

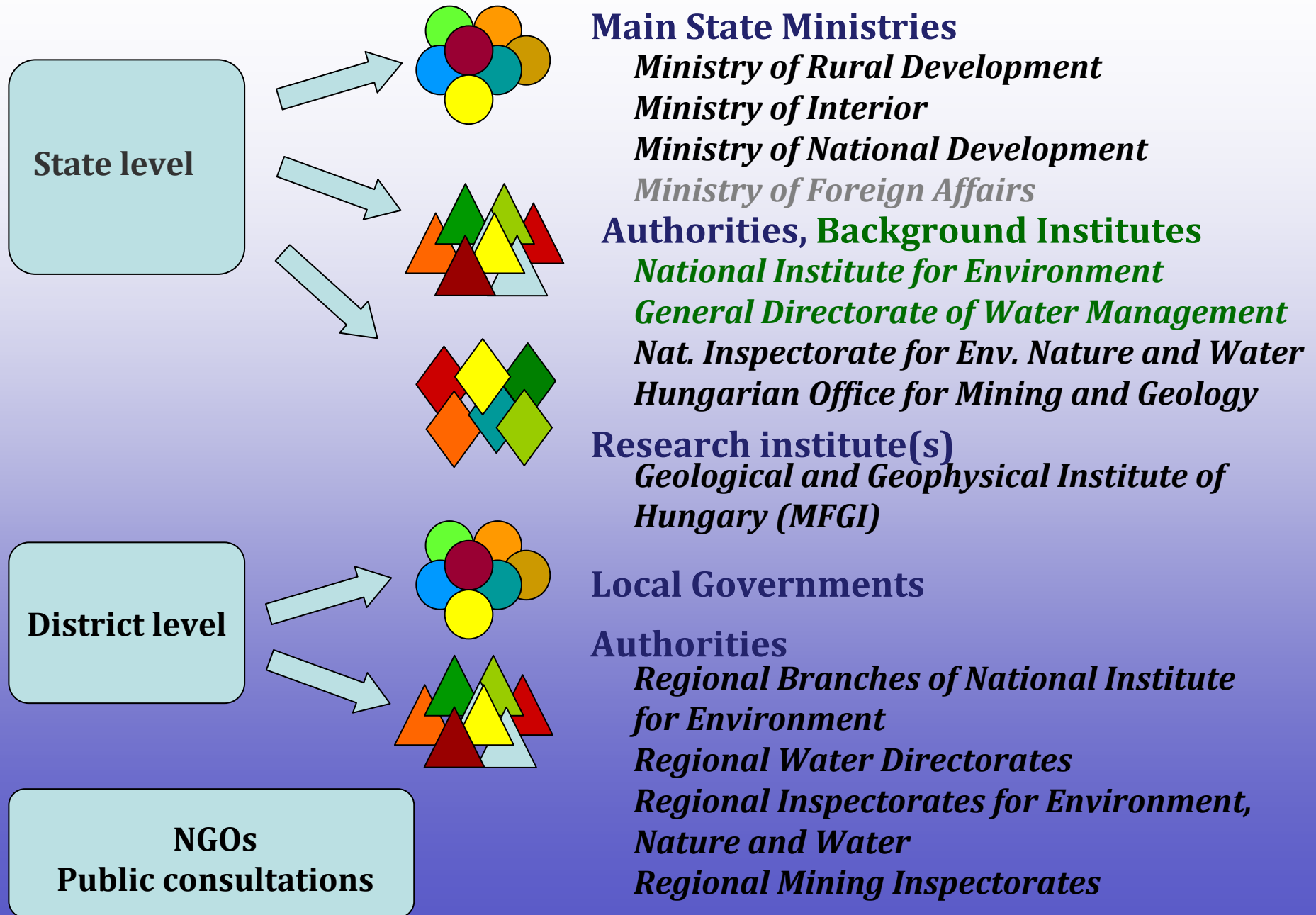
Groundwater Governance in Hungary and Regional Overview

