

# The outcomes of FP7 DANCERS project as guidelines for the BSH later stages

FP7 DANCERS: "DANube macroregion: Capacity building and Excellence in River Systems (basin, delta and sea)"  
(EC GA 603805 / 2013)

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# FP7 DANCERS - “Ultimate deliverables”

Toolbox of instruments containing:

1. Strategic research agenda (SRIA)
2. concept and detailed plan of the distributed research infrastructures for the Danube – Black Sea Macrosystem
3. Proposals for an integrated educational program with the full cooperation of partners from Danube - Black Sea Macrosystem.

# FP 7 DANCERS – SPECIFIC OBJECTIVES

- \* 1. critically analyse the achievements in integrated river- delta –sea management in the Danube Region.
- \* 2. understand links between the achievements, deliverables and results of the work performed.
- \* 3. Define a set of instruments to enhance environmental research and innovation in Danube Region.

# FP 7 DANCERS – PROJECT STRUCTURE

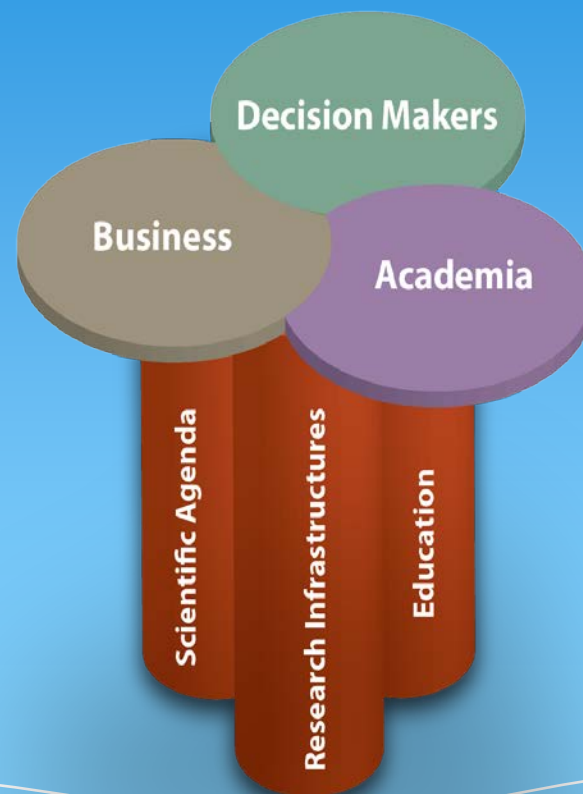
## \* Analyse:

### \* the three pillars of knowledge

- \* science,
- \* research infrastructures
- \* Human potential

### \* Interactions with the three main categories of stakeholders:

- \* scientists and academia,
- \* decision and policy makers
- \* business community.



# Knowledge and expertise

EU 15 PARTNERS:  
IFREMER (FR), UCC  
(IE), CIIRC (ES),  
UStirling (UK), HCMR  
(GR), CORILA (IT)

DANUBE AREA PARTNERS:  
GEOECOMAR & NIBS (RO),  
ZSI, BOKU, WCL (AT), BAFG  
(DE), USZ (HU), UNS (SR)

UNESCO-  
IHE (INTL)

ANALYSIS WITH REPRESENTATIVES OF MAIN ACTORS IN THE DANUBE  
- BLACK SEA MACROSYSTEM

## TOOLBOX OF INNOVATIVE INSTRUMENTS

DANUBE BLACK SEA END USERS

1. POLICY AND DECISION MAKERS
2. RESEARCH ORGANIZATIONS
3. BUSINESS – INDUSTRY COMMUNITIES

# PROPOSED SRIA TOPICS (1):

## River-delta-sea system continuity

Restoring ecosystem continuity throughout the Danube River – Danube Delta – NW Black Sea system

Pathways of transport and accumulation of litter(plastic) and pollutants (including emerging pollutants (e.g. nanoparticles) in the Danube – Black Sea system and their impacts on local ecosystems

Dynamics of Dissolved Organic Matter in the Danube River – Danube Delta – Black Sea System

Understanding river-sea interaction processes in the Danube Delta transitional environments

Managing dams and reservoir lakes as critical sediment traps and bottlenecks for river habitat continuity

## PROPOSED SRIA TOPICS (2)

### Strengthening sustainable use of resources

Ensuring safe and continuous navigation while restoring the Danube green corridors (with strengthened natural protection from floods)

Developing sustainable agricultural practices (crops, husbandry) while obtaining good water quality in the Danube - Black Sea system

Reducing future risks of invasive species in the Danube River-Danube Delta – Black Sea system

## PROPOSED SRIA TOPICS (3)

### **Innovative technologies and new standards**

Managing water resources for human use by implementing new technologies for water abstraction, purification, distribution, collection, treatment, and reuse

Using and developing latest Earth observation (EO) technologies coupled with in situ measurements for an upgraded Danube – Black Sea environmental monitoring system

Understanding Climate change impacts on the Danube - Black Sea System by applying the latest generation of models

Harmonising scientific data and monitoring protocols in the Danube River - Danube Delta – BlackSea continuum

Innovative means to harness water energy



# PROPOSED SRIA TOPICS (4)

## Innovative use of river and marine resources

1. Resource Recovery from Eutrophication in the Danube – Black Sea interaction zone
2. Dealing with Eutrophication in the Danube – Black Sea interaction zone by using algae as 2<sup>nd</sup> Generation Biofuels
3. Restoring natural habitats in the Danube floodplains – Danube Delta and lagoon systems as support for fisheries revival

## PROPOSED SRIA TOPICS (5)

Unfolding the cultural heritage potential of the Danube - Black Sea system by using scientific tools

Promoting Cross Border Environmental Stewardship through Citizen Science

## DANCERS Proposed topics:

- Delivered to research funding agencies in the Danube Region, JPI Water and the EC DG Research & Innovation
- May be adapted and several topics selected for the wider Black Sea basin
- Could provide inspiration for the Black Sea River-Sea Strategic Research and Innovation Agenda
- More on [www.dancers-fp7.eu](http://www.dancers-fp7.eu)