

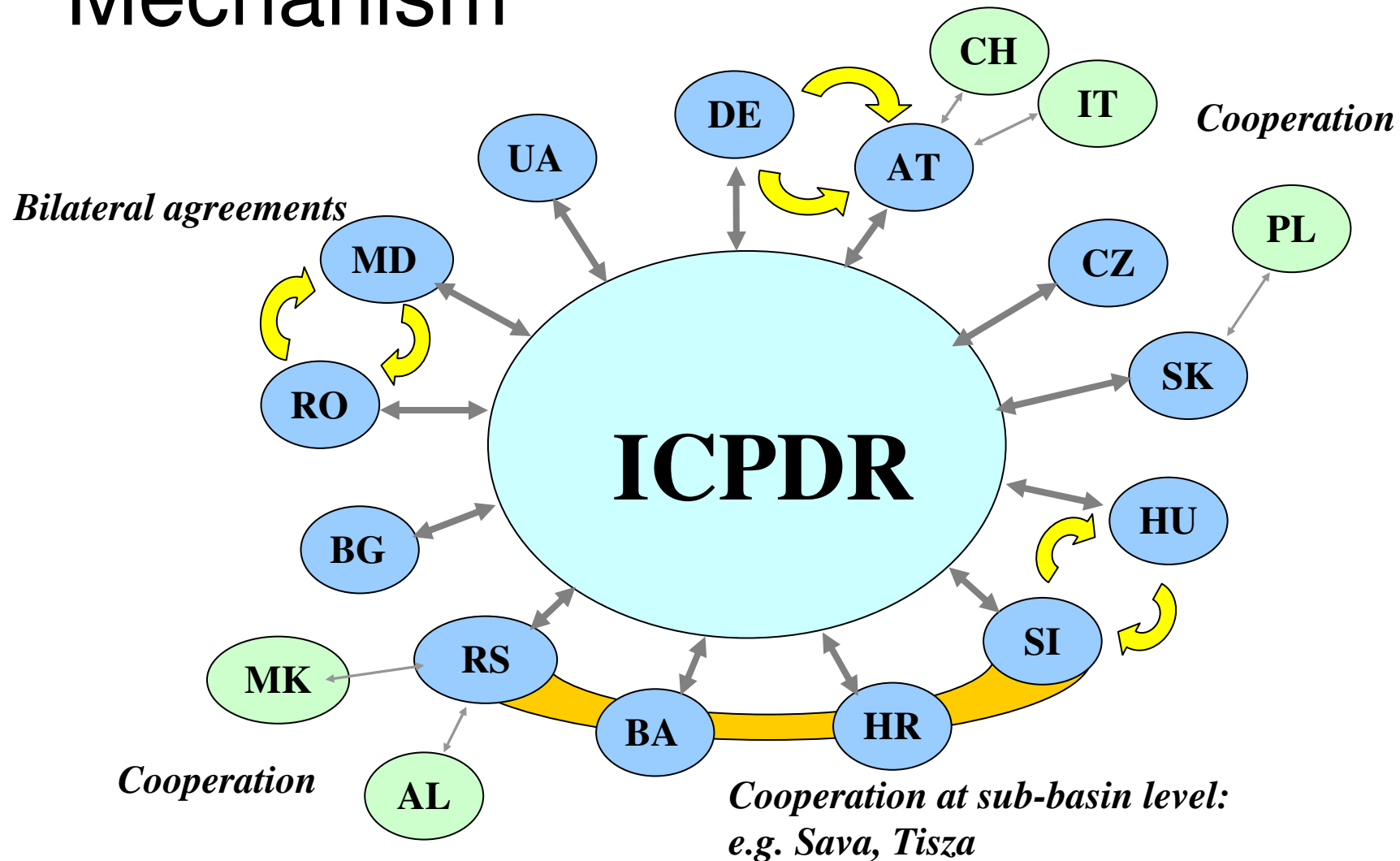
Identification of the Significant Water Management Issues in the Danube River Basin