Teodora Szocs

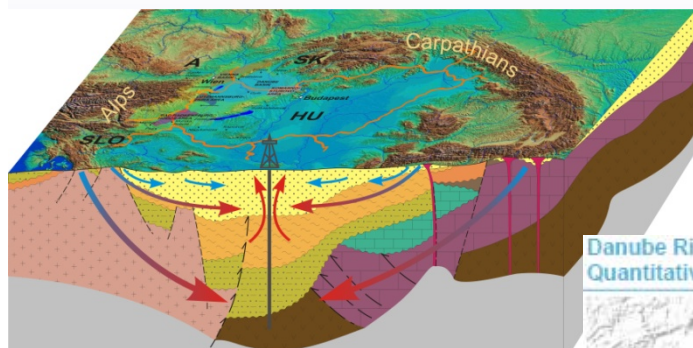
*International Association of Hydrogeologists,
Geological and Geophysical Institute of Hungary*

Groundwater Governance Fifth Regional Consultation: UNECE Region
The Hague Institute for Global Justice, 19th of March 2013

Institutions involved in groundwater governance



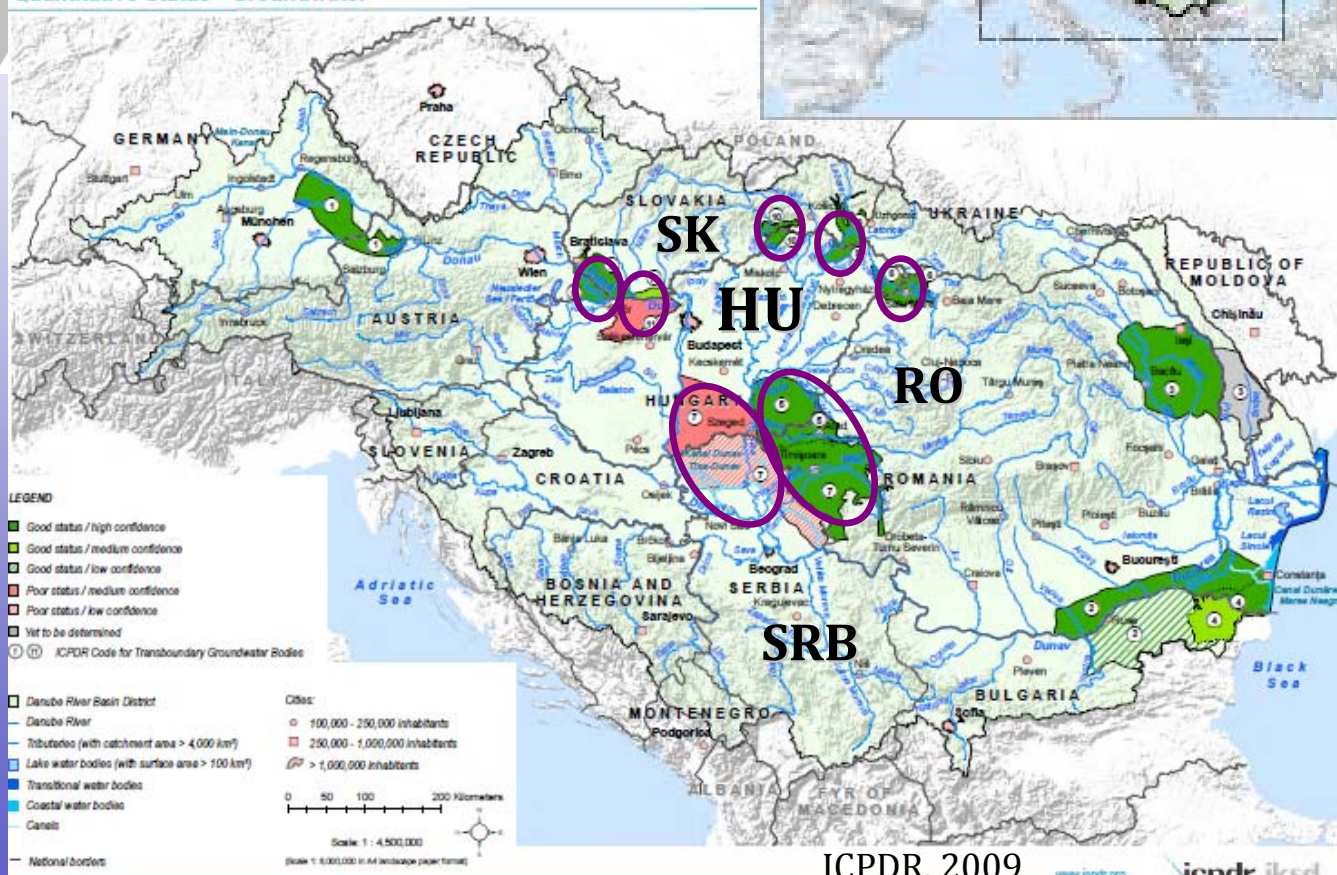
Why is state and international level governance important?



