



**UNECE**

United Nations Economic Commission for Europe

**Project on hazard and crisis management  
in the Danube Delta  
Hazard and Crisis Management Week**

**Danube Delta Analysis Report  
Links to the draft Agreement and  
Joint Contingency Plan**

Dr. Mihaela Popovici



# Structure of the presentation

Historic perspective

Background

Project area and Partners

DDAR Content

Links between the Danube Delta Analysis Report (DDAR) and the Trilateral Agreement and the Joint Contingency Plan

# Historic perspective

- Danube River Basin Management Plan
- Sub basin initiatives:
  - Sava
  - Tisza
  - Danube Delta
  - .....

# Background



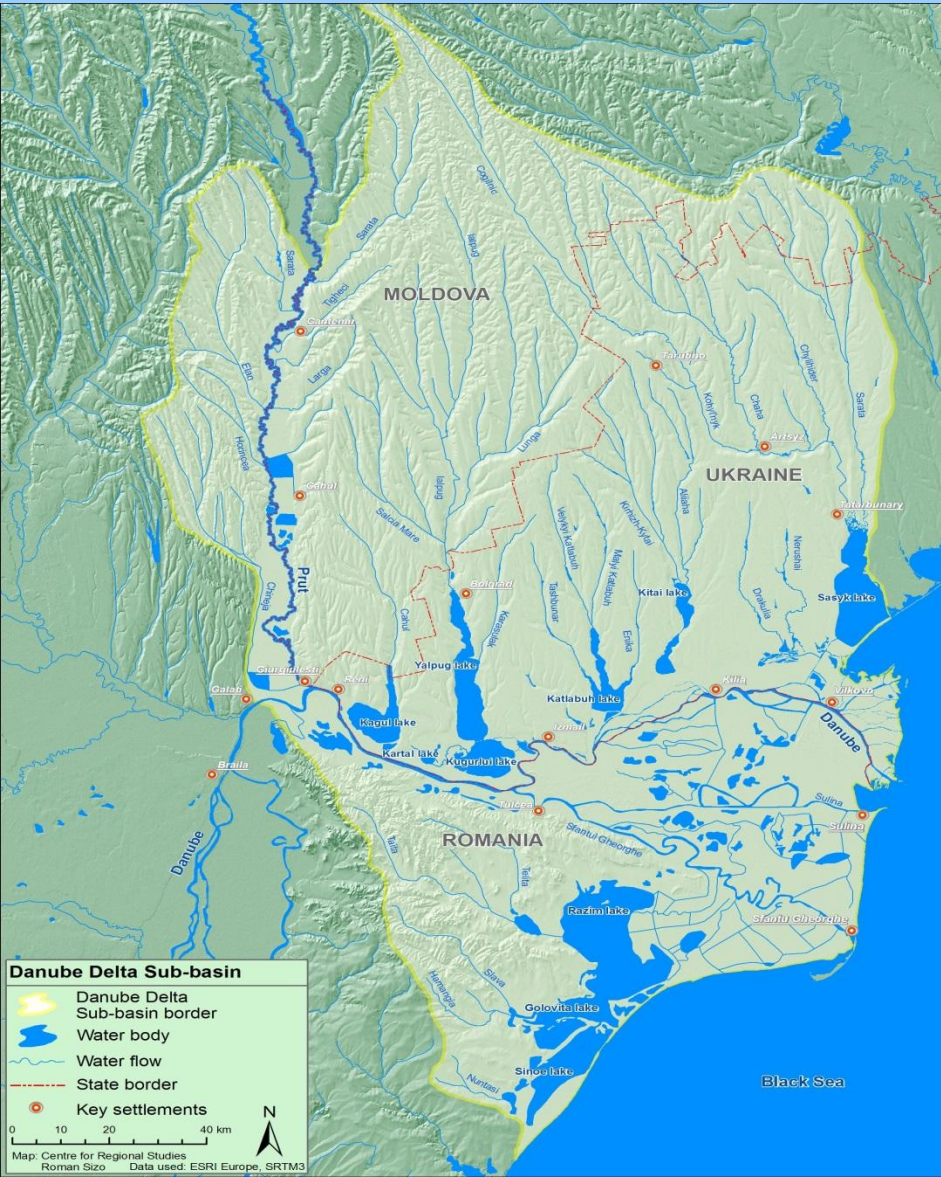
**ENVISEC Initiative**  
**Danube Delta Sub basin Analysis Report (WFD Art 5 Report)**

## General Objective

**Improving cross-border cooperation in the Danube Delta and building capacities for introducing a river basin approach to the management of natural resources in the Danube Delta Region.**



