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Background report for the workshop:

**The Economic Analysis according to the WFD –
Status of Implementation (October 2003)
An international Exchange of Experience**

20 – 21 November 2003, Berlin

**Revised for the Lille IV conference
5 – 6 February, 2004**

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Disclaimer

This report on the present status of implementation of the economic analysis in EU Member States and Accession Countries has originally been compiled in preparation of an international workshop on the economic analysis that took place on 20-21 November 2003 in Berlin. It was organised by Ecologic on behalf of the German Federal Ministry for Environment, Nature Conservation and Nuclear Safety.

Due to time constraints, not all countries were able to provide information on the implementation status in their country in time for that workshop. In preparation of the Lille IV conference, the report has now been amended (February 2004) to include the implementation status reports for all EU countries, except Slovenia. The extensive Annex to this report compiles the information provided by the national experts via interviews or questionnaires.

1 Background of this workshop and report

Economic aspects of water management have been assigned a key role in the implementation process of the EU Water Framework Directive (WFD). The Economic Analysis, which needs to be completed by the year 2004 according to Articles 5, 9 and Annex III of the Directive, constitutes an important contribution to an increased integration of economic considerations into water management. In addition, the Integrated River Basin Management (IRBM) approach of the WFD calls for co-operation and exchange at the international level, while the issue of selecting cost-effective sets of measures is one of the major tasks that will rely on international co-operation.

The implementation of the WFD raises challenges which are widely shared by Member States. With many European river basins transcending territorial and administrative borders, concerted and co-ordinated action, a common understanding and a joint approach are considered prerequisites for a successful and effective implementation. Therefore, the Common Implementation Strategy (CIS) has been agreed upon at the EU level, to allow for a coherent and harmonious implementation of the WFD. More than 15 European expert and working groups have been set up within the CIS on different areas of the WFD.

As one of these EU Working Groups, the group WATECO (WATER ECONOMICS) has developed a "Guidance Document for the Implementation of the Economic Elements of the EU WFD". As all of the guidance documents, it is legally non-binding. Being conceptualised as a general guide to the economic aspects of the WFD, the WATECO guidance document needs further specification and application to the specific situation of each river basin. Currently, after the restructuring of the CIS-working groups, two drafting groups of the WG 2B ("Integrated River Basin Management") are dealing with economic issues. These are:

- DG eco1 aiming at the improvement of the "integration of economics" with other disciplines for the WFD implementation. The focus is on Article 5 requirements (characterisation of the River Basin, baseline scenario, cost recovery) until the end of 2003 and the cost-effectiveness of measures in 2004 (Lead. Commission, France) and
- DG eco2 aiming at providing support on the issue of environmental and resource costs (Lead: Commission, Netherlands).

Besides the activities and results of the CIS-activities for the implementation of the economic analysis for 2004, a large number of other activities have taken place at the European, national and local level in form of working groups, pilot studies, workshops for informing and exchanging views and experiences etc.

Since the 2004-deadline is approaching fast and most countries are currently working on the practical implementation of the WFD, the last months of 2003 and the beginning of 2004 seem to be a crucial point/last chance for the exchange of experience at the European level.

On the economic analysis, the present workshop: "Economic Analysis according to the EU Water Framework Directive: Present status of Implementation" that will take place on 20 – 21 November 2003 (on behalf of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and organised by Ecologic) is part of a number of events that have taken place / are planned to support the implementation of the economic analysis and to ensure an integrated approach with other elements of the WFD.

These are:

- The workshop "implementing economic analysis of the WFD in pilot river basins and other case studies" on the 9 and 10 October 2003 held in Paris;
- The 4th conference "Europe of Water, Water of the Europeans" that will take place on the 5 and 6 February 2004 in Lille (France), dedicated to "The implementation of the economic elements of the WFD: progress report, which difficulties and which solutions, which issues for after 2004" ("Lille IV"-conference).

