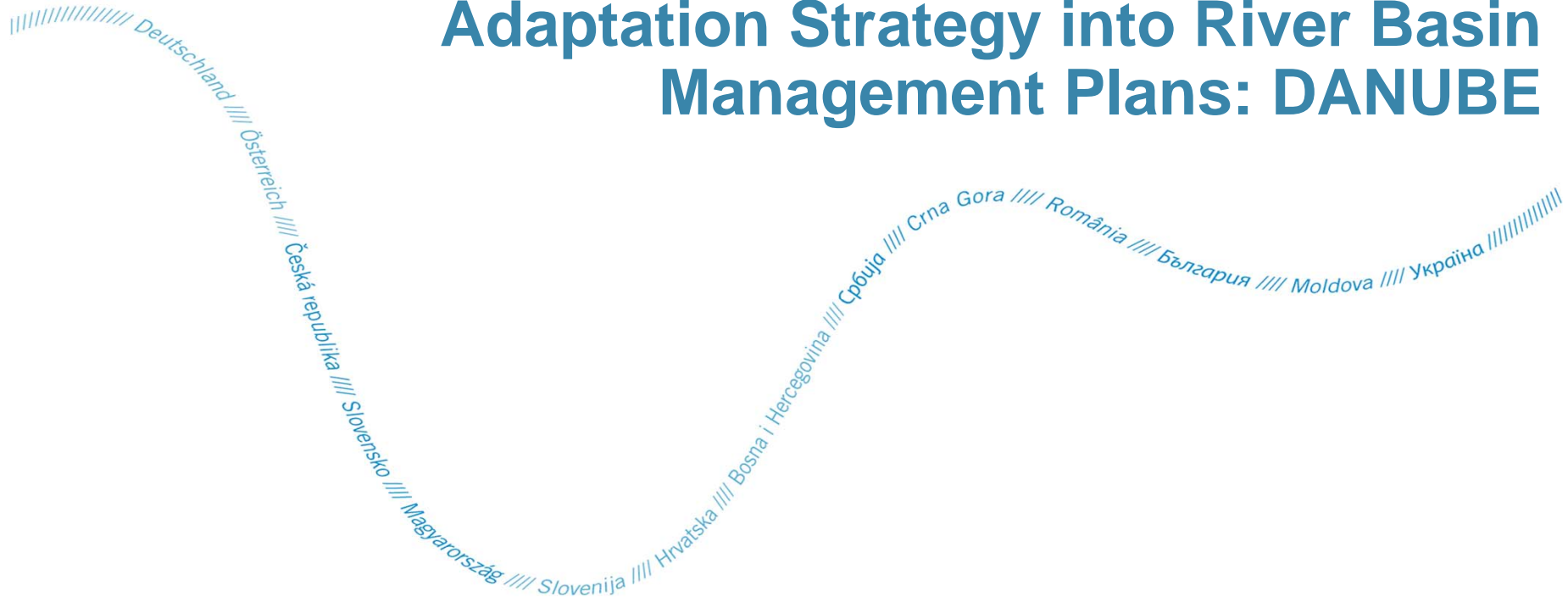

2nd Meeting Global Network of Basins Working on Climate Change Adaptation

13-14 February 2014, Geneva (CH)