# Project Area and Partners



**Project Area**  
Moldova, Romania, Ukraine

**Lead agency**  
UNECE in cooperation with UNEP  
Regional Office for Europe

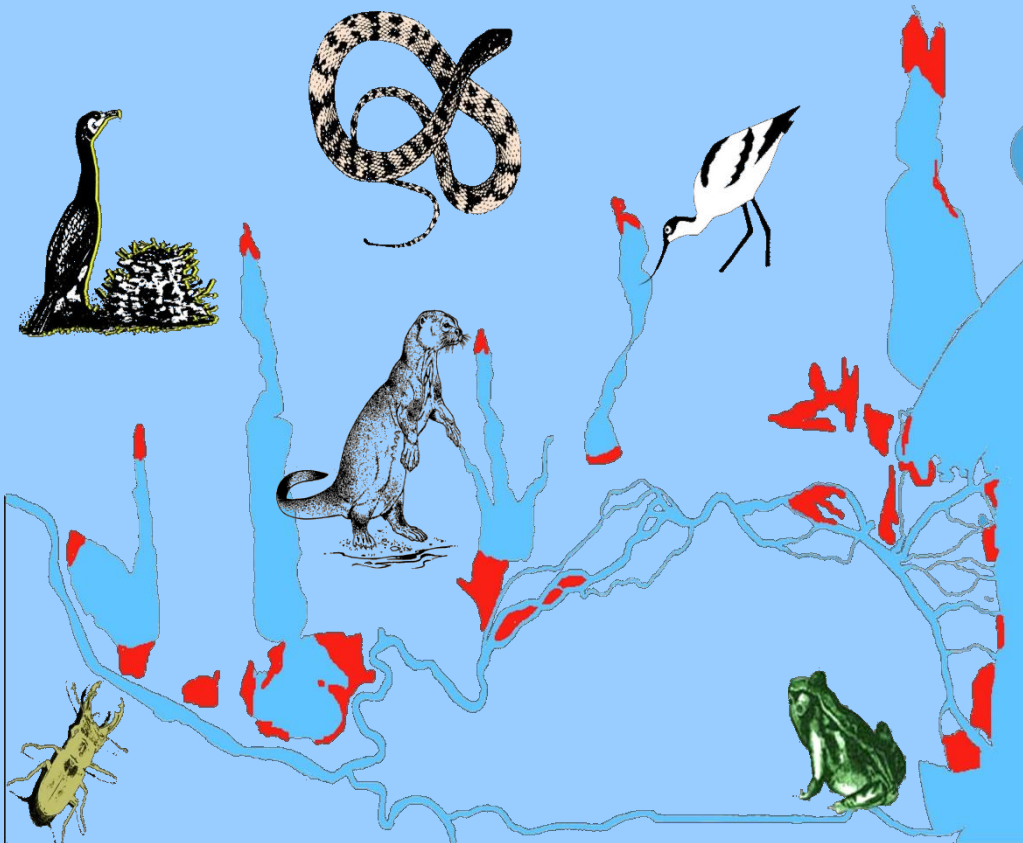
**Implementing agency**  
International Commission for the  
Protection of the Danube River  
(ICPDR)

**Regional Project Manager**  
Center for Regional Studies UA  
**Local partners in the three  
countries**

UNECE Convention on the Transboundary  
Effects of Industrial Accidents m



# Danube Delta Analysis Report



Represents the first step,  
followed by the  
**Danube Delta  
Sub Basin Management Plan  
and Joint Program of Measures**



# DDAR Content (1)

## 1. INTRODUCTION

- 1.1 Aim of the report
- 1.2 Structure and the contents of the report
- 1.3 Status of the report and disclaimer

## 2. THE DANUBE DELTA SUB-BASIN AND ITS INTERNATIONAL COORDINATION ARRANGEMENTS

- 2.1 Delineation of the Danube Delta Sub-Basin Project Area
- 2.2 States, administrative units and competent authorities
- 2.3 International coordination of the WFD implementation
  - 2.3.1 Coordination at the basin-wide level
  - 2.3.2 Bilateral and multilateral cooperation



# DDAR Content (2)

## 3. GENERAL CHARACTERISATION OF THE DANUBE DELTA SUB-BASIN

### 3.1 Geographic characterisation

### 3.2 Climate and hydrology

### 3.3 Soil and geology

### 3.4 Surface and ground waters in the Danube Delta Sub-basin

3.4.1 The Danube Delta and its main tributaries

3.4.2 Important lakes

3.4.3 Coastal area

3.4.4 Groundwater

### 3.5 Nature conservation areas

### 3.6 Socio-economic aspects

3.6.1 Population

3.6.2 Land use

3.6.3 Main economic sectors





# DDAR Content (3)

## 4 CHARACTERISATION OF SURFACE WATERS

### 4.1 Identification of surface water categories

### 4.2 Surface water types and reference conditions

#### 4.2.1. Ecoregions in the Danube Delta Sub-Basin

#### 4.2.2 Rivers

#### 4.2.3 Lakes

#### 4.2.4 Transitional waters

#### 4.2.5 Coastal waters

### 4.3 Identification of surface water bodies

#### 4.3.1 Water bodies in rivers

#### 4.3.2 Water bodies in lakes

#### 4.3.3 Water bodies in transitional waters

#### 4.3.4 Water bodies in coastal waters



# DDAR Content (4)

## **4.4 Identification of significant pressures**

- 4.4.1 Significant point sources of pollution
- 4.4.2 Significant diffuse sources of pollution
- 4.4.3 Hydromorphological alterations
- 4.4.4 Other significant pressures

