



Twinning Project

Implementation of the Water
Framework Directive in Croatia



Introduction in the **Water Framework Directive**



Scope of the WFD

- ❑ Covering all waters (surface waters, groundwater, coastal waters) and their catchments
- ❑ Covering all impacts on those waters





Purpose of the WFD

- Prevents further deterioration and enhances the status of aquatic ecosystems;
- Promotes sustainable water use;
- Protects and improves of the aquatic environment by reduction of discharges of priority substances
- Reduces of pollution of groundwater
- contributes to mitigating the effects of floods and droughts;



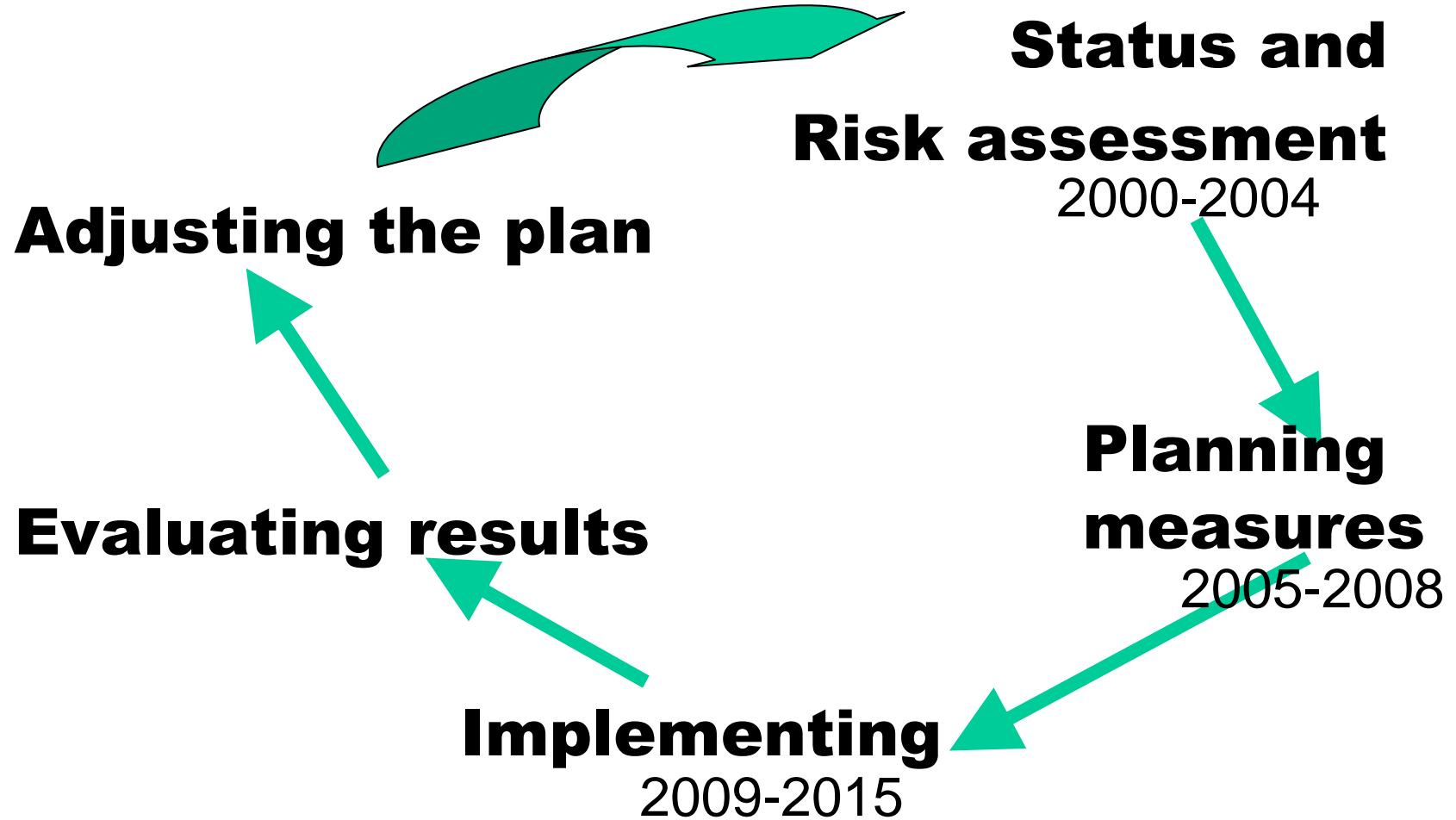


Key elements and principles

- water management based on river basins
- achieving good water quality (good status) for all waters by a set deadline, 2015
- getting the prices right/polluters pays principle
- getting the citizen involved more closely/ public participation principle



How the WFD is implemented?