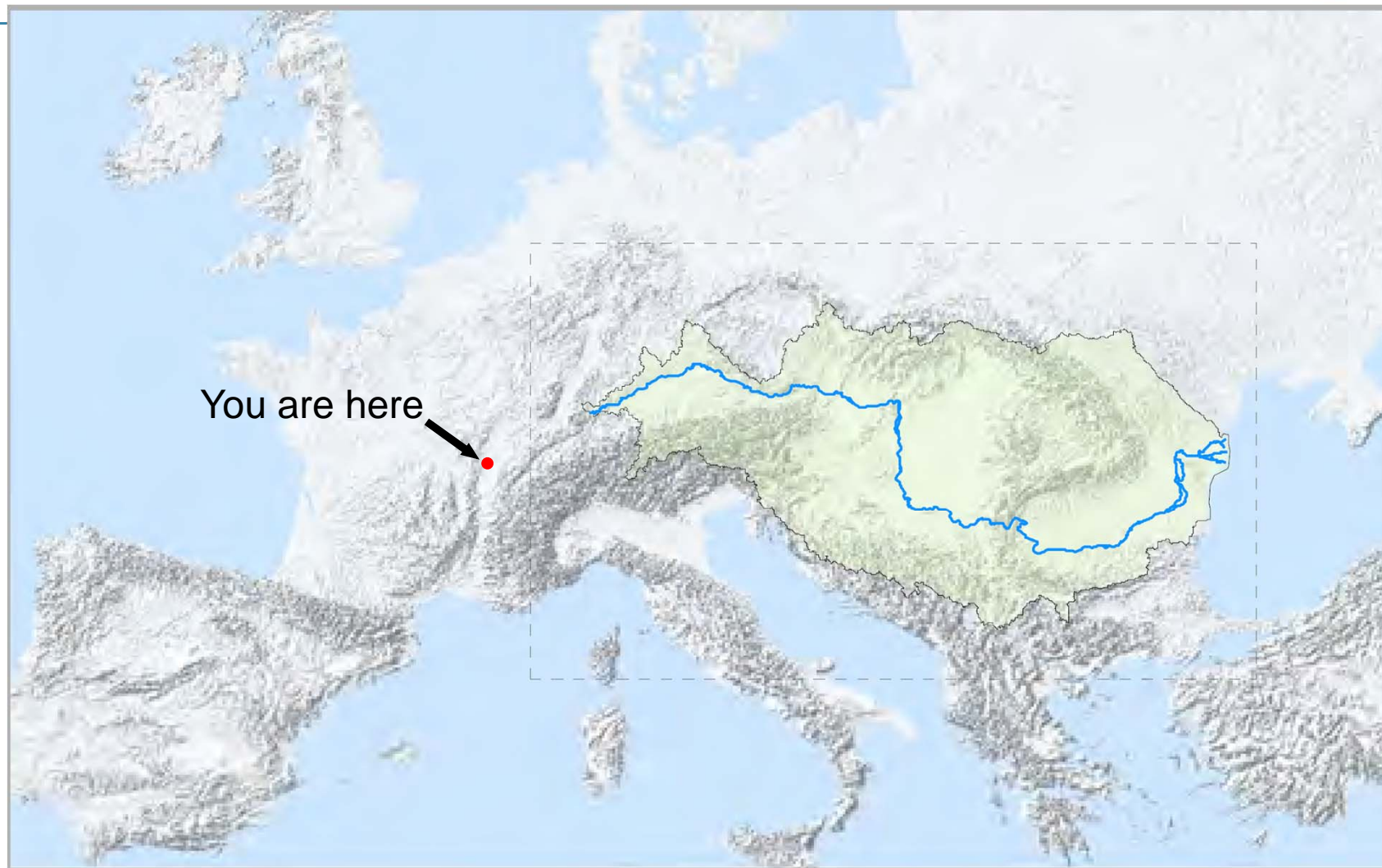


Implementation of Climate Change Adaptation Strategy into River Basin Management Plans: DANUBE



