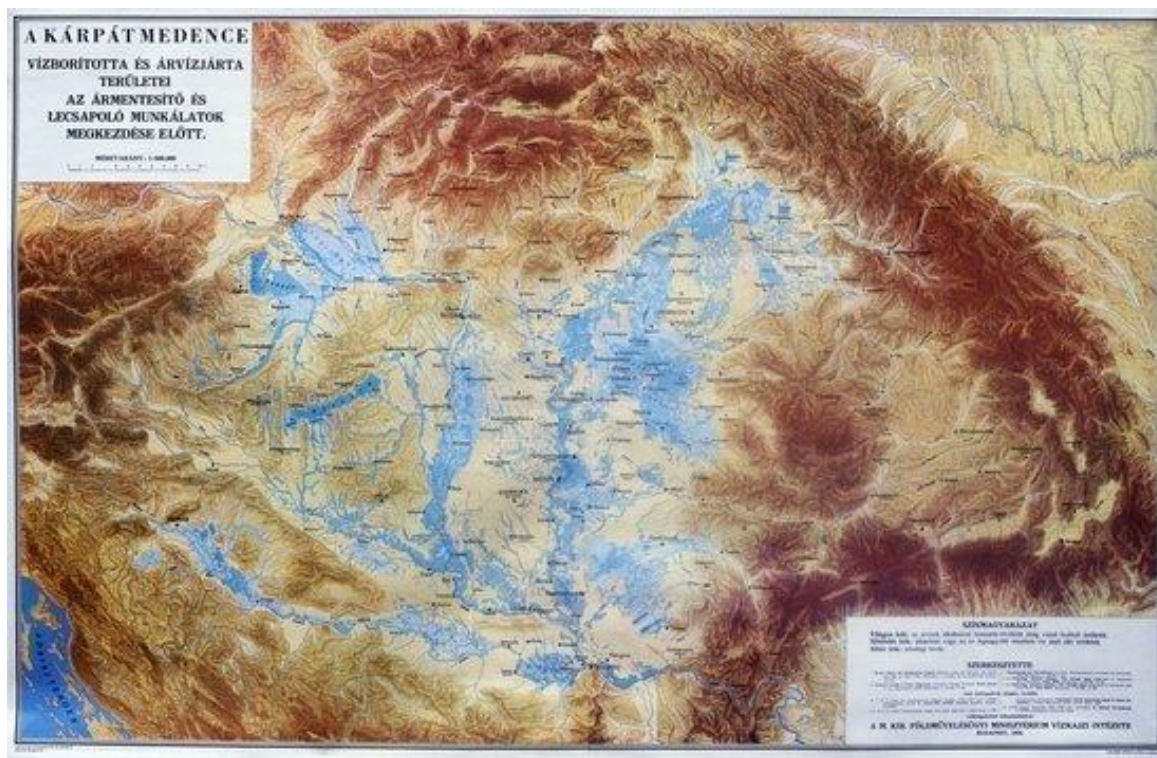
SDG indicator 6.5.2 for transboundary cooperation

Measures the proportion of the transboundary basin area - river lake or aquifer – within a country with operational arrangement for water cooperation in place

- 107 country responded (out of 153 countries sharing transboundary waters)
- 59% average of the national percentage of transboundary basins covered by an operational arrangement
- 17 countries with all transboundary basins covered by operational arrangements
- Significant effort needed to ensure that operational arrangements cover all transboundary waters



Hungary in the Carpathian Basin



84% < 200 mBf
(in the bottom
of Carpathian
basin)