Time schedule

Dec. 2000	Entry into force
Dec. 2003	National legislation
Dec. 2004	Status and Risk assessment
Dec. 2006	Plans for monitoring
Dec 2008	Draft management plan, public consultation started
Dec. 2009	Programme of measures and river basin management plans
Dec. 2012	programme of measures implemented
Dec. 2015	„good status“
Dec 2021	Second management cycle
Dec 2027	Third management cycle



River Basin Approach



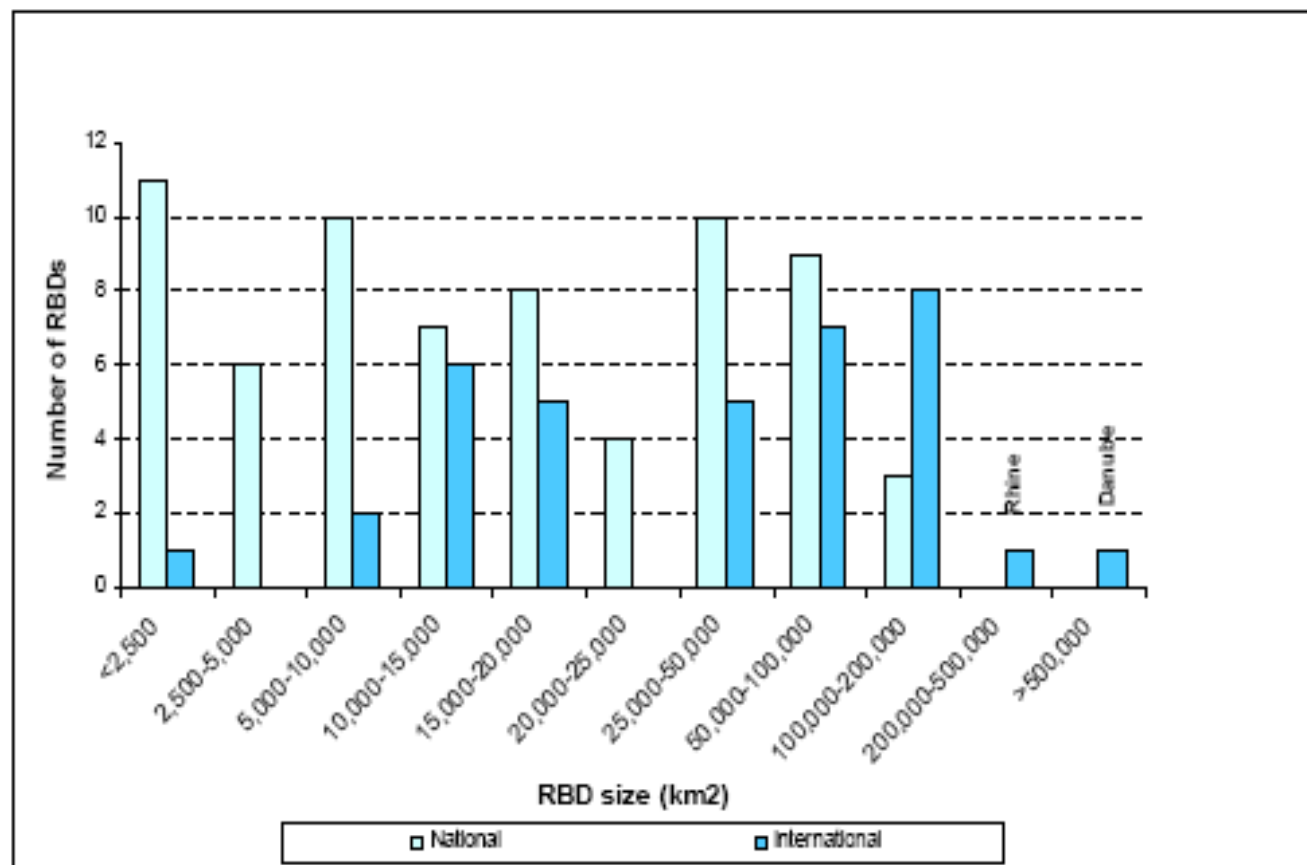
- ❑ 40 international RBMD in EU
- ❑ Covers 60% of territory



Size distribution of RBD

Average size of national RBMD – 25 000 km²

Average size of national part of international RBMD – 50 000 km²





Good water status

- “Good **surface** water status” means the status achieved by a surface water body when both its **ecological status** and its **chemical status** are at least ‘good’.
- “Good **groundwater** status” means the status achieved by a groundwater body when both its **quantitative status** and its **chemical status** are at least ‘good’.