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The Danube River Basin



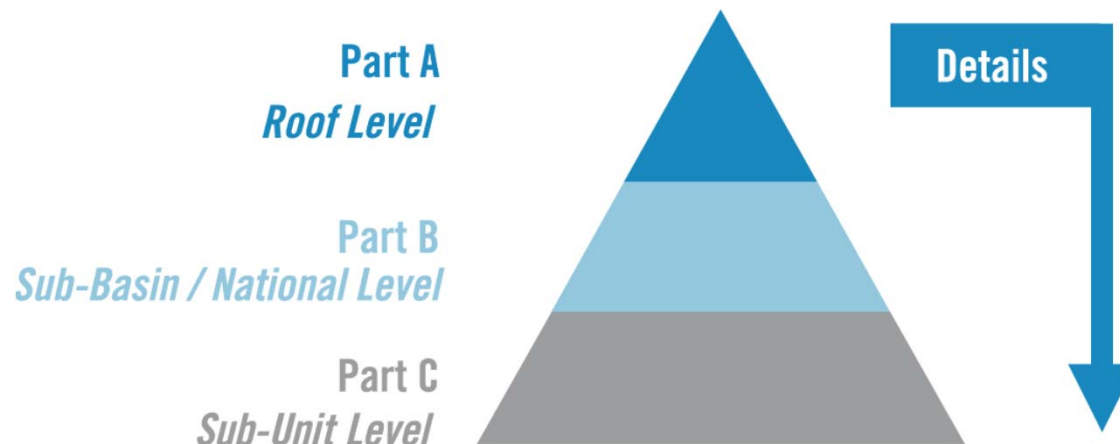
The Danube: Framework conditions



- **Legal framework** for cooperation **in place** (Danube River Protection Convention, signed 1994) - ICPDR established
- 14 countries and EU are **Contracting Parties** to the Convention
- Key tools for transboundary water management: **EU Water Framework Directive** (2000/60/EC) and **EU Floods Directive** (2007/60/EC)
 - Both Directives require **internationally coordinated management plans** for the basin-wide level
 - **1st Danube River Basin Management Plan** (WFD): Adopted in 2009
 - **Joint Programme of Measures** currently under implementation
 - **Updated 2nd Danube River Basin Management Plan** (WFD): 2015
 - **1st Danube Flood Risk Management Plan**: 2015 – in line with WFD cycle