95% of surface
waters
originated
abroad

Floods, excess
water, draughts

Continental
weather effects

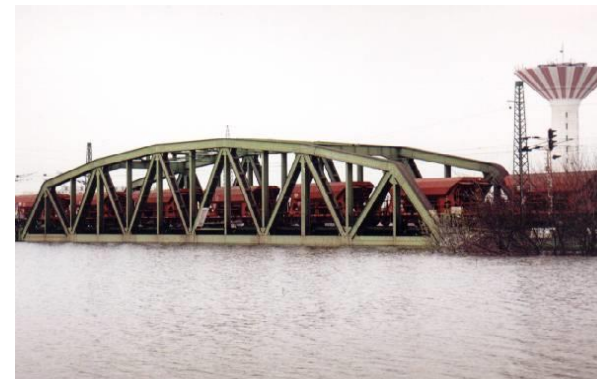


Hydro-geographical conditions

24 rivers entering into the country



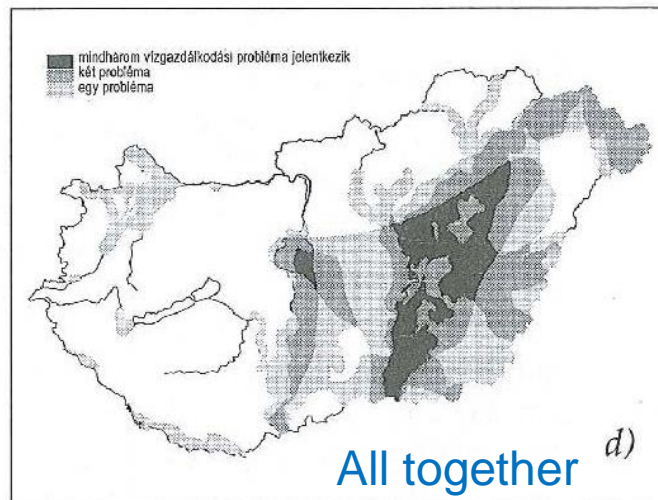
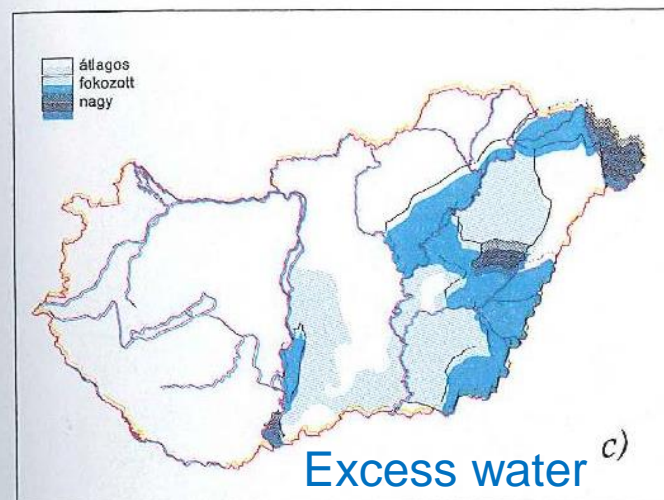
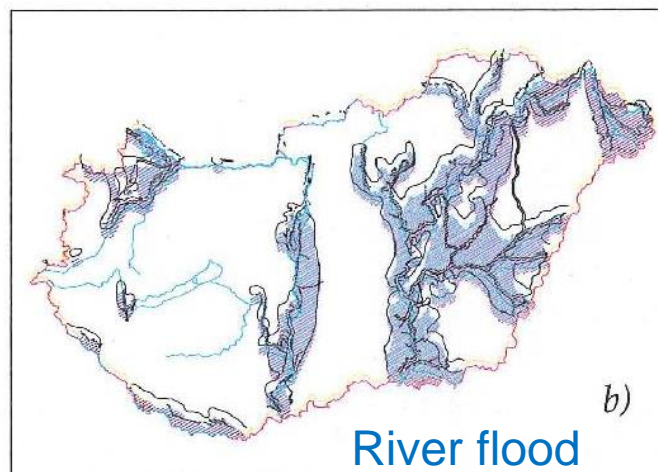
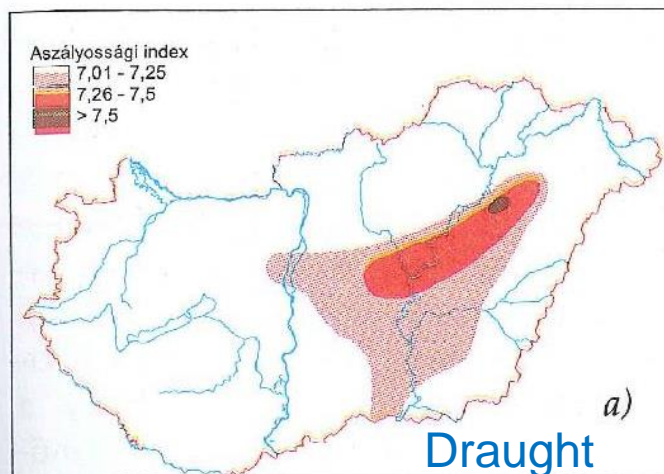
3 rivers leaving the country



