# The Role and Relevance of the UNECE Water Convention in Fostering Cooperation in Managing Transboundary Groundwaters

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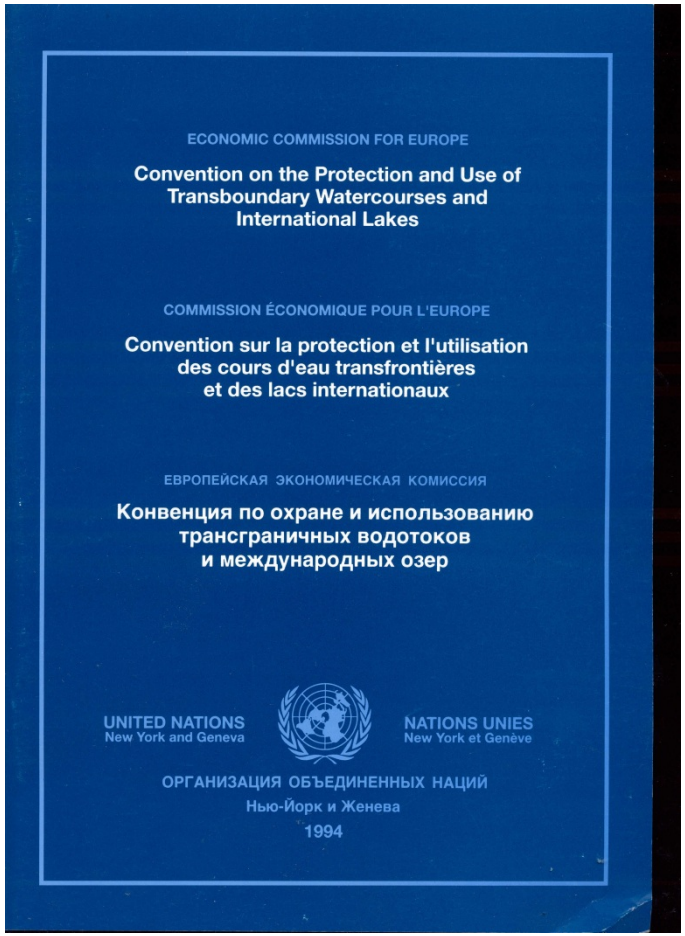
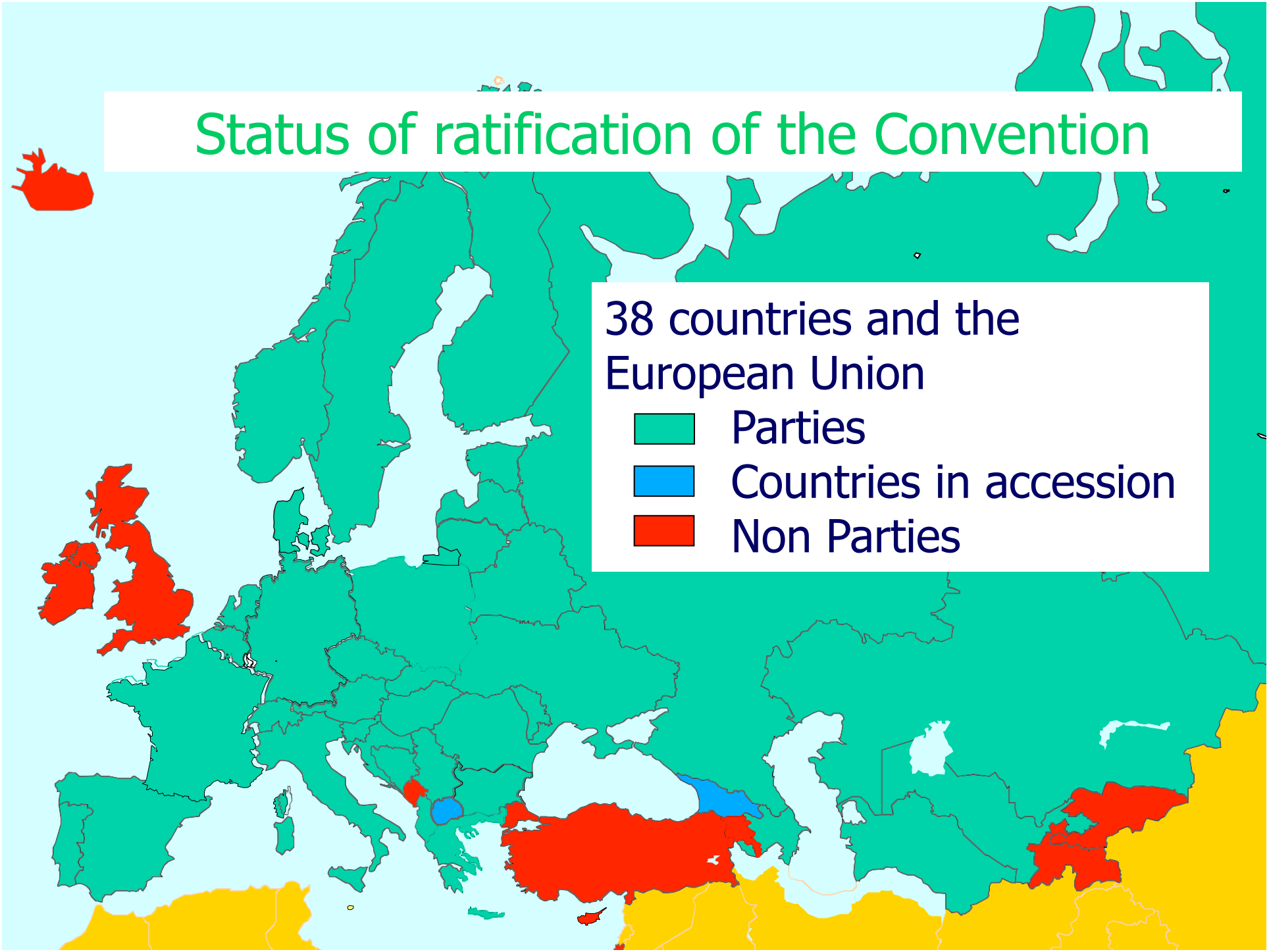
UNECE Water Convention