2 Aims of the workshop

The aim of this conference is to further the international exchange on national approaches for the Economic Analysis 2004 at a point in time at which improvements and adjustments based on the approaches chosen and experiences made in other countries are still possible. It addresses both Member States and first Round Accession Countries (hereafter: EU Countries). Furthermore, the workshop addresses the issue of co-operation in international river basins with regard to the Economic Analysis 2004 and its possible linkage and support to the decisions needed after 2004 on selection of sets of measures that are cost-effective at the river basin scale.

We hope that the participants will

- present and discuss their own difficulties and successes in implementing the Economic Analysis and at the same time
- get ideas/experiences on how to overcome them.

In addition, this workshop should:

- facilitate further co-operation between the “working level” of the different EU countries,
- provide input to the European drafting groups Eco1 and 2 on what is most urgently needed for the 2004 implementation and
- build on the results of the Paris workshop and provide input to the “Lille IV”-conference.

Finally, the workshop should show once again that the Economic Analysis is not (only) an issue of compliance with the WFD requirements but should be performed in a way that is integrated with other elements of the WFD (IMPRESS etc.) and supports the implementation of the “crucial” provisions of the WFD between 2004 and 2009 (selecting measures etc.). Therefore, we will centre the discussions on the **content of the Economic Analysis and its use after 2004 instead of the Economic Analysis “only” as a reporting requirement for 2004.**

The event is addressed to representatives of the national competent authorities for the implementation of the Economic Analysis of EU Countries and representatives of international river basins. Furthermore, interested experts of German co-ordination areas at River Basin level as well as representatives of selected pilot projects are invited. Representatives of the BMU, the Federal Environment Agency as well as the European Commission will participate in this workshop.

3 Leading questions of the workshop

The workshop will be centred around a number of leading questions for which information, approaches and assessments will be exchanged. These are:

a. How is the Economic Analysis being implemented in the different EU Countries?

It is important to acknowledge the difference between national, “broad scale” implementation and the “experimental” implementation within pilot river basins or pilot projects. Both do convey information, but for this workshop, our main focus will be the discussion of implementation at the national level. We seek to exchange information on how the different EU Countries tackle the main elements of the Economic Analysis implementation (the background document describing the **current implementation status** of the Economic Analysis in the EU Countries is a good starting point by identifying the main issues), which problems they have faced or are currently facing and how these problems can/could be solved. This information will be of value for other countries that currently might be facing similar difficulties.

b. How are technical and economic factors integrated for the 2004 requirements?

In order to improve decision-making in water management, it is crucial to establish stronger **links between technical and socio-economic information and assessments**. As a starting point, the reports due 2004 on pressures and impacts as well as on economics should be linked on certain aspects (in order to guarantee a co-ordinated approach e.g. in developing the baseline scenario, to avoid double work etc.). This approach has been supported by the WATECO and IMPRESS documents. However, the practical implementation of the Economic Analysis in many cases seems to be disconnected from the pressures and impacts analysis.

c. How will we use the Economic Analysis after 2004?

It is important to identify in which way information collected and assessments made in the Economic Analysis will be used for the next WFD implementation phases. Based on what will be done for 2004, economic knowledge will have to play a significant role in a number of important assessments and decisions (selecting cost-effective sets of measures to reach the environmental objectives, designation of Heavily Modified Water Bodies (HMWB), derogations considering the issue of cost recovery of water services etc.). **Therefore, it is important to discuss now what information and in which form (scale, disaggregation of information, accuracy of information etc.) will be needed after 2004 and which influence this has on the EA conducted for 2004.**

d. What is important for international river basins when thinking about the economic aspects of the WFD?

Since the WFD is based on the Integrated River Basin Management-approach,

transboundary co-operation in water management issues has a prominent position. Therefore, this co-operation is of importance for all aspects of the WFD implementation including the economic aspects.