Water Framework Directive and Floods Directive

Levels of Management



Part A: ICPDR – coordination on Danube basin-wide level

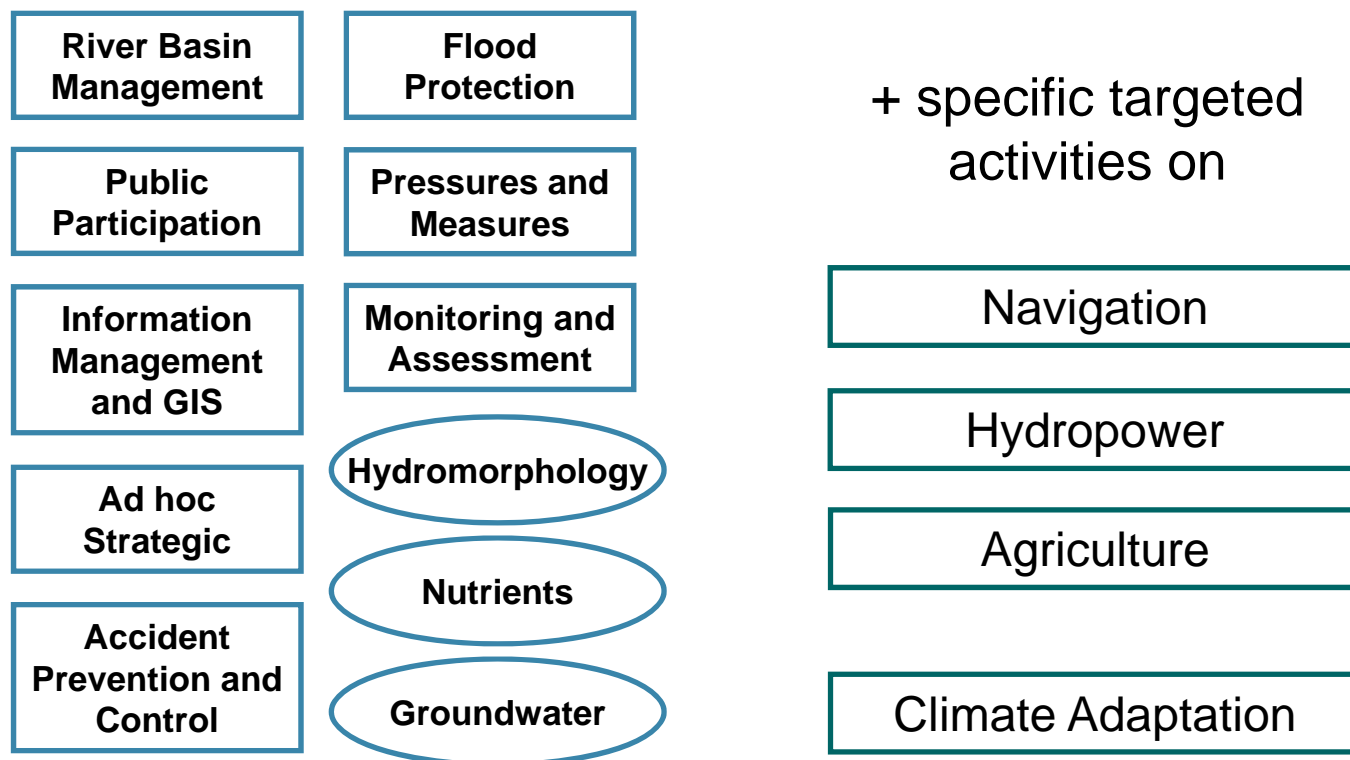
Part B: Sub-basin and/or national level

Part C: Management units within country

International Expert Groups, Task Groups, Activities

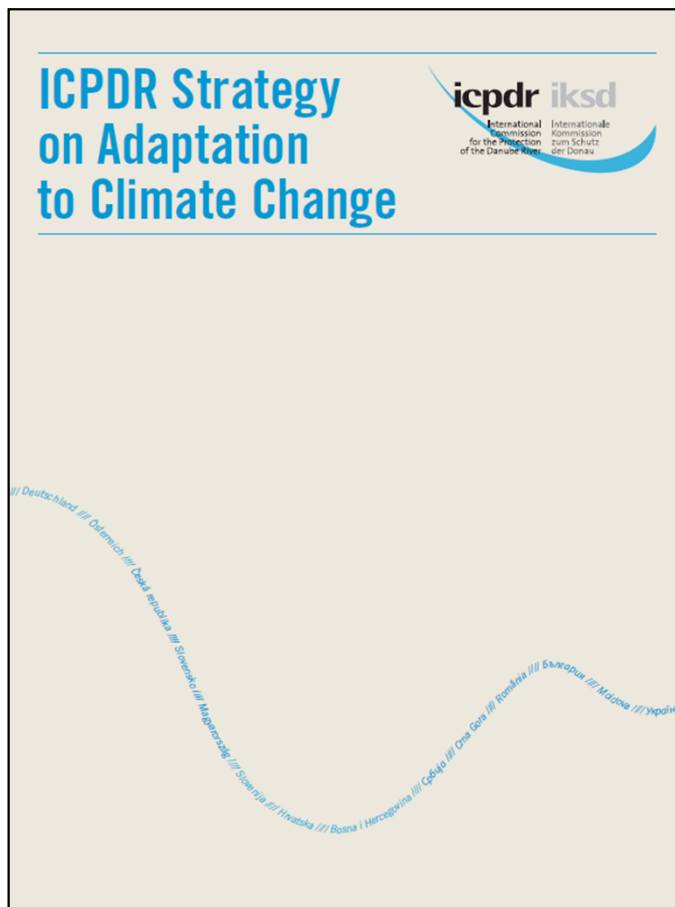


ICPDR Delegations of Contracting Parties



Participation in international expert groups of country representatives and stakeholders

December 2012: Danube Climate Adaptation Strategy adopted



Contents:

1. Introduction
2. Framework conditions
3. Climate change scenarios
4. Water-related impacts
5. Vulnerability
6. Overview of possible adaptation measures
7. Guiding principles on adaptation and integration into ICPDR activities
8. Next steps

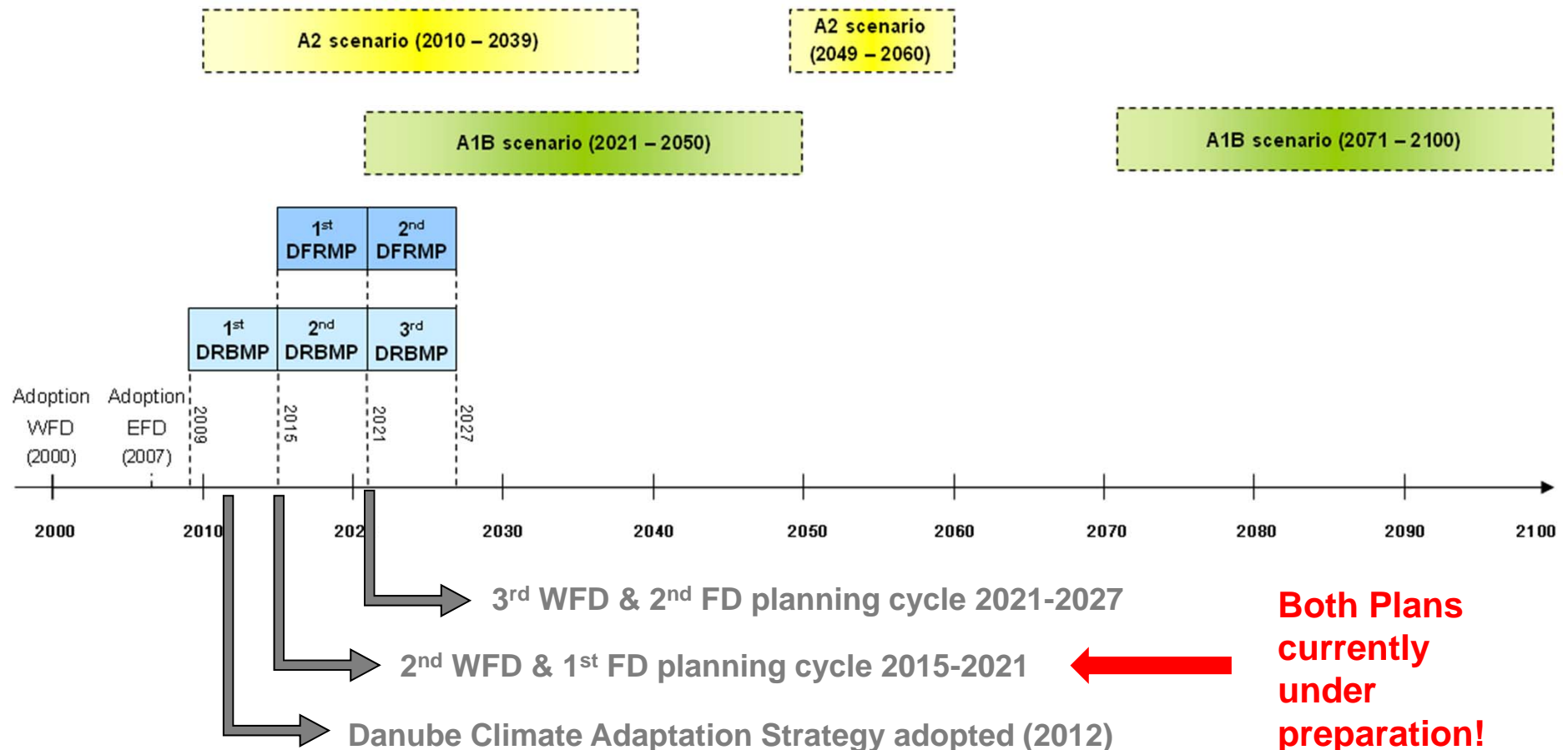
Danube Climate Adaptation Strategy

Strategic approach



- Danube Climate Adaptation Strategy does not include a separate programme of measures!
- Making best use of **existing structures and water management planning instruments**
 - **EU Water Framework Directive** and **EU Floods Directive** are main tools for adaptation
 - ICPDR Expert Groups and Task Groups mandated to **incorporate Climate Adaptation** in Danube River Basin and Danube Flood Risk Management Plan
 - **Cyclic and adaptive** approach (6-years cycle)
- Strategy includes Guiding Principles (from CIS Guidance Document No. 24), supporting ICPDR Expert Groups and Task Groups in adaptation

Adaptive approach for adaptation – time horizons



Integration of Climate Change Adaptation in Management Plans



- Integration of climate change adaptation in coordinated 2nd Danube River Basin Management Plan (WFD) and 1st Danube Flood Risk Management Plan
- Draft Plans to be available by December 2014
- 6 months public consultation (January 2015 – June 2015)
- Finalisation and adoption in December 2015
- Planned two-fold approach:
 - General chapter on overarching activities (information on strategic approach, steps taken for integration, etc.)
 - Incorporation of climate adaptation in specific relevant chapters (i.e. pressures assessment, monitoring programmes, adaptation measures as part of Joint Programme of Measures, etc.)

2nd DRBM Plan – DRAFT ToC

2nd Danube River Basin District Management Plan – Structure, outline, overview data collection