Too much water



Too little water



Floods

Every 2-3 years
minor

Every 5-6 years
significant

Every 10-12 years
extreme

Excess water

Every 2-3 years

Droughts

Every 3-5 years

Bilateral transboundary water cooperation



Bilateral transboundary water cooperation agreements with all neighboring countries



- Prevention of floods, droughts, river training;
- Hydrological forecasting, data exchange on quality and quantity;
- River basin management planning;
- Flood risk management planning;
- Prevention and mitigation of accidental transboundary water pollution;
- **The sustainable and equitable use of water resources;**
- Joint project implementation, joint research activities;
- Water protection (quantitative and qualitative)



Romania

Low water Regulation exist (II. Chapter Art 7. /19/).

Serbia

No relevance to water allocation in the agreement.

Croatia

No relevance to water allocation in the agreement.

Slovenia

No relevance to water allocation in the agreement.

Austria

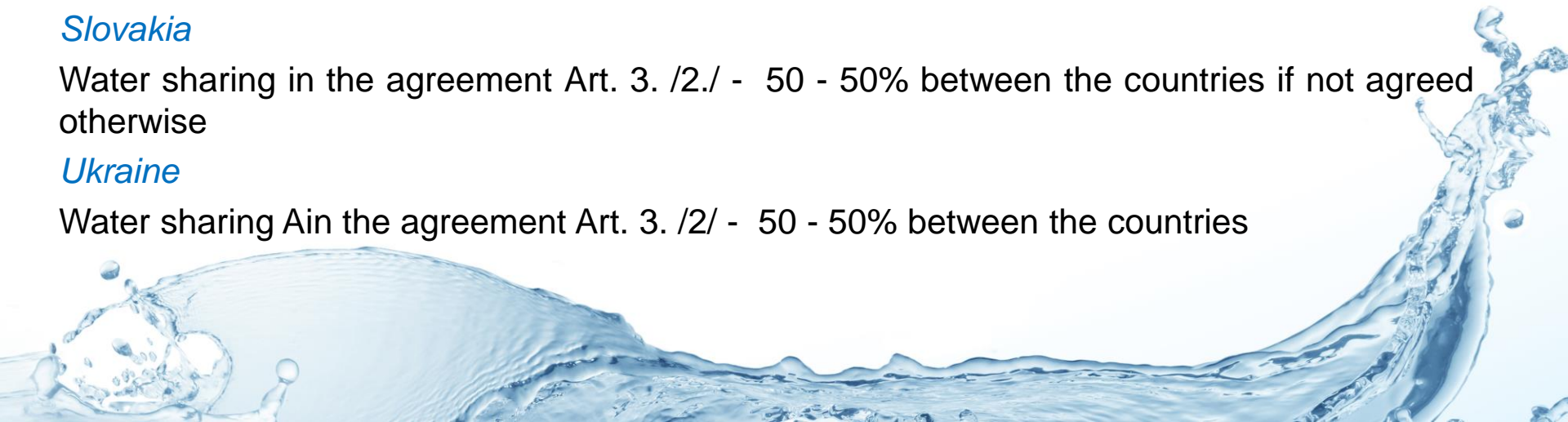
Water sharing in the agreement Art. 2. /5./ and /6./ - 50 - 50% between the countries, upstream country can not decrease the water flow more that 1/3 of the natural flow.

Slovakia

Water sharing in the agreement Art. 3. /2./ - 50 - 50% between the countries if not agreed otherwise

Ukraine

Water sharing in the agreement Art. 3. /2/ - 50 - 50% between the countries



Hungary in the Danube Basin



Danube River Basin District: Overview

MAP 1



Danube is
the most
international
river basin

800,000 km²
19 countries
81 million
people

This ICPRD product is based on national information provided by the Contracting Parties to the ICPRD (AT, BA, BG, CZ, DE, HR, HU, MD, RO, RS, SI, SK, UA) and CH, except for the following: EuroGlobalMap v2.1 from EuroGeographics was used for national borders of AT, CZ, DE, HR, HU, MD, RO, SI, SK and UA. ESRI data was used for national borders of AL, ME, MK. Shuttle Radar Topography Mission (SRTM) from USGS Seamless Data Distribution System was used as topographic layer; data from the European Commission (Joint Research Centre) was used for the outer border of the DRBD of AL, IT, ME and PL.