## **4.5 Monitoring**

- 4.5.1 Water quality monitoring of surface waters
- 4.5.2 Water quantity monitoring of surface waters

## **4.6 Assessment of impacts on the sub-basin level**

- 4.6.1 Impact on rivers
- 4.6.2 Impact on lakes
- 4.6.3 Impact on transitional waters
- 4.6.4 Impact on coastal waters



# DDAR Content (5)

## **4.7 Identification of AWBs and provisional identification of heavily modified water bodies**

4.7.1 Identification of AWBs

4.7.2 Provisionally identified heavily modified water bodies

## **4.8 Risk of failure to reach the environmental objectives**

4.8.1 Approach for the risk assessment on surface waters

4.8.2 Risk of failure analysis on rivers

4.8.3 Risk of failure analysis on lakes

4.8.4 Risk of failure analysis on transitional and coastal waters

4.8.5 Risk of failure analysis on AWBs and heavily modified water bodies

## **4.9 Data gaps and uncertainties**

## **4.10 Conclusion on surface waters, important transboundary issues**



# DDAR Content (6)

## 5 CHARACTERISATION OF GROUNDWATERS

### 5.1 Location, boundaries and characterisation of groundwater bodies

### 5.2 Identification of groundwater dependent ecosystems

### 5.3 Identification of significant pressures

5.3.1 Significant point sources of pollution

5.3.2 Significant diffuse sources of pollution

5.3.3 Water abstraction, drainage

5.3.4 Other significant pressures

### 5.4 Monitoring

5.4.1 Water quality monitoring of groundwater

5.4.2 Water quantity monitoring of groundwater

### 5.5 Assessment of impacts

### 5.6 Risk of failure to reach the environmental objectives

5.6.1 Approach for the risk of failure analysis on groundwater

5.6.2 Results of the risk analysis on groundwater

### 5.7 Data gaps and uncertainties

### 5.8 Conclusions on groundwater, important transboundary issues



# DDAR Content (7)

## 5 CHARACTERISATION OF GROUNDWATERS

### 5.1 Location, boundaries and characterisation of groundwater bodies

### 5.2 Identification of groundwater dependent ecosystems

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5.6.2 Results of the risk analysis on groundwater

### 5.7 Data gaps and uncertainties

### 5.8 Conclusions on groundwater, important transboundary issues



# DDAR Content (8)

## **6 INVENTORIES OF PROTECTED AREAS**

### **6.1 Inventory of protected areas**

6.1.1 Nature conservation areas (Natura2000 sites)

6.1.2 Drinking water protection zones

6.1.3 Water stretches for bathing

### **6.2 Data gaps and uncertainties**

### **6.3 Conclusions on protected areas, important transboundary issues**

## **7 ECONOMIC ANALYSIS**

### **7.1 Economic analysis of water uses**

7.1.1 Characterisation of water uses

7.1.2 Characterisation of water services and cost recovery

7.1.3 Cost-effectiveness analysis

### **7.2 Projecting trends in key economic indicators and drivers up to 2021**

### **7.3 Data gaps and uncertainties**

### **7.4 Conclusions on the economic analysis of water uses**





# DDAR Content (9)

- 8 CLIMATE CHANGE**
- 9 DANUBE DELTA SPECIFIC ISSUES**
- 10 PUBLIC INFORMATION AND CONSULTATION**
- 11 KEY CONCLUSIONS AND OUTLOOK**
- 12 REFERENCES**

# Making connections that add value

## DDAR links with Trilateral Agreement

### Legal and institutional frame

International Agreements/Conventions  
Bilateral agreements  
Bilateral commissions

### Shared interests....

Pollution prevention/reduction  
Water quality  
Monitoring/Warning  
Transboundary cooperation  
Joint Program of Measures –  
Operational guidelines

### Making connections....

Danube countries  
Competent authorities  
Institutions  
Experts  
Exchange of information  
Implementing mechanisms

### Shared dilemma.....

EU WFD Objective

Good environmental  
status

UNECE Industrial  
Accidents Convention  
objective

Good water quality



# Making connections that add value

## DDAR links with Joint Contingency Plan

### Legal and institutional frame

International Agreements/Conventions  
Bilateral agreements  
Bilateral commissions