Table of Contents

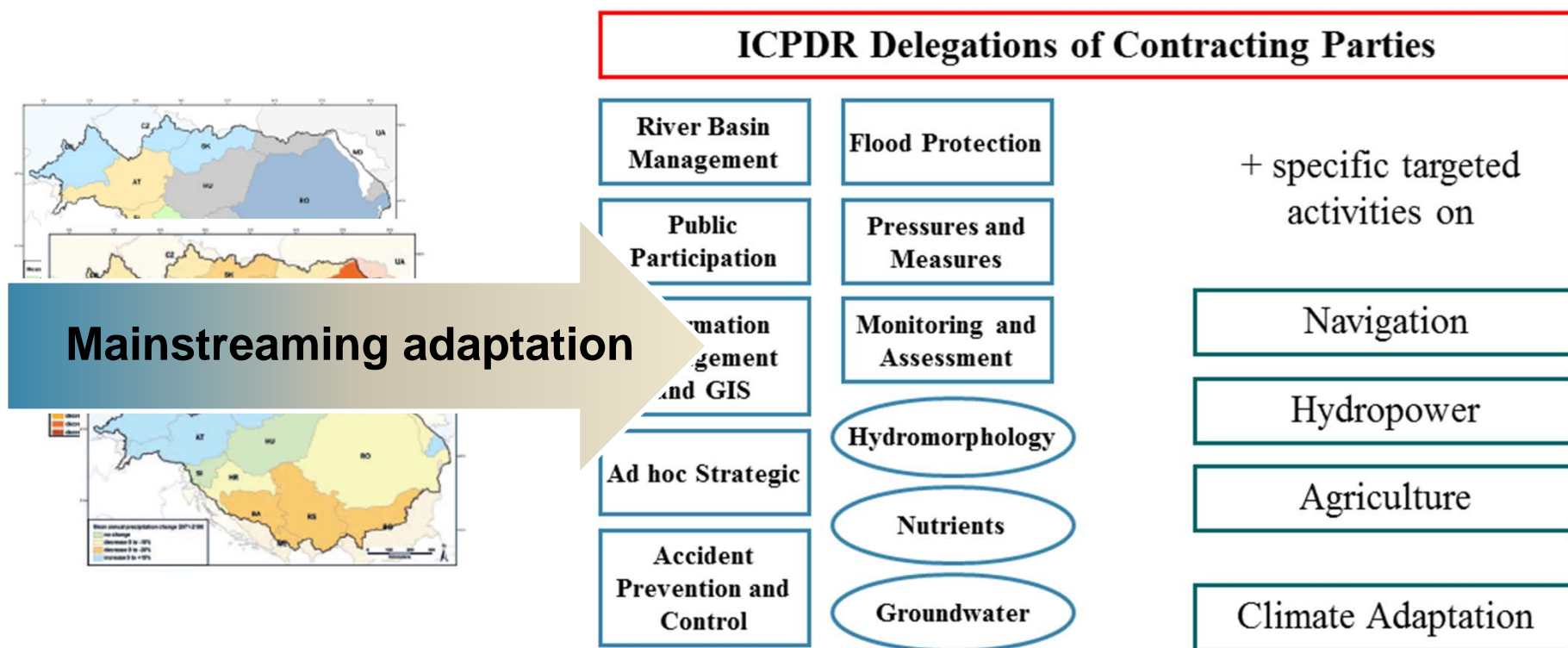
| | | |
|-------|---|---|
| 1 | Introduction and background | 1 |
| 1.1 | Introduction | 1 |
| 1.2 | The development of the 2 nd DRBM Plan and the EU Water Framework Directive | 1 |
| 1.3 | The Danube Basin Analysis 2013 – analytical basis for the 2 nd DRBM Plan | 1 |
| 1.4 | Role of Significant Water Management Issues | 1 |
| 1.5 | Structure and logic of the 2 nd DRBM Plan | 1 |
| 2 | Signific pressures in the Danube River Basin District | 1 |
| 2.1 | Surface waters: rivers | 1 |
| 2.1.1 | Organic pollution | 1 |
| 2.1.2 | Nutrient pollution | 2 |
| 2.1.3 | Hazardous substances pollution | 2 |
| 2.1.4 | Hydromorphological alterations | 3 |
| 2.1.5 | Other issues | 4 |
| 2.2 | Surface waters: lakes, transitional waters, coastal waters | 4 |
| 2.3 | Groundwater | 4 |
| 2.3.1 | Groundwater quality | 4 |
| 2.3.2 | Groundwater quantity | 5 |
| 3 | Protected areas in the DRBD | 5 |
| 4 | Monitoring networks and ecological / chemical status | 5 |
| 4.1 | Surface waters | 5 |
| 4.1.1 | Surface water monitoring network under the TNMN | 5 |
| 4.1.2 | Joint Danube Survey 3 | 5 |
| 4.1.3 | Confidence in the status assessment | 5 |
| 4.1.4 | Designation of heavily modified and artificial water bodies | 5 |
| 4.1.5 | Ecological status/potential and chemical status | 5 |
| 4.1.6 | Gaps and uncertainties | 5 |
| 4.2 | Groundwater | 6 |
| 4.2.1 | Groundwater monitoring network under TNMN | 6 |
| 4.2.2 | Status assessment approach and confidence level in the status assessment | 6 |
| 4.2.3 | Status of GWBs of basin-wide importance | 6 |
| 5 | Environmental objectives and exemptions | 6 |
| 5.1 | Management objectives for the DRBD and WFD environmental objectives | 6 |
| 5.2 | Exemptions according to WFD Articles 4(4), 4(5) and 4(7) | 6 |
| 6 | Integration issues | 6 |
| 6.1 | Interlinkage between river basin management and flood risk management | 6 |
| 6.2 | Inland navigation and the environment | 6 |
| 6.3 | Sustainable hydropower | 6 |
| 6.4 | Sturgeons in the Danube River Basin District | 6 |
| 6.5 | Water scarcity and drought | 7 |
| 6.6 | Adaptation to climate change | 7 |