TransEnergy Project

Main aquifers:
Multilayered
porous
intergranular
sediments;
Lime stones,
dolomites.

Danube River Basin District:
Quantitative Status - Groundwater



ICPDR, 2009

www.icpdr.org

icpdr iksl

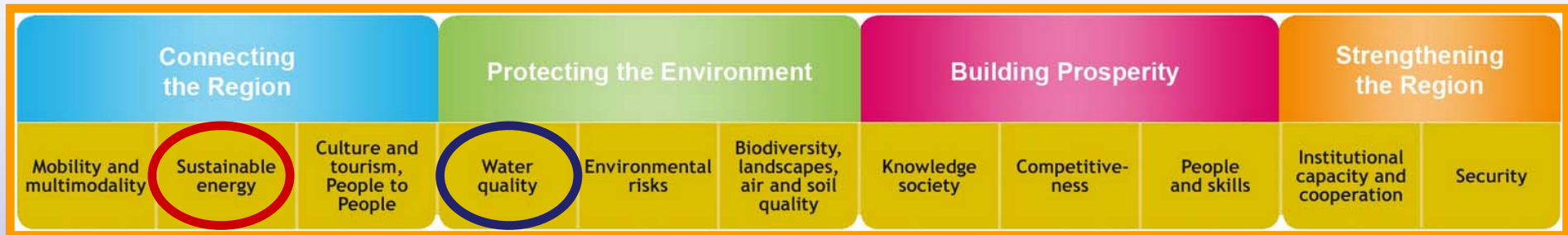
Governance of transboundary aquifers and groundwater bodies is needed !

Groundwater governance at international level

- Hungary shares 7 out of the 11 aggregated transboundary groundwater bodies in the Danube River Basin; ICPDR Groundwater Task Group
- Secretariat for Environmental Affairs of the Rural Development Ministry
- Four (Hungarian-Slovakian, Hungarian-Romanian, Hungarian-Serbian, and Hungarian-Croatian) out of 7 bilateral water committees are active in transboundary groundwater governance

EU Danube Region Strategy (EUSDR)

4 pillars, 11 priority areas



Renewable energy → Geothermal energy → Groundwater
→ Long term sustainable management is needed

Water quality → Groundwater quality- Coordination through the ICPDR (WFD- DRBMP)

It is not about funding, it is about closer cooperation!



Common basis for governance at state levels
Groundwater poorly represented in EUSDR

Main legislation relevant for Hungary

Act LVII of 1995 on water management: priority list to satisfy water demands

1. **drinking water and public health**
2. **medicinal purposes (balneology)**
3. **agriculture, livestock, and fish-farming**
4. **nature conservation**
5. **economic → energy use**
6. **other**

Water Framework Directive, RBMPs: environmental objectives

Helsinki Convention: Transboundary groundwater

Renewable Energy Directive (2009/28/EC), NREAP: 14.65% RES by 2020, 17% contribution of geothermal energy of total RES (from 9% in 2010).

Amendments of the Act XLVIII of 1993 on Mining:

Concession; Geothermal Protection Zone

Government Decree 147/2010, Government Decision 1002/2012:

Re-injection

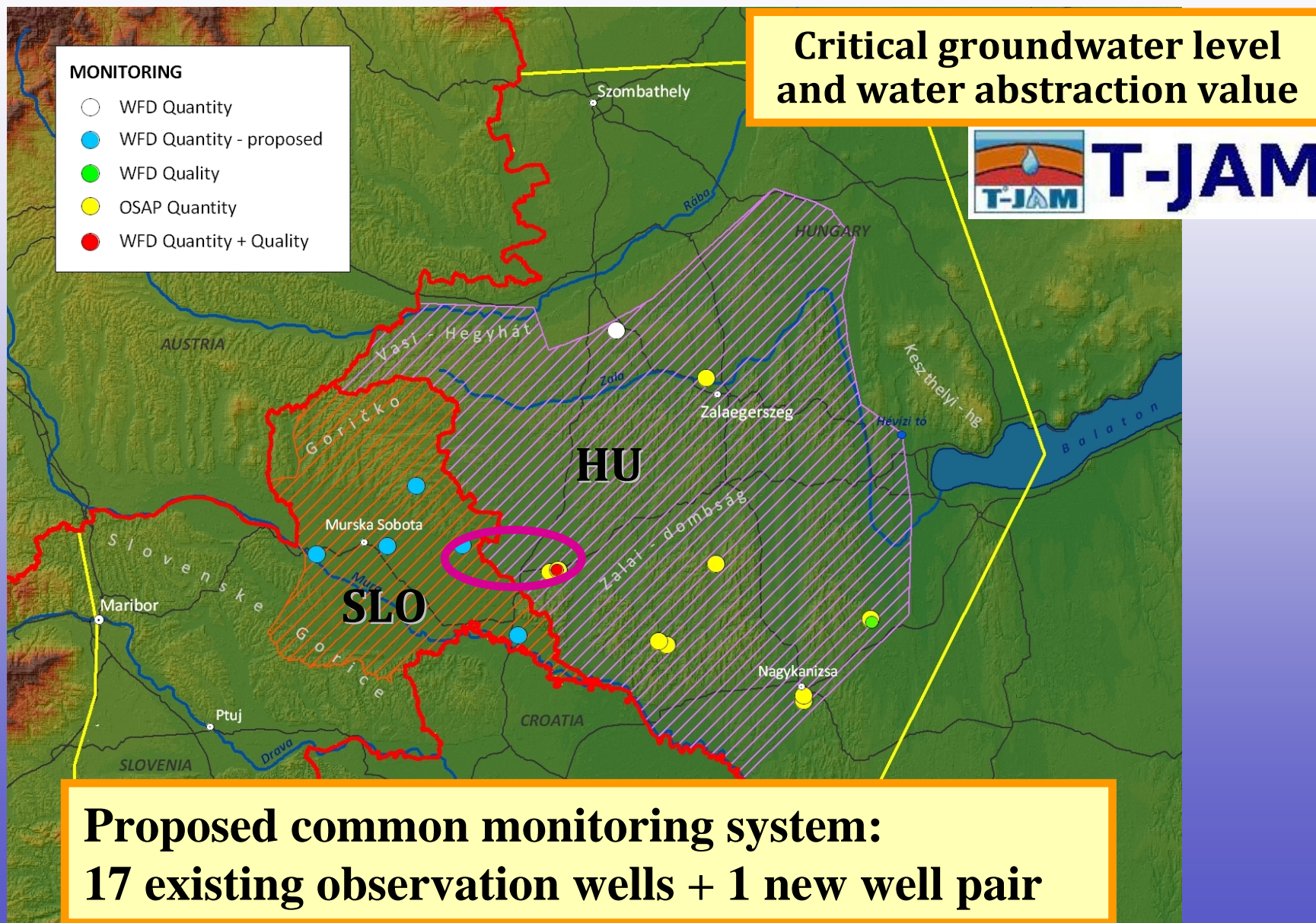
Licensing for groundwater abstraction and heat production

Regulation is based on **depth** and **type of heat production**

Depth below surface (m)	Type of production	Licensing Authority
0-20		
20-2500 Open for licensing	Closed loop, no water produced (GSHP)	Regional Mining Inspectorate Regional Inspectorate for Env., Nature and Water (env. co-authority, EIA)
	Abstraction of (thermal) water	Regional Inspectorates for Environment, Nature and Water (water permit, EIA) water permit also considered as a license for prospection, exploitation and utilization of geothermal energy
Below 2500 Closed for licensing	Not relevant yet, Concession procedure	Hungarian Office for Mining and Geology; CVIA, Minister signs concession contract Reg. Insp. for Env. Nat. and Water (w. permit, EIA) Regional Mining Inspectorates; designation of geothermal protection zones