Gheorghe Constan

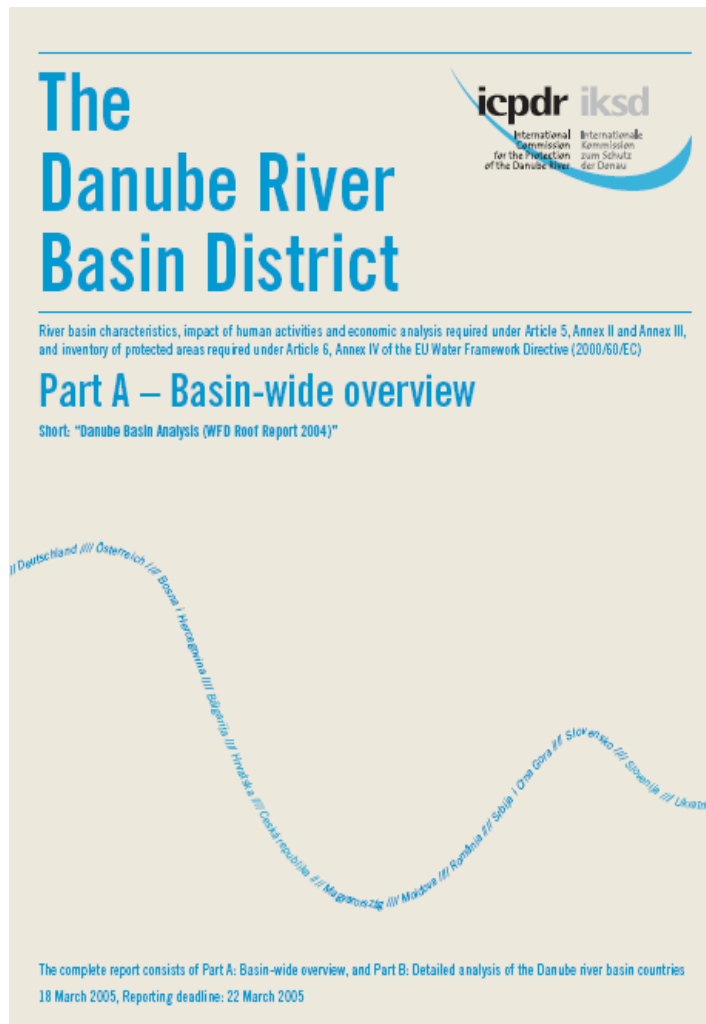
Ministry of Environment, Waters and Forests, Roma

ECRAN Taix, Podgorica, 10-12 March 2015

Coordination Mechanism



Danube Basin Analysis 2004



- ⇒ First comprehensive analysis of the entire Danube River Basin
- ⇒ Basis for any future river basin management planning
- ⇒ Identification of significant water management issues

Danube Basin Significant Water Management Issues

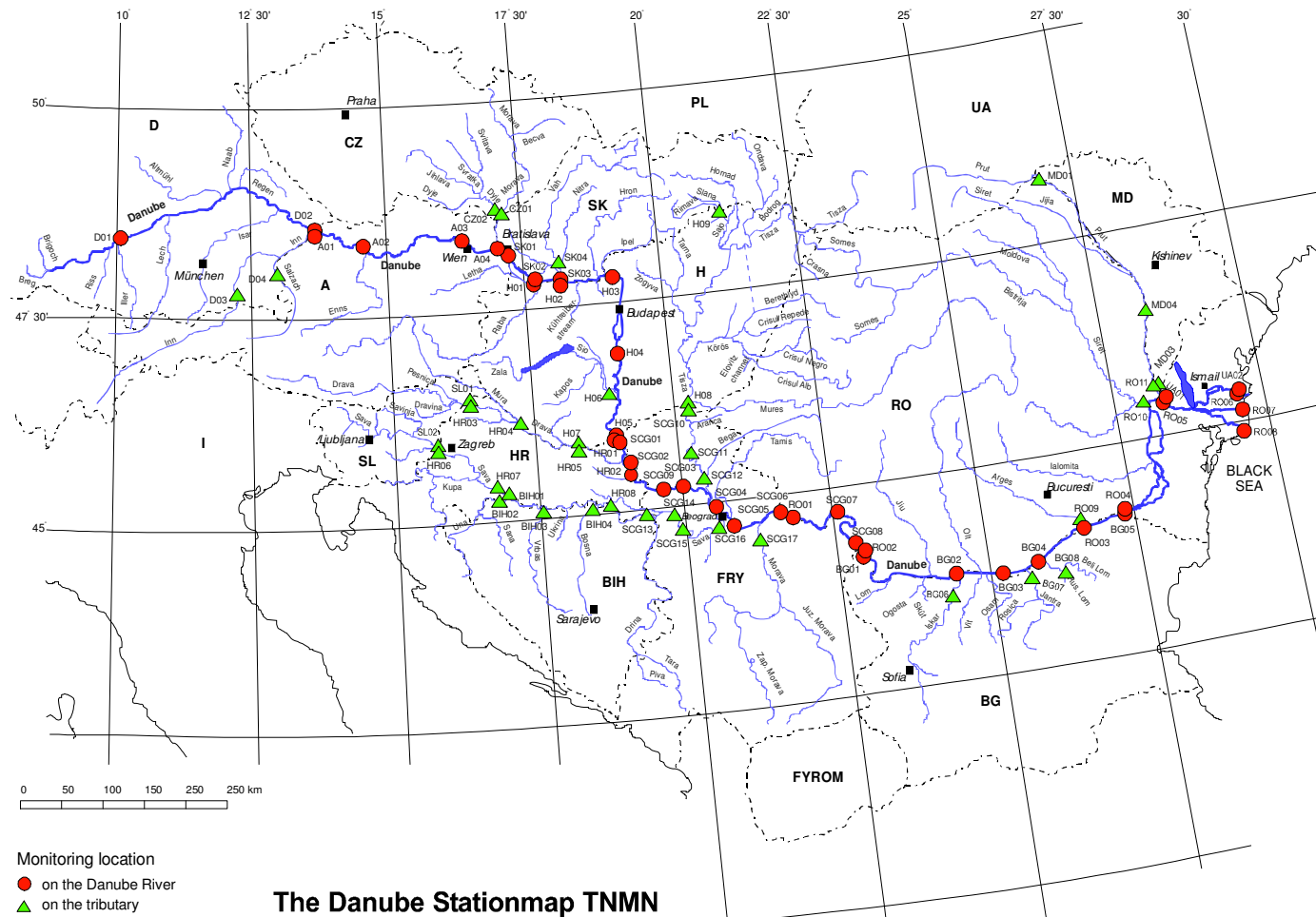
- Defines which are the main pressures on water requiring to be addressed on the Danube basin-wide level in order to reach WFD objectives
- Based on the Danube Basin Analysis Report, compiling relevant information inter alia on the main pressures and impacts on water
- Includes the results of the monitoring programmes in the DRBD

