



AN OVERVIEW OF ECONOMIC ANALYSIS WITHIN THE FRAMEWORK OF WFD

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OVERVIEW

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THE WATER FRAMEWORK DIRECTIVE



Water Framework Directive (WFD) “Directive 2000/60/EC” establish a framework of Community action in the field of water policy”.

WFD focuses on **ecological status** of water system: **good chemical status** is prerequisite

Economics are explicitly included in WFD:

- cost effective program of measures
- disproportional costs

WFD relates to many other directives...



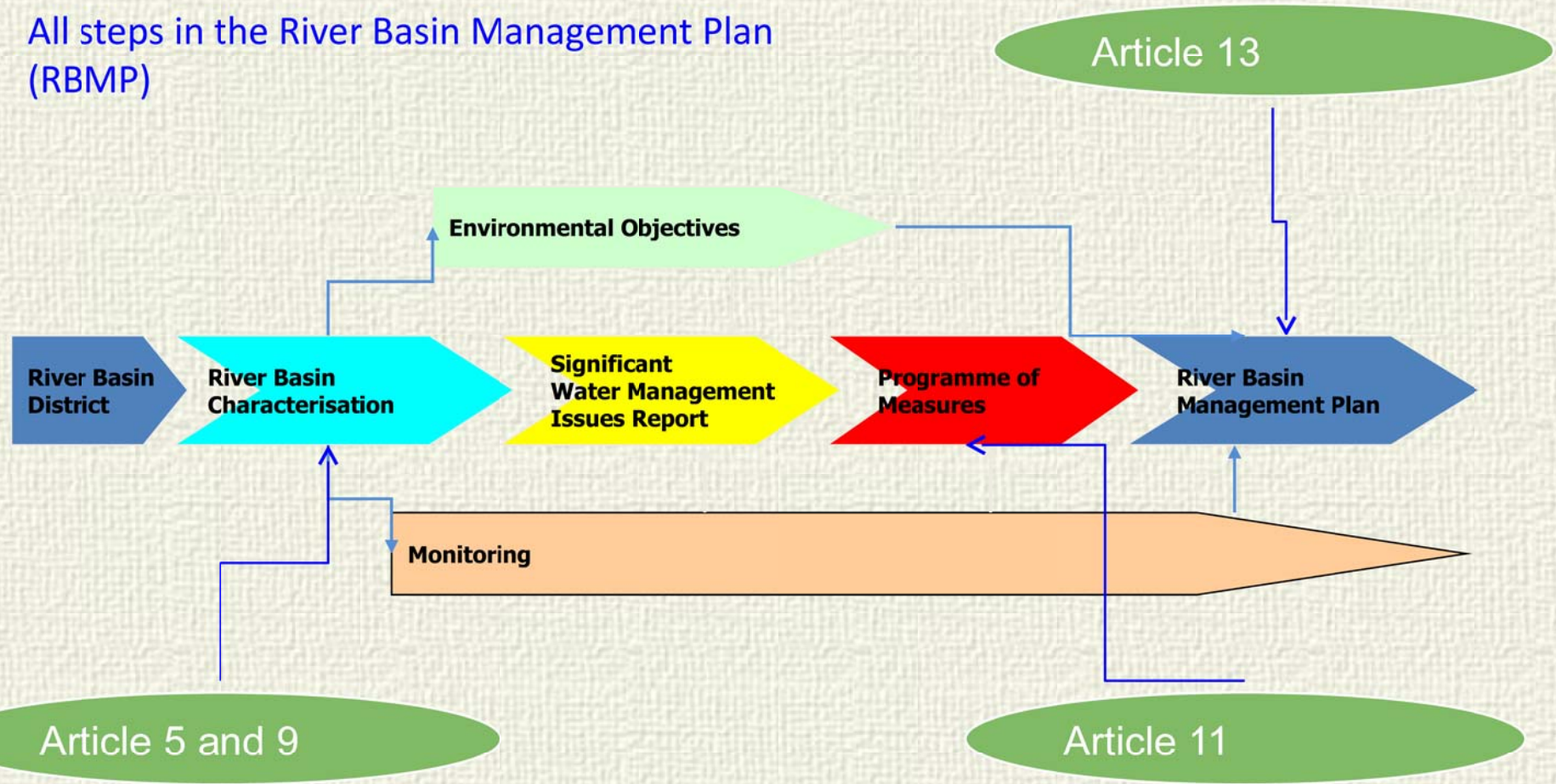
THE MAIN FEATURES OF WFD



- Water as part of the ecosystem and a natural resource and – at the same time – as an economic good
- River basin approach of surface water and groundwater
- Integration of land- and water related aspects
- Identification and protection of (potential) freshwater supply
- Sustainable and rational water use
- Participatory policy-making and decision-making process
- Emphasis on institutional, legal and financial instruments for implementation.

STAGES OF WFD PROCESS

All steps in the River Basin Management Plan (RBMP)





WFD AND ECONOMICS



Article 5 Characteristics of the river basin district, review of the environmental impact of human activity and economic analysis of water use

Article 9 Recovery of costs for water services

Article 11 Programme of measures

Article 13 River basin management plans

THE ECONOMIC SIDE OF THE WFD

A water user whose **water price is low** because the price is subsidized does not have much interest in saving water.

A water user whose **water price is high** because it is cost-recovery will save and conserve water in order to keep his/her water bill down.

- **The economic approach in the WFD** goes far beyond the water price. There are many provisions within the Directive which reflect the **cost-benefit idea** – that is what the economic approach is all about.