Vienna, December 2009

icprd iksd
International Commission
for the Protection
of the Danube River

Danube River Protection Convention

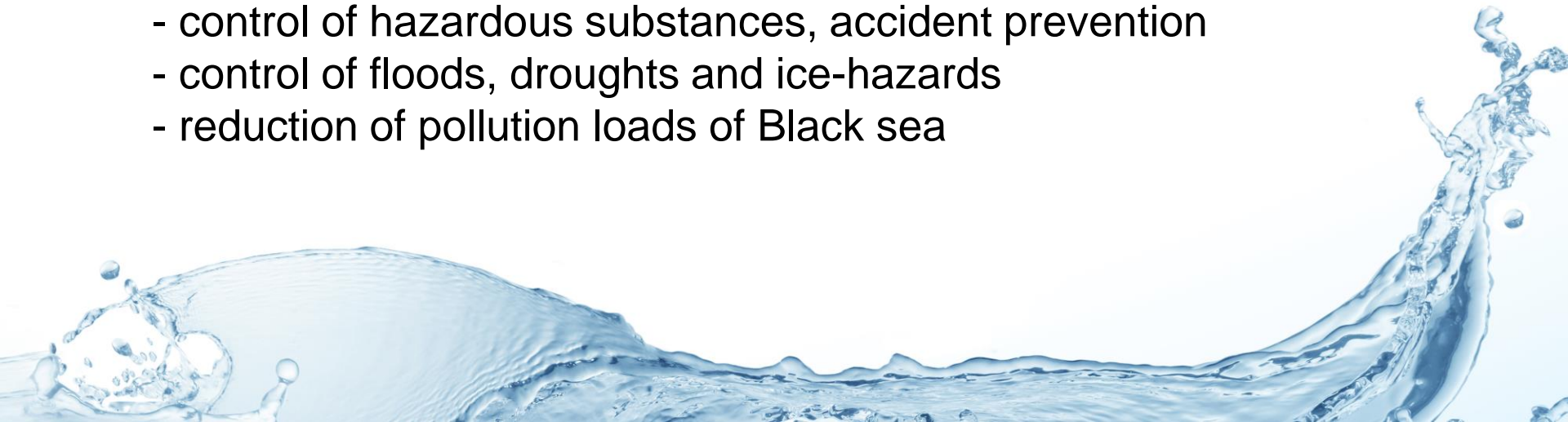


Legal frame for cooperation to assure protection of water and ecological resources and their sustainable use in the Danube River Basin.

Signed: 29 June 1994, Sofia

The main objectives of the Convention:

- sustainable and equitable water management
- conservation and rational use of surface and groundwater
- control of hazardous substances, accident prevention
- control of floods, droughts and ice-hazards
- reduction of pollution loads of Black sea