First Danube Basin Significant Water Management Issues

- Based on the activities developed under the UNDP/GEF project on the Danube Pollution Reduction Programme (using SIA)
- Used the support and data produced during the 15 years of UNDP/GEF assistance for the Danube River Basin
- Used the available data and knowledge existing at the national level
- Used the data produced within the Trans National Monitoring Network

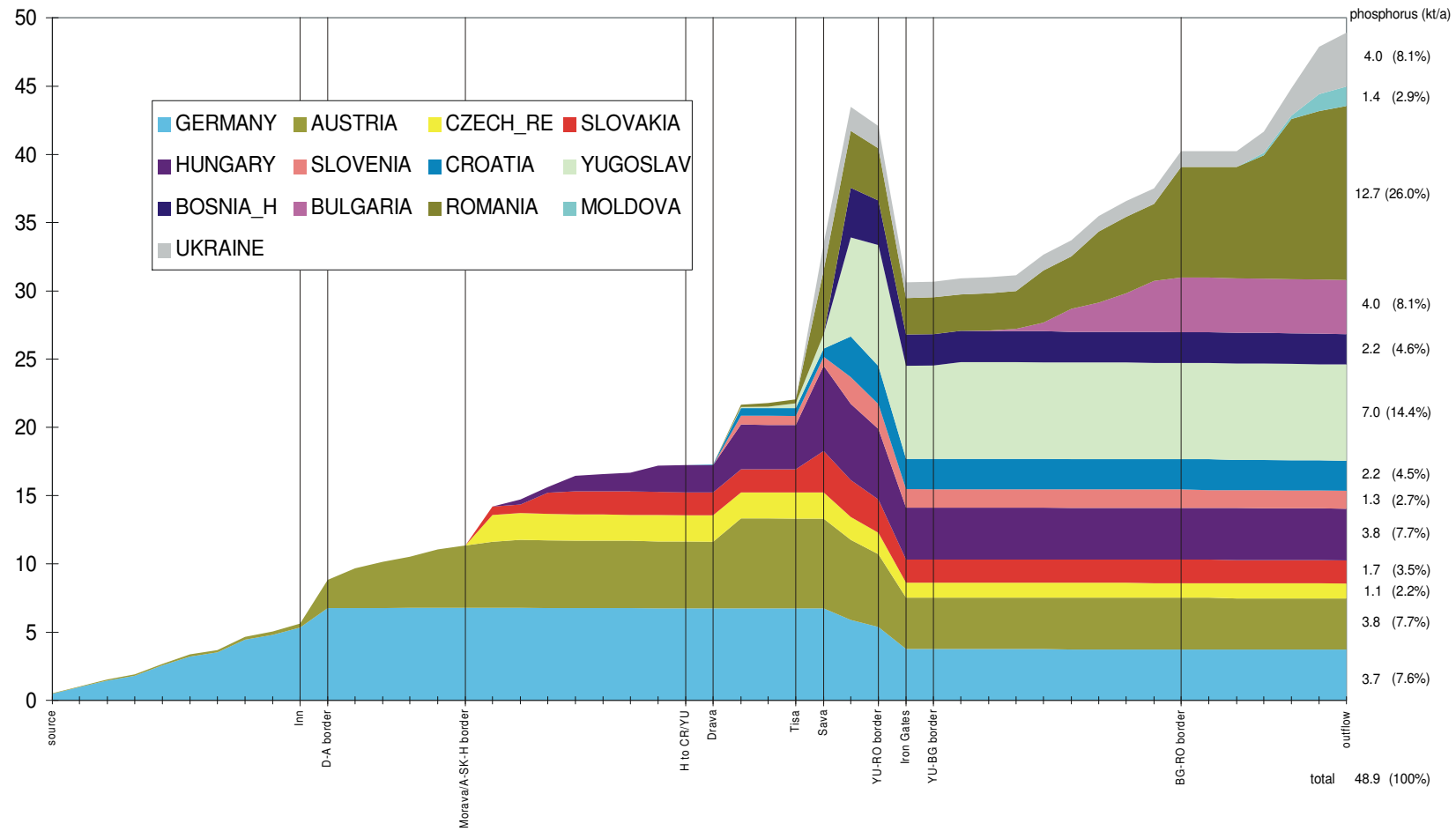
Trans National Monitoring Network – TNMN