- WFD is the first EU environment Directive which makes use of the **economic approach** in a comprehensive way.

MOST IMPORTANT ECONOMIC PROVISIONS OF THE WFD:

- An **economic analysis of water use** in the river basin along with the technical inventory (**Article 5**)
- The **principle of cost-recovery of water services** and the need “that **water pricing policies** provide adequate incentives for users to **use water resources efficiently...**” (**Article 9**)
- A **Baseline-Scenario** which takes “account of long term forecasts of supply and demand for water in the river basin...” (**Annex III**)
- The most cost-effective combination of measures in respect of water uses to be included in the **programme of measures** based on estimates of the potential costs of such measures (**Article 11, Annex III**)
- **Exemptions** from the objective to achieve the Good Water Status (on time) based – among other criteria – on “**disproportionate costs**” (**Article 4**)



PRINCIPLE OF COST RECOVERY



The Functions of Cost-Recovering Water Prices

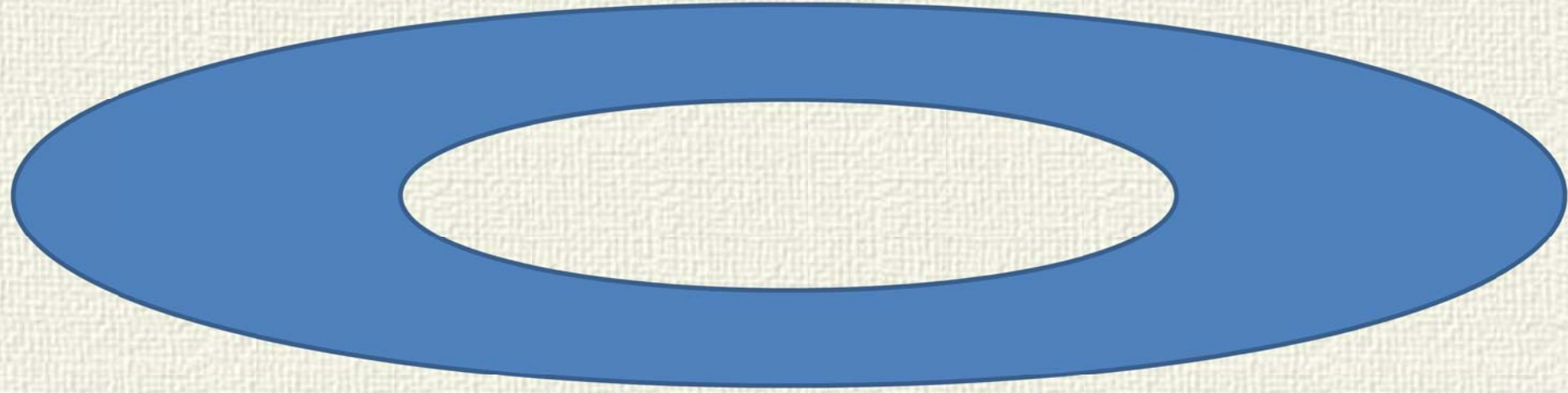
- **Information:** Water users learn about the costs which are caused by their water use. The mere information about the water price can contribute to a sustainable water use.
- **Incentive function:** Water users should be charged with a water price so they can decide if their water use is worth its price. The consumer can then decide if he/she wants to spend that amount of money for water or use less water and spend the money saved for other purposes (approach of foregone opportunities).
- **Financing:** Through the water price, funds are collected to cover the costs of water supply and waste-water collection and treatment as well as for water protection measures (polluter/user pays principle).