Water Quality Assessment

High	<u>no, or only very minor</u> , anthropogenic alterations to the values of the physico-chemical and hydromorphological quality elements; <u>no, or only very minor</u> evidence of distortions; <u>type –specific conditions and communities</u>
Good	<u>Low level</u> of distortion, deviate only slightly from undisturbed conditions
Moderate	<u>Moderate level</u> of distortion, values are significantly more disturbed than under conditions of good
Poor	Values of the BQE shows <u>major alterations</u> from normally associated with undisturbed conditions Biological communities <u>deviate substantially</u>
Bad	<u>Severe</u> alteration; Large portions of the relevant biological communities <u>are absent</u>

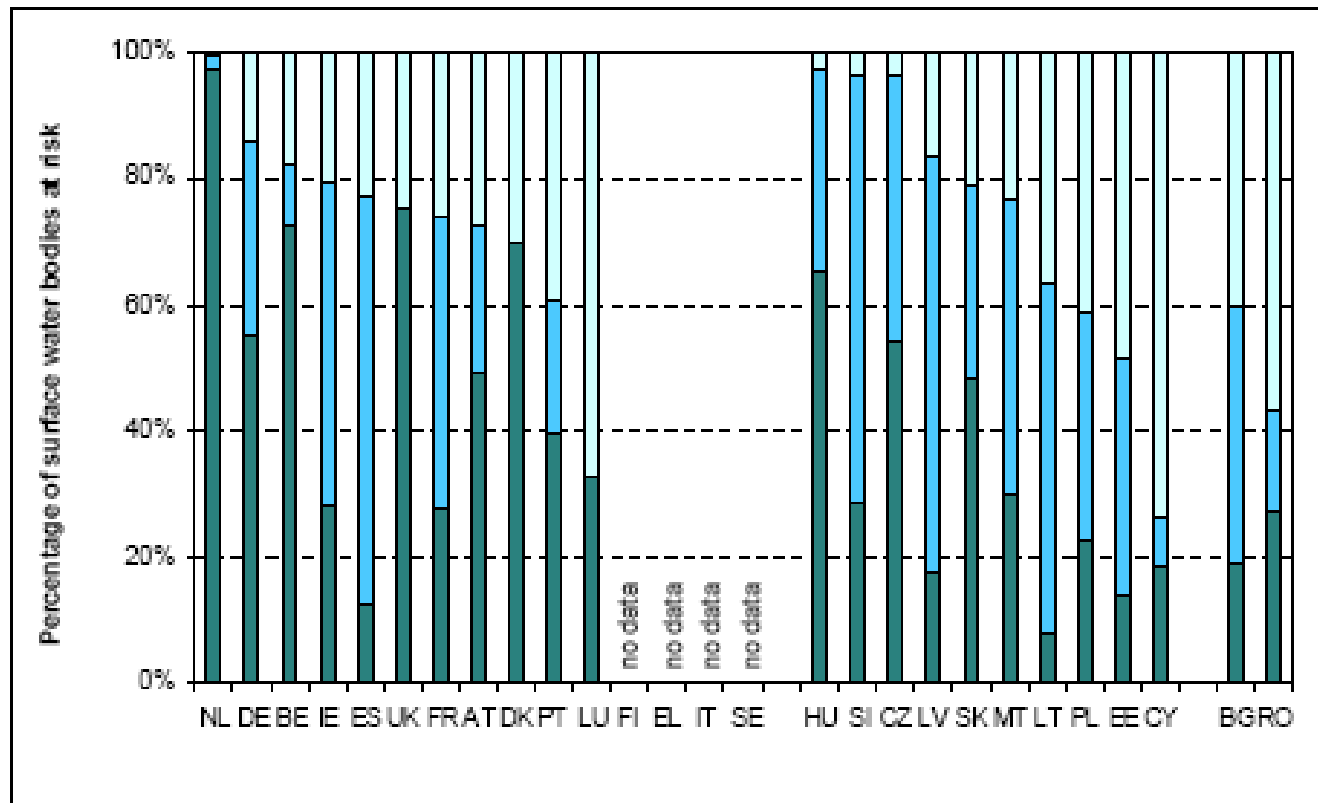


Quality elements

- ***Biological elements*** (aquatic flora, benthic invertebrate fauna, fish fauna)
- ***Hydromorphological*** (e.g. hydrological regime; quantity and dynamics of water flow)
- ***Chemical and physico-chemical elements*** (thermal conditions, oxygenation conditions, salinity, acidification status, nutrient conditions)
- ***Specific pollutants*** (all priority substances identified as being discharged)



Status and risk assessment



■ = 'at risk', ■ = 'insufficient data', ■ = 'not at risk'

An average 40% of surface water bodies in EU have been identified as being at risk and around 30% as not being at risk of failing to achieve the environmental objectives by 2015.



Content of a River Basin Management Plan

- ✓ characteristics of river basin
- ✓ environmental and economic analyses
- ✓ monitoring network
- ✓ established environmental objectives
- ✓ programme of measures
- ✓ results of public participation



Programme of measures

- Which measures are most efficient?
 - ✓ Investment needs to reconstruct or to built new waste water plants?
 - ✓ Setting up measures to enhance the hydromorphology?
 - ✓ Measures to reduce the diffuse pollution from agriculture?
 - ✓ Ensuring the cost recovery of water services?

- Discussion which of the pollution reduction measures are more effective – to built a waste water treatment plant or to reduce agriculture pollution.