until 2007 – only surface waters



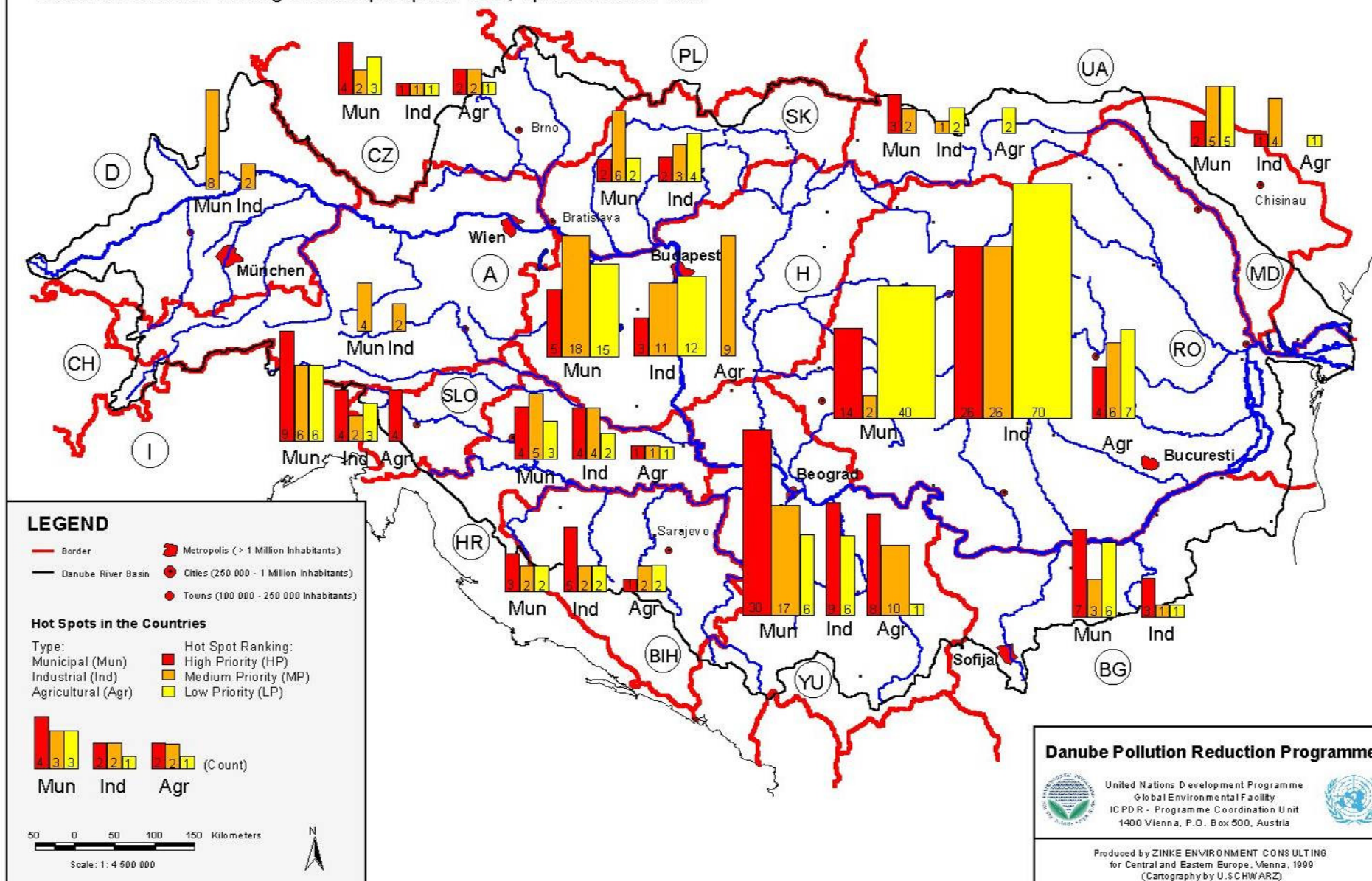
TNMN
Has been adapted to WFD requirements and report was sent to EC in March 2007