ASSESS THE FINANCIAL RATE OF COST RECOVERY

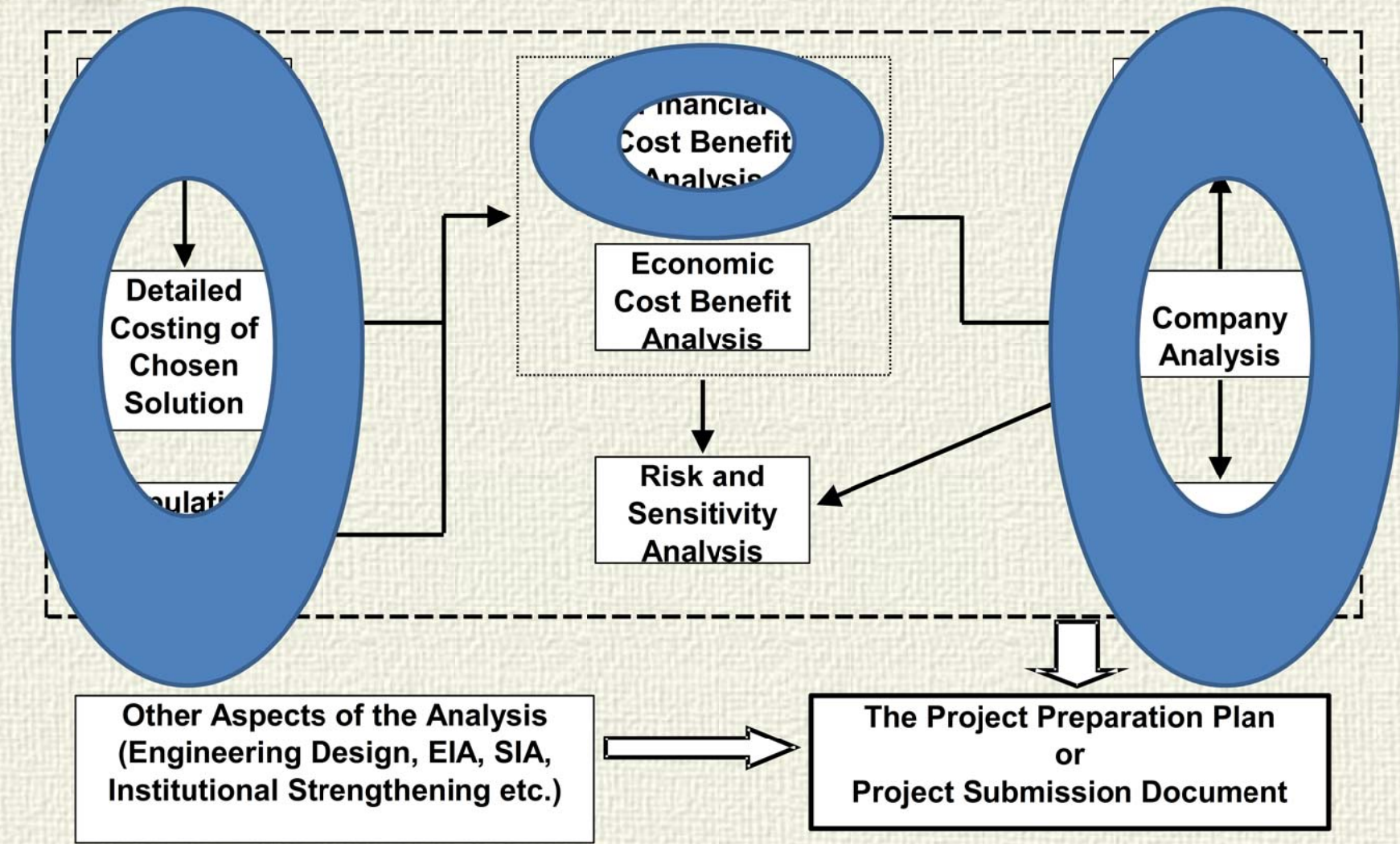


Full cost of water supply:





Review: Steps in Financial and Economic Analysis



THE PROVISIONS OF ARTICLE 9

Article 9: MS “shall take account of the principle of recovery of the costs of water services”.

Water services acc. to Article 2, No. 38, are practically all services which serve water supply and waste-water collection and treatment.

Costs acc. Article 9 are

- Financial costs
 - Environmental costs
 - Resource costs.
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- That water pricing policies provide adequate incentives for users to **use water resources efficiently**, and thereby **contribute to the environmental objectives** of this Directive
 - An adequate contribution of the different water uses , ..., to the recovery of the costs of water services.



THE LOOPHOLES



Article 9 : MS “**shall take account of** the principle of recovery of the costs of water services...”.

Rather than using the term “**objective**” which is used in Article 4 in connection with the Good Water Status the lawmakers use the term “**principle**”.

As far as water uses are concerned – a broader term than water services – Article 9 only stipulates “an **adequate contribution** ...to the recovery of the costs...”.

“MS may have regard to the **social, environmental** and **economic effects** of the recovery as well as the **geographic** and **climatic conditions** of the region or regions affected”.

MS “ shall not be in breach of this Directive if they decide in accordance with established practices not to apply the provisions of paragraph 1, second sentence...” . The provisions referred to deal with “adequate incentives ... to use water resources efficiently” and with “an adequate contribution of the different water uses to the recovery of costs of water services”.