# The Water Convention




- Signed on 17 March 1992
- Entered into force on 6 October 1996
- Amended in 2003 to allow accession to countries beyond the UNECE region
- Amendment entered into force on 6 February 2013 => countries outside ECE expected to be able to accede as of 2014

# Status of ratification of the Convention



# Main obligations under the Convention

- Protection of transboundary waters by preventing, controlling and reducing transboundary impacts
- Reasonable and equitable use of transboundary waters
- Obligation to cooperate through agreements and joint institutions

=> Overall objective of sustainability

# Two categories of obligations

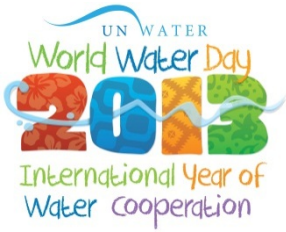
- For all Parties => also benefit for national legislation
- For Riparian Parties => the Convention does not replace basin agreements
  - Conclude bilateral and multilateral agreements Cooperate on the basis of IWRM
  - Establish joint bodies (e.g. river commissions)
  - Consult and exchange of information
  - Joint monitoring and assessment
  - Elaborate joint objectives and action programme

# The legal obligation to cooperate: agreements and joint bodies

- Obligation to cooperate (enter into specific agreements, exchange information, notify and consult, establish management plans, etc…)

- *ILC Draft Articles (2008):* aquifer States are encouraged to enter into bilateral and multilateral agreements; aquifer States should establish joint mechanisms of cooperation (similar to *UN Watercourses Convention (1997))*

- *UNECE Water Convention (1992):* Riparian Parties *shall* enter into bilateral or multilateral agreements which *shall* provide for the establishment of joint bodies