Annual Phosphorus Load in the Danube (in kt/y), subdivided over the countries of origin



Map 8: Hot Spots in the Danube Basin Countries

Based on National Planning Workshop Reports 1998, Updates March 1999



Define Management Objectives

By quantitative and qualitative components:

- measures (e.g. construction WWTP)
- elimination of pressures (e.g. reduction nutrient input)
- Water quality threshold (quality standards)

By bridging the gap between measures on national level and demands on international level to achieve objectives:

- Compilation of national measures by the international level in an effective way to reduce/eliminate impacts on basin wide scale

Management Objectives

- Basin wide management objectives are reached:
 - By coordination of national actions
 - By direct coordination at the ICPDR level

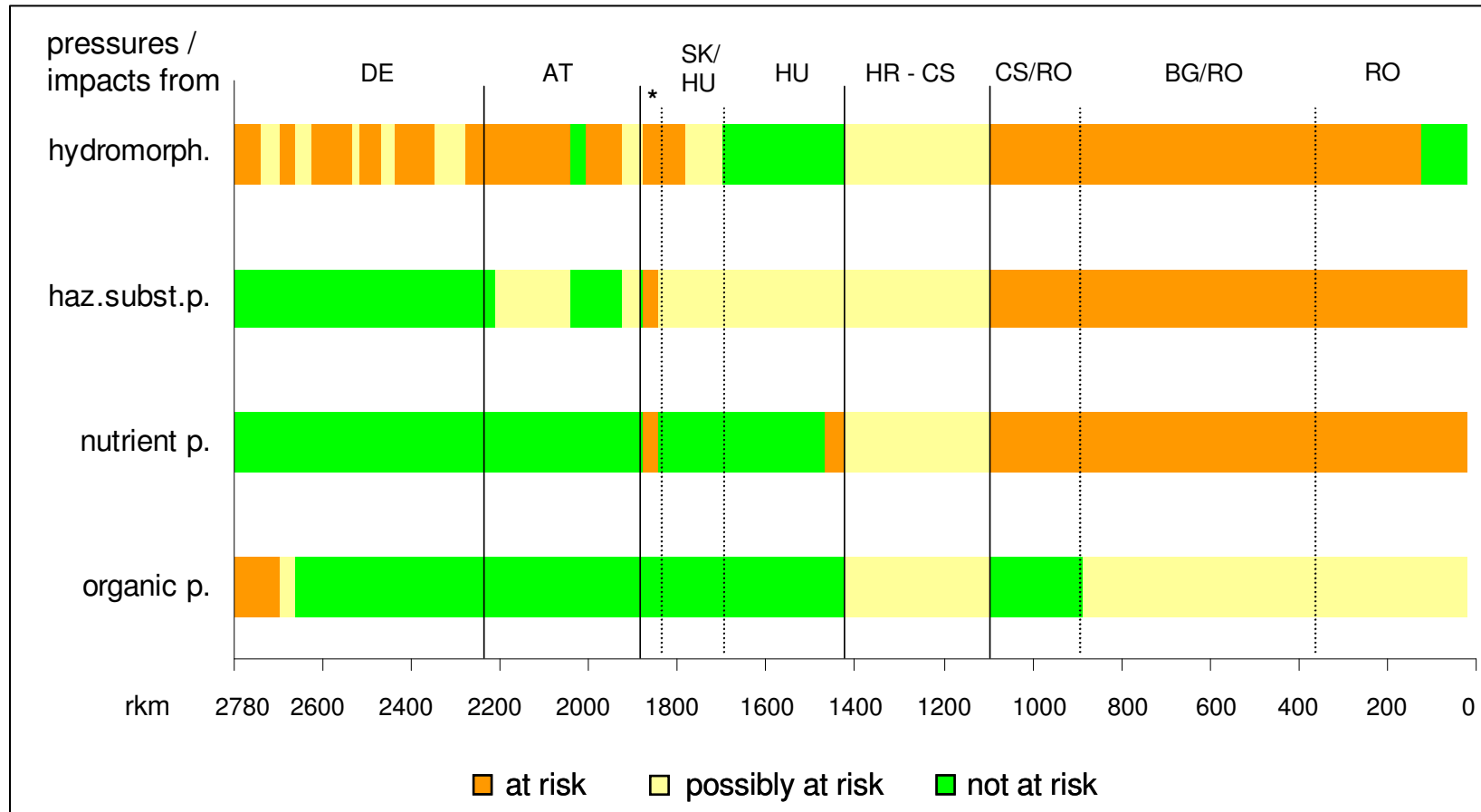
General and cross-cutting issues

- Interrelation between the basin-wide, national/sub-basin and sub-unit level
- Long-term visions and management objectives
- Basin-wide approach
- Joint Programme of Measures (JPM)
- Financing issues