COMMUNICATION ON PRICING POLICIES

According to Communication CCOM(2000) 477 final of 26. 07. 2000 there are the following cost types:

Financial costs of water services , that include the costs of providing and administering these services. They include all operation and maintenance costs, and capital costs (principal and interest payment, and return on equity where appropriate).

Environmental costs, that represent the costs of damage that water uses impose on the environment (e.g. a reduction in the ecological quality of aquatic ecosystems or the salinisation and degradation of productive soils).

Resource costs, that represent the costs of foregone opportunities which other uses suffer due to the depletion of the resource beyond its natural rate of recharge or recovery (e.g. linked to the over-abstraction of groundwater).

CONCLUSION

- the vague phrasing of Article 9
- the loopholes
- difficulties to determine the financial costs
- the problem to put environmental and resource costs into money terms
- the deeply rooted tradition in some MS to subsidise specific water uses.

There is no sustainability without cost-recovery.



TURKEY HAS 25 RIVER BASINS



Basin Protection Action Plans are being prepared. 11 basins are completed, 5 basins are being updated, 9 basins are started. They will set basis for the River Basin Management Plans which will be prepared in the context of Water Framework Directive



AN OVERVIEW OF THE TURKISH CASE



- *A project on Water Efficiency and Water Economics / under IPA funding*
- *A project on `Developing efficient economic Instruments for fulfilling the cost recovery and the assessment of the existing cost recovery rates of water services.` / funded by TÜBİTAK KAMAG program*
- *Reuse of Treated Wastewater in Agricultural Irrigation- Afyon Case /Joint project with Netherlands and Turkey*



Thank you!