### Shared interests....

Pollution prevention/reduction  
Water quality  
Monitoring/Warning  
Transboundary cooperation  
Implementing measures

### Making connections....

Danube countries  
Competent authorities  
Institutions, Experts  
Joint Program of Measures –  
Joint Contingency Plan

### Shared implementation

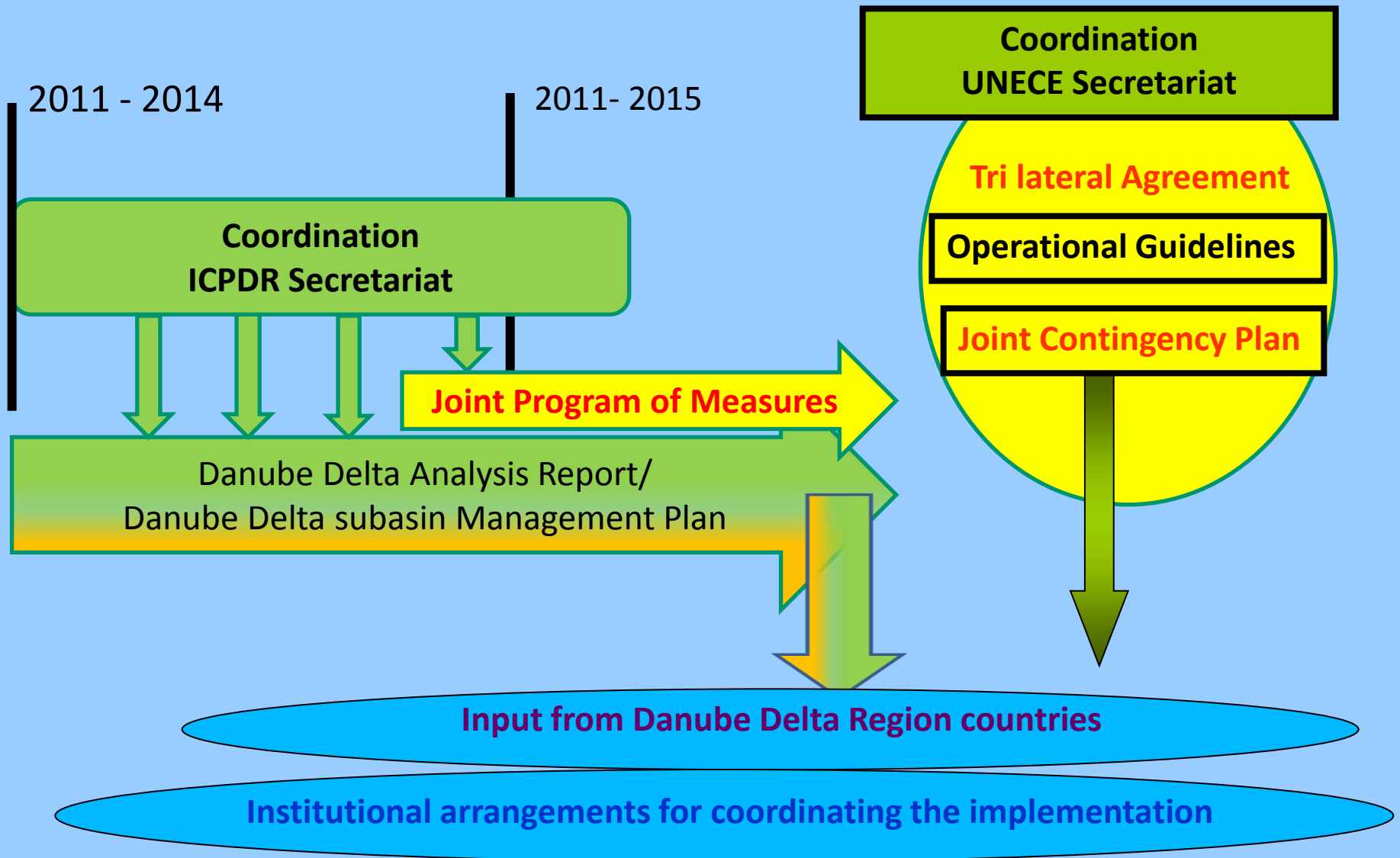
Joint Program of  
Measures

Joint Contingency  
Plan

Operational  
guidelines

Joint environmental monitoring, assessment  
and exchange of information

# Implementation synergies





**UNECE**

United Nations Economic Commission for Europe

# Thank you for your attention!

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Dr. Mihaela Popovici

International Expert

Email: [mihaela\\_popovici@yahoo.com](mailto:mihaela_popovici@yahoo.com)