Integration with other sectorial policies

- Inland Navigation
- Hydropower
- Agriculture
- Floods and droughts (Flood Directive)
- EU Marine Strategy Framework Directive

Identification Significant Water Management Issues



Significant Water Management Issues



Organic
Pollution



Nutrient
Pollution



Hazardous Substances
Pollution



Hydromorphological
Alterations

Vision and Management Objectives for organic pollution

- No untreated municipal and industrial waters are discharged into the Danube waters

Vision and Management Objectives for nutrients

- The nutrient balance in the Danube River Basin is environmentally sustainable. The emissions of nutrients via point and diffuse sources are managed in a balanced way for the entire Danube River Basin, that neither the waters from this basin nor the Black Sea are threatened or impacted by eutrophication

Vision and Management Objectives for dangerous substances

- Hazardous substances are not threat for aquatic environment of the waters within the Danube River Basin and Black Sea Basin. No untreated municipal and industrial waters are discharged into the Danube waters. Best available techniques are implemented for the treatment of industrial wastewaters to eliminate and reduce the discharge of the dangerous substances

Vision and Management Objectives for hydromorphological alteration

- Hydromorphological alterations do not impact the aquatic ecosystems in the Danube River Basin. The aquatic environment functions in a holistic way – hydromorphological alterations are managed in such a way that necessary habitats and structures are provided to ensure self-sustaining aquatic populations.

Joint Action Program investments and expected results

»Investments:

» Municipal wastewater collection & treatment	3.709 bill USD
» Industrial waste water treatment	0.276 bill USD
» Agricultural projects and land use	0.113 bill USD
» Rehabilitation of wetlands	0.323 bill USD

•Nitrogen reduction:

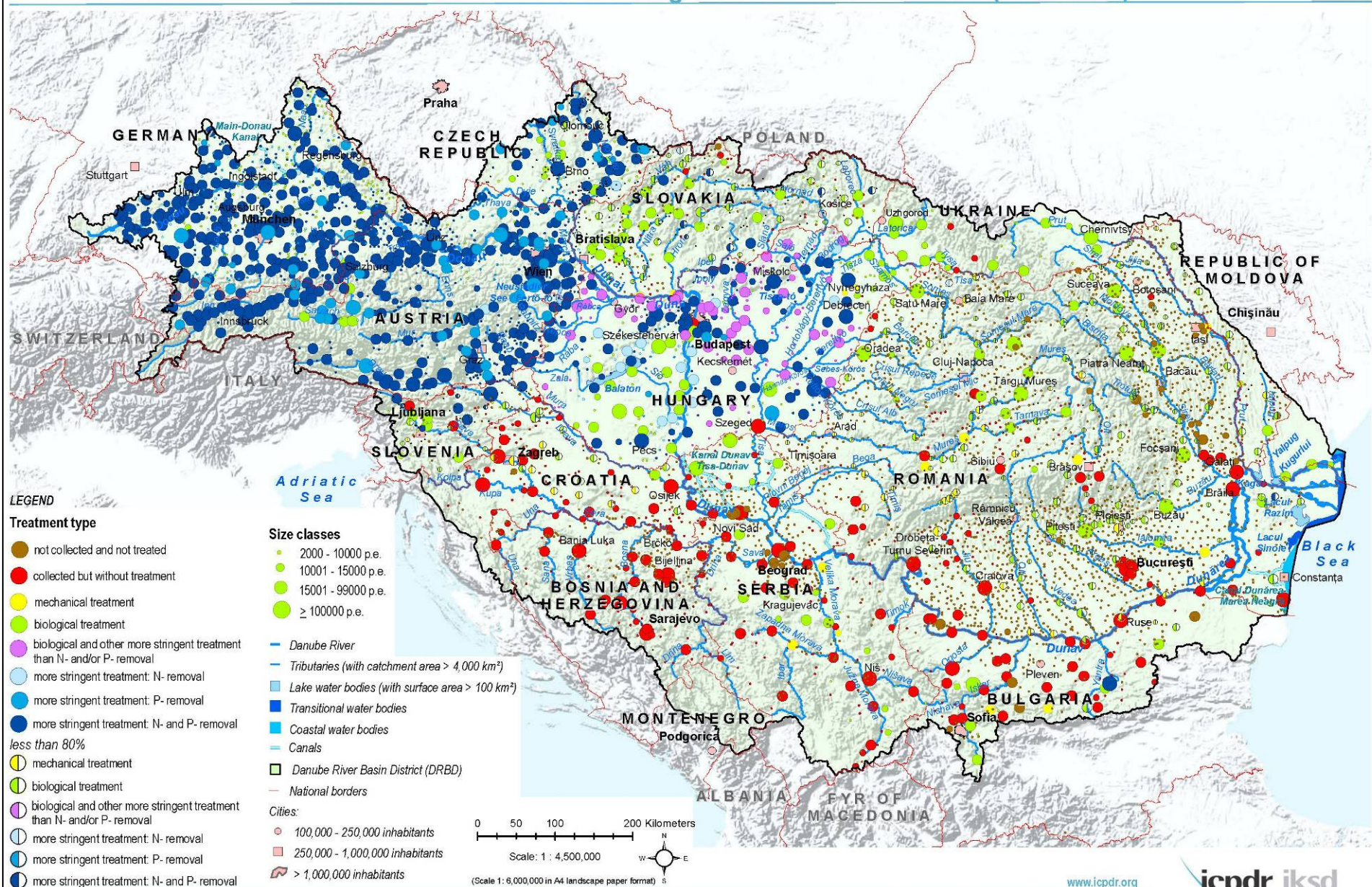
» from point sources	58,600 t/y
» from diffuse sources	60,000 t/y
» total emission reduction:	22 %