For the time being, the implementation of the Economic Analysis is largely focused on national approaches. Therefore, the issue of **how the Economic Analysis of 2004 will support the international co-operation and decision-making after 2004** in the case of international river basins and which challenges/solutions are connected to this should be addressed during the workshop. The question of how the Economic Analysis 2004 will be used in the next steps of the WFD implementation is a crucial one.

Due to the importance of international co-operation for selecting measures in transboundary river basins, a special session will be devoted to the issue of cost-effectiveness and international co-operation. At the same time, it will be important to include references to the international dimension of the Economic Analysis in all different workshop sessions (information on water uses, baseline scenario development etc.).

4 Scope of the Report

This report aims at providing background information on the current implementation status (October-November 2003) of the economic analysis in the different EU-countries for the above mentioned workshop. It covers the main elements of the economic analysis for 2004 (water uses, baseline scenario and cost recovery), while special consideration is given to the preparation of the selection of cost-effective measures at the national and especially international level.

It is based on information gathered through questionnaires as well as through personal interviews with the national experts of the EU Countries nominated for this workshop. This information can be found in Annex I, II and III of this report, while Annex IV provides a list of the contacted experts per country.

A total of 15 Member states and 10 “first round” Accession Countries have been contacted in the preparation phase to this workshop. Due to:

- time constraints imposed by the current heavy workload associated with the implementation of the economic analysis as well as
- the tight time schedule available for this investigation,

not all countries were able to identify a national contact person for this workshop or did not reply to this information request.

Therefore, information on the current implementation status of the following countries: Austria; Finland; Ireland; Italy; Lithuania; Portugal; Malta; Slovakia; Slovenia could not be integrated in the background report before the Berlin workshop.¹ The report has been revised as a preparation of the Lille IV conference (to take place on 5-6 February 2004) and now includes information on all countries, except Slovenia. The main text of this report however remains unchanged.

The main text of the background report **highlights certain important issues on the current implementation status** (investigated through the questionnaires) which can be of value to the persons involved with the implementation of the economic analysis at present. In addition, it **complies/identifies the most relevant open questions which can serve as “starting points” for the exchange of views and discussions** at the Berlin workshop in addition to the leading questions of the workshop (see above).

This report does not elaborate in greater detail on the WFD requirements regarding economic aspects in general, nor on the WFD economic analysis or the WATECO-guidance, since the experts participating at the Berlin workshop will be aware of this information. Therefore in the following chapter, only a short summary will be given on the main elements of the 2004 requirements.

¹ For Cyprus only the information on the general administrative set-up as well as for the presently planned next steps can be included in this analysis, as Cyprus will outsource the work for the economic analysis 2004 to an external consultant service (endorsement is expected for February 2004) so that no progress report could be provided at this stage as the practical work is only starting. In addition, in the case of Belgium, only the Flemish Region is covered in the questionnaire.

5 The Economic Analysis for 2004 – a Reminder

The year 2004 constitutes the first key milestone for the WFD implementation process in general, but also for the economic analysis. In essence, it is required to analyse for each river basin district (RBD) the following four focal issues:

1. *Assessing the economic importance of water uses*

According to Article 5 (and Annex III) of the WFD, an economic analysis of water uses has to be conducted in order to assess the importance of water for the economy and the socio-economic development of the river basin district. The economic analysis should provide the river basin's economic profile in terms of general indicators, e.g. economic turnover, gross income, employment or the number of beneficiaries for significant water uses.

In a broader context, the economic analysis is intended to pave the way for the assessment of significant water management issues to be reported to the public by 2007. It also serves to prepare the ensuing cost-effectiveness analysis, by initiating investigations of likely tradeoffs between socio-economic development and water protection within the river basin.