# Applicability of the Convention to groundwater

- "Transboundary waters" means any surface or ground waters which mark, cross or are located on boundaries between two or more States (Art.1(1))
- The Guide to Implementing the Convention: “As for groundwaters, the Convention includes both confined and unconfined aquifers”

# Early years…

- Inventory  of transboundary groundwaters by UNECE Task Force on Monitoring  and Assessment 1999
- Guidelines on monitoring and assessment of transboundary groundwaters (2000)
- Pilot projects to apply the guidelines

# Recent activities…

- Inventory and assessment: First (2007) and Second (2011) Assessments of Transboundary Rivers, Lakes and Groundwaters in UNECE region
- Preliminary study of the application of the principles of the Convention to transboundary groundwater (2010-2011) and Study on groundwater in transboundary water agreements in EECCA (2009)
- 2012 Model Provisions on Transboundary Groundwaters
- Capacity for Water Cooperation workshop for EECCA countries (Almaty, 2012), by UNECE, UNESCO, OSCE & UNDP

# Model Provisions on Transboundary Groundwaters

- Non-binding guidance
- adopted by Meeting of the Parties in 2012
- Build on the ILC Draft Articles
- Active participation of UNESCO and IAH in their development
- To be used by Parties and non-Parties when entering into or reviewing bilateral or multilateral agreements on transboundary groundwaters (in the form of an additional protocol to an existing agreement or a new and separate specific agreement on groundwaters)
- Accompanied by commentaries with references to international commitments and existing State practice

# Model Provisions on Transboundary Groundwaters

**Provision 1**

- obligation to take all appropriate measures to prevent, control and reduce any transboundary impact
- obligation to use transboundary groundwaters in an equitable and reasonable manner, taking into account all relevant factors

**Provision 2**

- obligation to use transboundary groundwaters in a sustainable manner

# Model Provisions on Transboundary Groundwaters

**Provision 3**

- Obligation of cooperation in the common identification, delineation and characterization of their transboundary groundwaters
- Programmes for the joint monitoring and assessment of quantity and quality of transboundary groundwaters

**Provision 4**

- Integrated management of transboundary groundwaters and surface waters

# Model Provisions on Transboundary Groundwaters

**Provision 5**

- Prevention, control and reduction of the pollution of transboundary groundwaters

**Provision 6**

- Exchange of information and available data on transboundary groundwaters (condition, status of use)

**Provision 7**

- Joint or coordinated plans for the proper management of their transboundary groundwaters (allocation, abstraction volumes, authorizations, pumping limitation, preservation & rehabilitation)

# Model Provisions on Transboundary Groundwaters

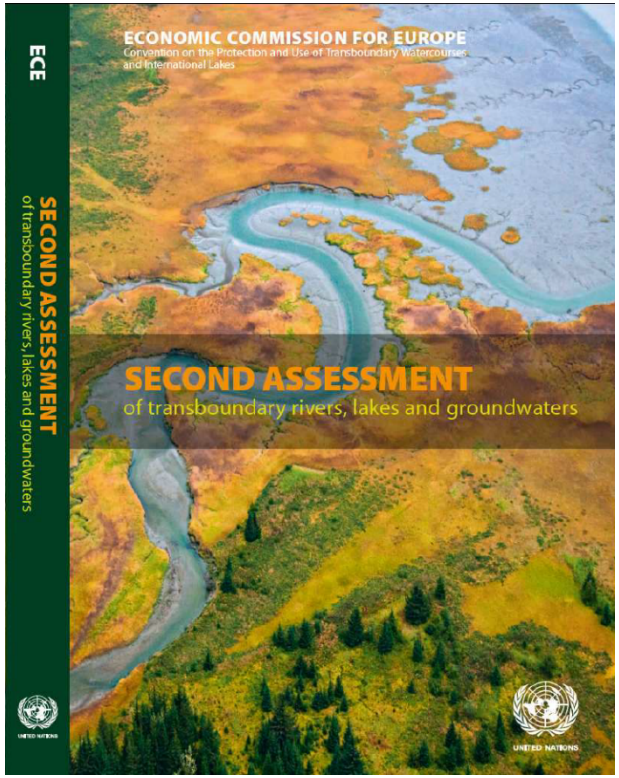
## Provision 8

- Environmental impact assessment
- Notification of the other Party and consultations
- Access to information, public participation and access to justice with respect to the conditions of transboundary groundwaters