2nd Danube River Basin District Management Plan – Structure, outline, overview data collection

| | | |
|-------|---|----|
| 7 | Economic analysis | 7 |
| 7.1 | WFD economics | 7 |
| 7.2 | Description of relevant economic water uses and economic meaning | 7 |
| 7.3 | Projection trends in key economic indicators and drivers up to 2021 | 7 |
| 7.4 | Economic control tools | 7 |
| 7.5 | Conclusions | 7 |
| 8 | Joint Programme of Measures (JPM) | 7 |
| 8.1 | Surface waters: rivers | 7 |
| 8.1.1 | Organic pollution | 7 |
| 8.1.2 | Nutrient pollution | 7 |
| 8.1.3 | Hazardous substances pollution | 8 |
| 8.1.4 | Hydromorphological alterations | 8 |
| 8.2 | Surface waters: lakes, transitional waters and coastal waters | 9 |
| 8.3 | Groundwater | 9 |
| 8.3.1 | Groundwater quality | 9 |
| 8.3.2 | Groundwater quantity | 9 |
| 8.4 | Joint Programme of Measures under Climate Change | 9 |
| 8.5 | Financing the JPM | 9 |
| 8.6 | Key conclusions | 9 |
| 9 | Public information and consultation | 9 |
| | Annex – Overview table data collection | 10 |

Indication of relevant chapters for incorporation of climate change adaptation in 2nd Danube River Basin Management Plan (similar approach foreseen for 1st Danube Flood Risk Management Plan which is also under preparation)

Mainstreaming adaptation in different ICPDR Expert Groups



ICPDR Expert Groups were mandated to fully integrate adaptation in water management planning processes

Mainstreaming of adaptation: Questionnaires



- Targeted questionnaires for each ICPDR Expert Group
- Starting point: Scenarios, expected impacts and Guiding Principles for adaptation as included in Danube Climate Adaptation Strategy, addressing:
 - I. Climate modelling, projections, scenarios, potential impacts and uncertainty
 - II. How to build adaptive capacity for management under climate change?
 - III. Water Framework Directive (WFD) and adaptation
 - IV. Flood risk management and adaptation
 - V. Drought management, water scarcity and adaptation
- Matrix on relevance of Guiding Principles for different Expert Groups
- Basis for development of targeted questionnaires

| | Guiding principle No. | RBM EG | FP EG | PP EG | MA EG | PM EG | N TG | GW TG | HYMO TG | ECON TG |
|------|-----------------------|--------|-------|-------|-------|-------|------|-------|---------|---------|
| I. | all items | x | x | | | | | | | |
| II. | 1-5 | x | x | | | | | | | |
| | 6 | x | x | x | | | | | | |
| | 7-10 | x | x | | | | | | | |
| | 11 | x | x | x | | | | | | |
| | 12-13 | x | x | | | | | | | |
| III. | 1 | | | | x | x | x | x | x | |
| | 2 | | | | x | | | | | |
| | 3 | | | | x | | | | | |
| | 4 | x | | | x | | | | | |
| | 5 | | | | | | | | | x |
| | 6-11 | | | | | x | x | x | x | |
| IV. | 1-16 | | x | | | | | | | |
| | 17-19 | x | x | | | | | | | |
| V. | all items | x | | | | | | | | |

Table 1: Overview guiding principles for adaptation to climate change and indication of relevance for ICPDR EGs and TGs

Planned next steps



- Finalisation of targeted questionnaires for each Expert Group
- Discussion of questionnaires in upcoming Expert Group Meetings, composited by national and sector/NGO representatives
- Incorporation of results from questionnaires in different chapters of
 - Draft 2nd Danube River Basin Management Plan and
 - Draft 1st Danube Flood Risk Management Plan
- Publication of draft Plans and 6 months public consultation, including joint stakeholder workshop in spring 2015
- Incorporation of feedback and update of Plans
- Finalisation and adoption by ICPDR in December 2015
- 2015-2021: Implementation of adaptation measures
- (2018: Update of Climate Adaptation Strategy foreseen)

Thank you for your kind attention!

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