2. *Baseline scenario*

The specific role of the economic analysis in the development of a baseline scenario (BLS) is the assessment of forecasts in key economic drivers likely to influence pressures and thus water status up to 2015. In the BLS, trends in water supply and water demand will need to be evaluated. The focus should be on changes in general socio-economic variables (e.g. population growth), in economic growth of main sectors as well as on changes in the implementation of planned investments linked to existing regulation. Both hydrological as well as socio-economic drivers have to be investigated.

3. *Assessing current levels of cost-recovery*

The assessment of current levels of costs recovery of water services is in accordance with Article 9 of the WFD. Key elements to be investigated in the economic analysis include the status of water services, the institutional set-up for cost-recovery, the extent of the recovery of the costs (including both financial and environmental and resource costs) of the water services, the contribution of key water uses to the costs of these services as well as the incidence of subsidies.

4. *Preparing for the cost effectiveness analysis*

With regard to the cost-effectiveness of the programme of measures, the economic analysis to be carried out by 2004 (as in Annex III of the WFD) "shall contain enough information in sufficient detail [...] in order to [...] make judgements about the most cost-effective combination of measures in respect of water uses to be included in the programme of measures under Article 11 based on estimates of the potential costs of such measures".

Since this is not possible for 2004 to the full extent, it has been agreed within the WATECO-document to take preparatory steps in the economic analysis 2004 that will be used for the selection of programmes of measures after 2004.

So, in preparation for the cost-effectiveness analysis of possible measures and their combinations, the existing cost information gaps should be reduced, for example by:

- gathering data on the unitary costs of key measures to be considered for the development of River Basin Management Plans (RBMP) and/or

- estimating and collecting ranges of costs (minimum, maximum) for individual measures, along with key parameters influencing these costs.

The emphasis should be on costs that are non site-specific (i.e. financial costs of measures, indirect non-water related environmental costs) and on basic measures. In addition, an overall approach on the methodology for the selection of cost-effective programmes of measures could be investigated as a basis for the work after 2004.

6 Status of Implementation – October 2003

The information presented in this chapter has been gathered through questionnaires as well as through personal interviews with the national experts of the EU Countries nominated for this workshop. The Annexes to this paper present the implementation status of the economic analysis in the individual countries in greater detail (as it was reported by the national experts).

In section 6.1., an overall introduction to the responsibilities and capacities concerning WFD implementation is given with a special focus on the economic analysis. Section 6.2 then gives an overview on key issues and challenges for the economic analysis for 2004.

This chapter is not intended as a complete and detailed survey of the implementation status in the different EU Countries, but more as an introduction to the discussion of critical issues at the Berlin workshop.

6.1 WFD and the Economic Analysis Implementation: Responsibilities, Capacities

In most of the countries investigated, a ministerial body² is the **leading authority** for WFD implementation in general, as well as for the economic analysis. In addition, many countries have formed (inter-ministerial) **working groups**. They are mainly instituted as a platform for co-ordination and exchange, as many WFD implementation activities have to proceed in parallel, while their results should simultaneously feed into other implementation processes (e.g. the integration of economics with the pressures and impacts analysis).

Most countries incorporate **expert advice** in their implementation process (to a more or less formalised degree). They either outsource part of the necessary activities for the economic analysis by 2004 or consult external experts in their working processes (e.g.: invite them to participate in methodological development processes or integrate them in thematic working groups). It is interesting to note that small countries are more apt to outsource important activities as a whole, while bigger countries tend to develop the economic analysis within their own administration.

A national **guidance document**, further specifying the general CIS Guidance Documents for the respective national situation, has been prepared in approximately a third of the countries investigated. Guidance documents on the economic analysis have only been developed in a few countries.

As a preparation for the economic analysis for 2004, **feasibility studies** as well as **pilot studies** have been conducted. In those countries that conducted a feasibility study, it helped to identify how present data collection systems should be adapted, where efforts should be concentrated on and where methodological development is needed. In many cases, however, the investigation of data and information availability was more done **“on the job”** while preparing the economic analysis and not conducted as a separate effort. Pilot studies also constitute a form of “learning by doing” and allow for important insights to be garnered

² In most cases, the Ministry of Environment or the Environment Agency is responsible for WFD implementation.

for broader scale implementation. Many countries report to make extensive use of pilot study results.