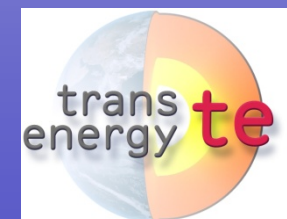
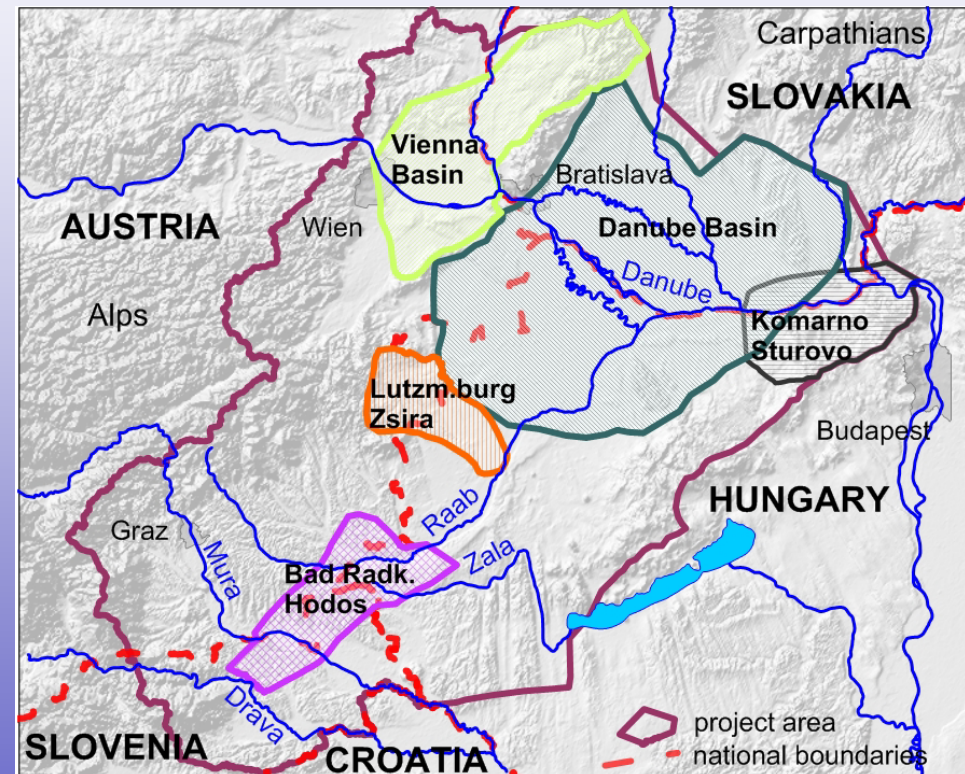
Different licensing procedures in the neighbouring countries!

Example of providing the basis for a transboundary common thermal water governance



Governance of transboundary aquifers and groundwater bodies

- **TransEnergy** project → four geological surveys; work to support a harmonized thermal water and geothermal energy utilization management and governance among Hungary, Slovenia, Austria and Slovakia.
- Good example for other regions in Europe sharing transboundary resources.



Practical application of COUNCIL DIRECTIVE 98/83/EC on the quality of water intended for human consumption to achieve low arsenic in drinking water

- **201/2001 Government Decree** on requirements and controlling the quality of drinking water
- **National Program on Improving Drinking water quality**
 - National Development Plan
 - New Hungary Development Plan
 - **New Széchenyi Plan** (Environment and Energy Operative Program)
- Last Derogation Deadline: 25th December 2012
- **1st of January 2013 Ministry of Defence**, Hungarian Defence Forces: 123 settlements, about 340 000 people; mobile As removal systems until June
- **Romanian-Hungarian joint company: water for human consumption in the Hungarian Békés County.** Concession for 49 years. 30% extraction efficiency rise up to 60%.

Concluding remarks

- *Adequate groundwater institutions exist* at different government levels in Hungary.
- *Groundwater policies and legislation do exist* in Hungary and they are *applied* and *enforced*.
- *Additional to national governance*, sustainable long term management of transboundary aquifers and groundwater bodies is needed *in the Pannonian Basin*, which requires *groundwater governance at international level, too*.

Budapest World Water Summit – October 2013



Thank you for your attention!