•Phosphorus reduction:

» from point sources	12,000 t/y
» from diffuse sources	4,000 t/y
» total emission reduction	33 %

Other Emerging Issues in the Danube River Basin

- Integration with other sectorial policies
- Groundwater
- Quality and quantity aspects of the sediment management
- Invasive alien species
- Water scarcity and droughts
- Sturgeon issues
- Adaptation to climate change



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 datasets was used for 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 Center) was used for the outer border of the DRBD of AL, IT, ME and PL.

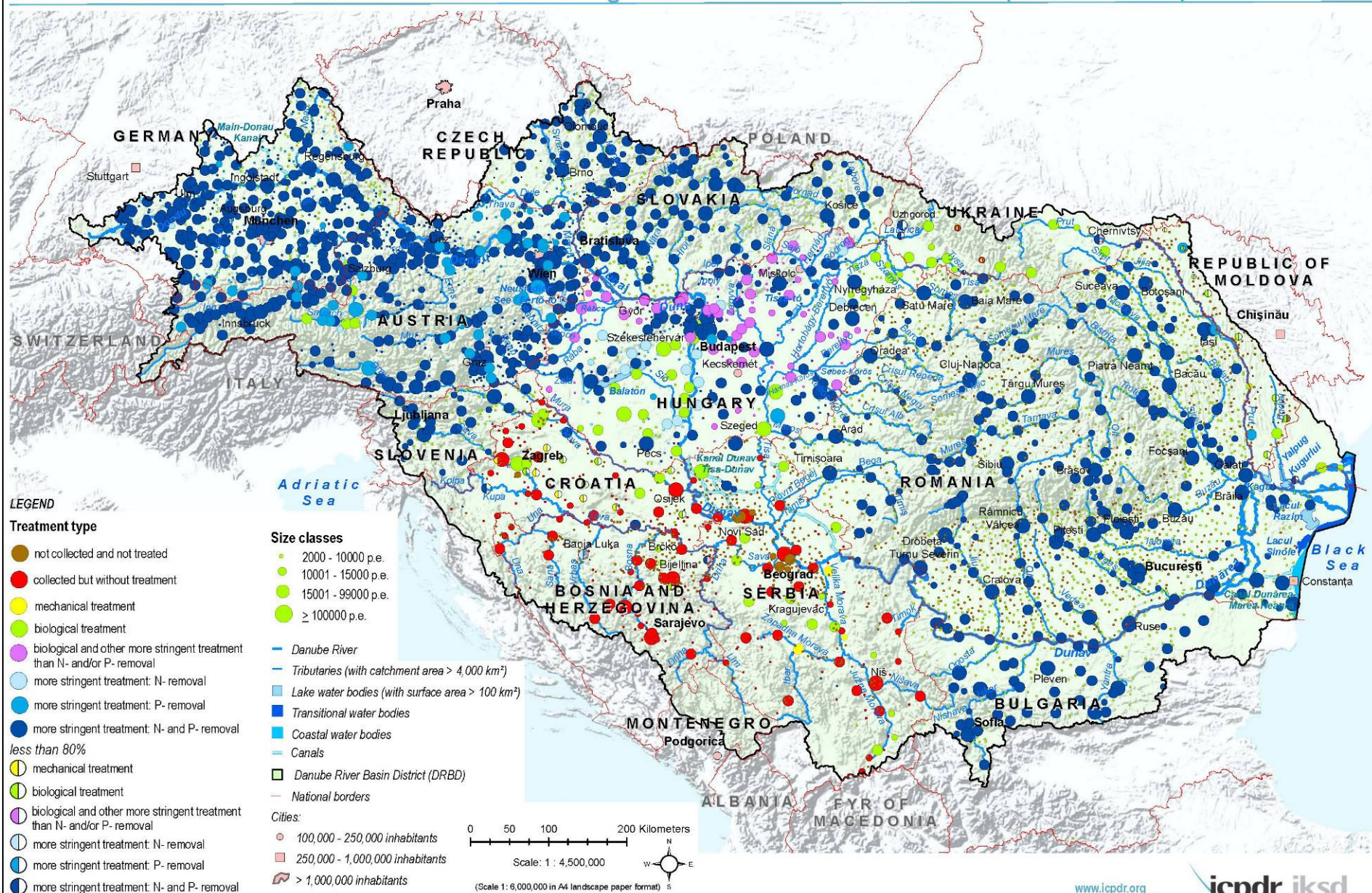
Vienna, November 2009

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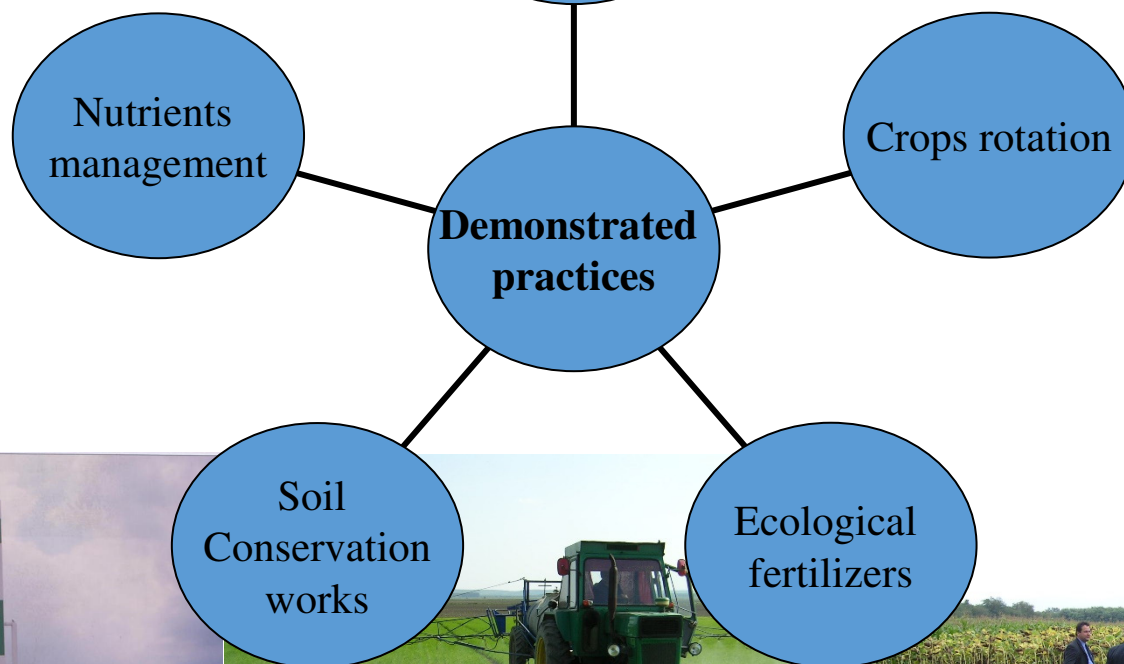
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Ecological rehabilitation works



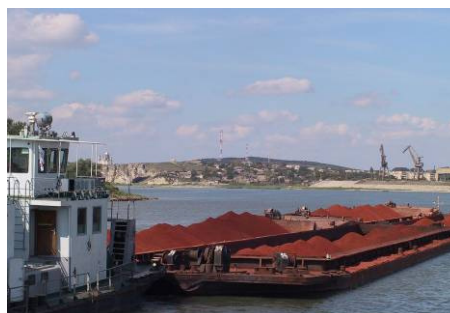
Foto: Iulian Nichersu
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Hydromorphological Alterations

Natural



Driver/Pressure



HYMO alterations



Danube River Basin District:
Ecological Prioritisation Regarding Restoration Measures for River and Habitat Continuity



The ecological prioritisation approach (Part A) is not meant to substitute similar national approaches but to outline the basin-wide perspective. Low restoration priority indicated on the basin-wide level does not imply that no measures should be undertaken on the national level as all fish species need open river continuity. On the other hand, ecological prioritisation is only one of many aspects in deciding which measures to adopt and implement. Final decisions will be taken at the national level.

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Thank you for your
attention!