Contracting Parties



- Germany



- Austria



- Czech Republic



- Slovakia



- Hungary



- Slovenia



- Croatia



- Bosnia & Herzegovina



- Serbia



- Montenegro



- Romania



- Bulgaria



- Rep. of Moldova



- Ukraine



- European Union

ICPDR and the EU Water Framework Directive

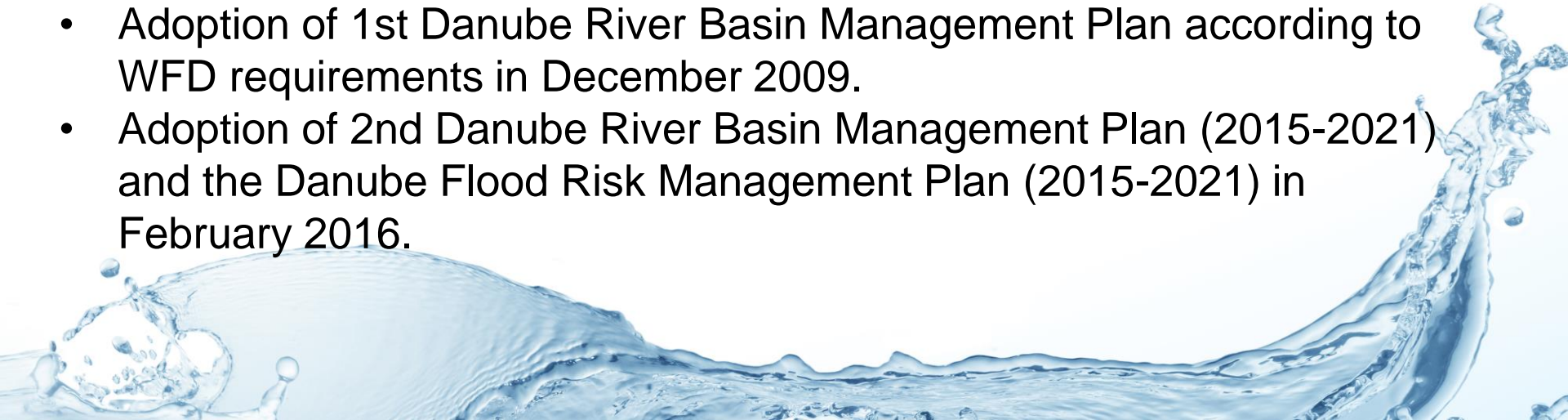


The International Commission for the Protection of the Danube River (ICPDR) works to ensure the sustainable and equitable use of waters in the Danube River Basin. 2019 Hungarian presidency.

- Implementation legal requirement for 8 EU Member States
- Political commitment of 6 Non-EU Member States to work towards a coordinated Danube River Basin Management Plan

Milestones:

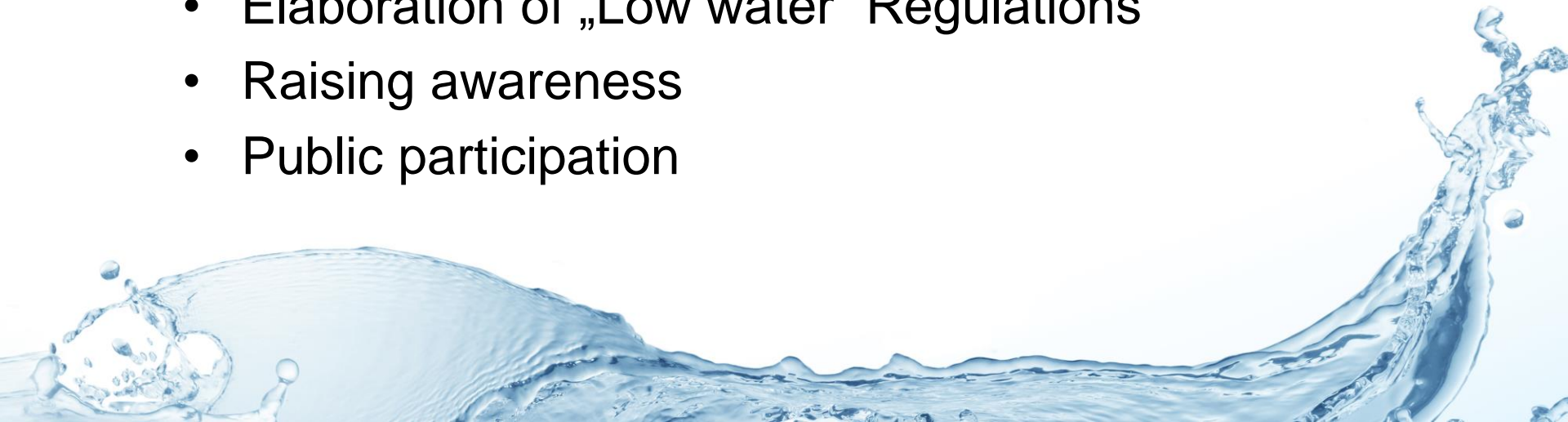
- Adoption of 1st Danube River Basin Management Plan according to WFD requirements in December 2009.
- Adoption of 2nd Danube River Basin Management Plan (2015-2021) and the Danube Flood Risk Management Plan (2015-2021) in February 2016.



Future tasks



- Climate change mitigation, scenarios for the hydrological changes
- Flood risks management
- Risk assessment related to the water scarcity
- Early warning system
- Identification of present and future water demands
- Elaboration of „Low water” Regulations
- Raising awareness
- Public participation



A wide-angle photograph of a river flowing through a valley. The river has a rocky bed and is surrounded by green vegetation. In the background, there are blue mountains under a blue sky with some clouds. A large log is partially submerged in the river.

Thank you for your kind
attention!