## Provision 9

- Joint body

# Second Assessment of Transboundary Rivers, Lakes and Groundwaters




- Prepared for the 7th "Environment for Europe" Ministerial Conference (Astana, Kazakhstan; September 2011)
- Collective effort by Parties and non-Parties to the Water Convention, and countries outside the UNECE region
- Prepared on close cooperation with the national water/environment administrations
- A broad partnership: Ramsar Convention, UNEP-GRID, IGRAC, GWP-Med etc.
- Covers >140 rivers, 25 lakes, about 200 groundwaters and 25 Ramsar Sites/wetlands of transboundary importance

United Nations Economic Commission for Europe

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

World Water Day 2013 International Year of Water Cooperation

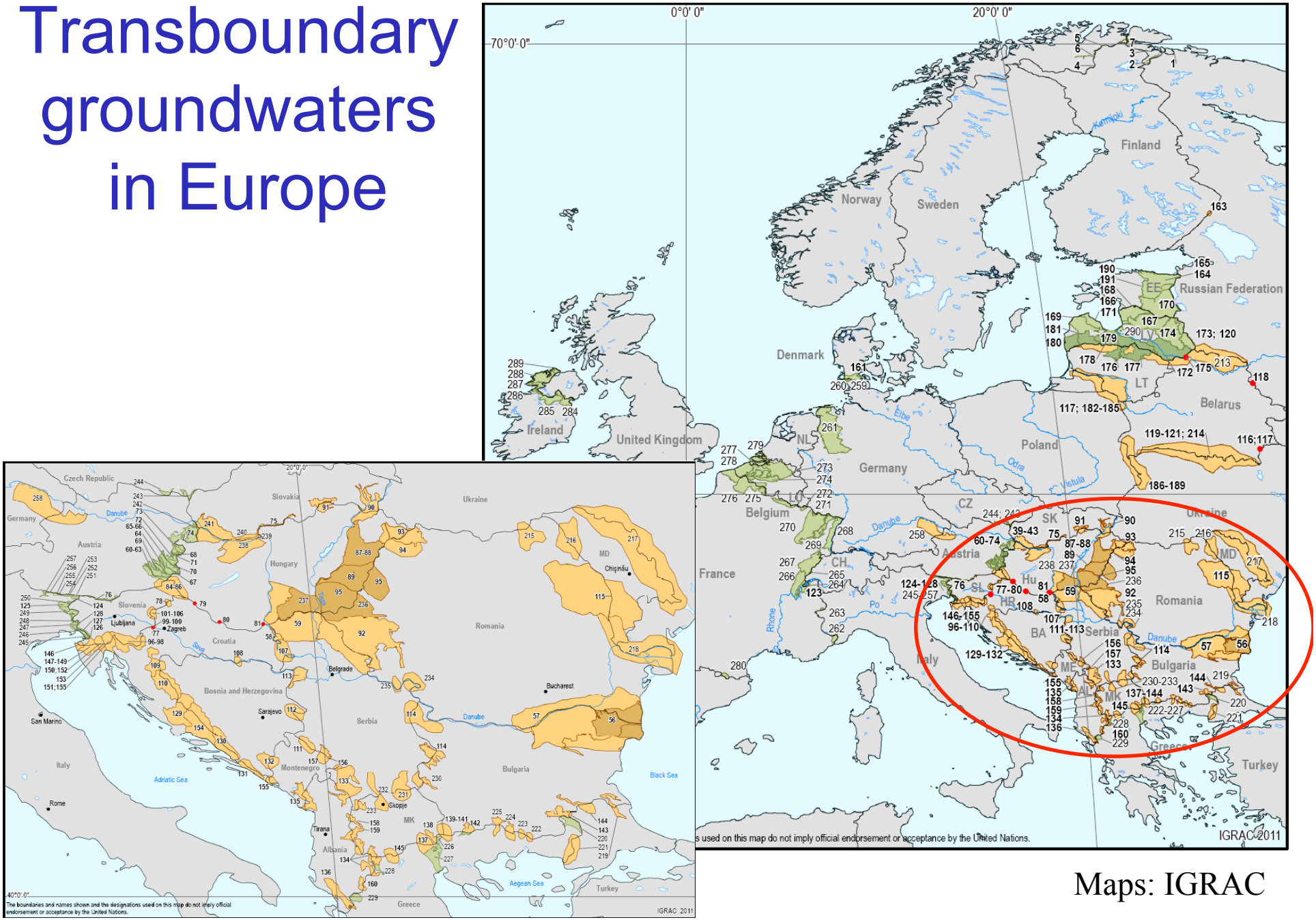
# Scope of the assessment regarding groundwaters

Transboundary groundwaters (aquifers & groundwater bodies) assessed in the context of transboundary river basins

Information collected

- Inventory of transboundary groundwaters
- Spatial information on the location, extent and delineations
- Quantity and quality status
- Pressure factors (abstractions, pollution sources)
- Transboundary impacts
- Management response
- Transboundary cooperation

# Transboundary groundwaters in Europe




Maps: IGRAC

# Transboundary groundwaters in the Caucasus and Central Asia

Maps: IGRAC

# Some general observations – legal basis and institutions

- border of the European Union (EU) — a divide of approaches, concepts and regulatory obligations; “aquifer” vs. “groundwater body”
- Many bilateral and multilateral **agreements** in the EECCA subregion: often no explicit reference to groundwater, or application to groundwater remains very low
- principle of **integrated management of surface and groundwater** missing in water laws in a number of countries of the EECCA
- Joint bodies in most cases do not deal with groundwaters; among the exceptions: the Danube Basin, groundwater monitoring cooperation of the Russian Federation and Estonia

# Management challenges

- Insufficient attention to groundwater in existing agreements, need to analyse and revise existing agreements
- Joint characterization of transboundary groundwaters remains limited (even of GW bodies in the EU)
- Even though in most cases some level of monitoring introduced, monitoring inadequate & needs to be improved
- In many countries, a proper assessment and planning lacking
- Groundwater protection zones and vulnerability mapping used, but in many cases need to be improved
- Licensing of abstraction mostly used, but insufficiently, and abstractions needs to be better monitored
- Better protection needed: e.g. introduction or improvement of wastewater treatment, more effective application of good agricultural practices

# Conclusions — relevance of the UNECE Water Convention

- Already the platform for cooperation and sharing experience for some 40 Parties & increasingly beyond pan-Europe
- Convention has fostered the development of transboundary agreements, the establishment of joint bodies and cooperation at the political & technical levels for 20 years
- Strengthening capacity for implementation essential
- The well-functioning institutional structure adjusts to the needs
  - Groundwater Task Force — monitoring guidelines
  - Core Group on Groundwater under the Legal Board — Model Provisions
- Rich experience accumulated; guidelines of wide applicability
- Regional assessments have inspired similar exercises

# Conclusions — the outlook

- Global opening
- Model Provisions on Transboundary Groundwaters to be translated into practice
- Challenges in groundwater cooperation technical, legal and institutional => the work under the Convention tries to address all aspects => groundwater actors should take advantage of it
- Cooperation with partners - UNESCO, joint bodies for transboundary water cooperation, governments, stakeholders…

# Thank you!

## More information

including guidelines, publications and information on activities under the Convention can be found at

http://unece.org/env/water

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