With regard to the capacities of their present **data and information collection systems**, most countries indicate that it is inept to cover all of the requirements of WFD reporting, in particular as information is often not collected at the right spatial scale. However, there is a general consensus among the interviewed experts that present data collection systems are sufficient for 2004 and should not be adapted until then: the economic analysis for 2004 should be based on presently available data and information alone.

At the same time, different improvements on data and information for after 2004 are discussed/planned. Based on the “**WATECO principle of gradual adaptation**” (UK questionnaire), it should first be determined what data are needed and how they can aid the decision making process before initiating expensive (reorganisation of) data collection.

6.2 The Present Status of Implementation – Key Issues and Challenges

6.2.1 The Economic Importance of Water Uses

In most of the countries surveyed for this study, the analysis of the economic importance of **water uses does not constitute an area of major concern**. While certain limitations prevail with regard to the availability and quality of data, most countries consider the existing information base as sufficient for 2004 reporting (as already outlined in Section 6.1). Interesting additional issues regarding the current implementation status are:

- The level of **data aggregation/ scale** still remains to be resolved in some countries, as data are available at different aggregation levels and it has not been clarified yet to which scale they will be consolidated. This issue is in particular related to the fact that no common understanding exists so far on which level of aggregation will be most useful for after 2004.

Box 6.2—1: Linking Economic and Environmental Data

For the Flemish Region of Belgium, it has been outlined that difficulties in linking technical information and socio-economic data are created by different approaches to inventorying information.

In the case of Sweden and Latvia, scientific or technical data are often available at the river basin level, whereas much of the existing socio-economic data are normally presented at the administrative level, rendering a direct consolidation to the same (compatible) disaggregation level difficult.

Source: Questionnaires for Sweden, Latvia and the Flemish region of Belgium (please refer to the Annexes for greater detail).

- With a view to the tasks laying ahead for after 2004, **linking economic and environmental data** is regarded as a problem in many countries (see also Box 6.2—1). A clear methodology of how to proceed on this issue often still remains to be defined. A few countries already established a formal exchange (in form of an integrated working group) to improve the linkages between IMPRESS and economics. However, in many countries informal exchange is

still prevalent, as the need for co-operation has been recognised by the people working on these issues, but is not yet captured by the administrative structures.

- One difficulty already anticipated for post 2004 is related to developing a **good view on the economic importance of water uses**. There is the possibility that the information currently collected might not be the information needed for “valuing” the water uses within the process of selecting cost effective sets of measures at a later stage.
- As indicated by the survey analysis, some countries try to give the **complete picture** on the importance of water uses, while others focus efforts on the analysis of **the “most relevant” water uses**.
- Not many countries indicated that **data management systems** for information on water uses are being established, which might create inefficiencies at later stages of the economic analysis: If data cannot be retrieved at a later stage, the 2004 compilation of data might be closer to a **“one-shot effort”** instead of a continuous approach to data collection.
- Most of the countries indicated that the exact **format of reporting** information on water uses still has to be agreed on, but that GIS mapping and tables will probably be used in most cases.
- **Stakeholder involvement** is not a major issue in most countries for the analysis of the economic importance of water uses.

Box 5.4.1-1 Parallel Work-streams

A big obstacle, considered by the *UK* expert, to a timely implementation is that much work has to be done in parallel while it should better be done successively in order to provide scope for feedback from the different work streams and learning from each other.

This point has also been stressed by the *French* expert, who indicated that the main challenge is to establish appropriate links at the right time between the parallel work done on the economic analysis and the pressures and impact analysis.

Source: Questionnaires for the UK and France.

- Some countries outlined that **parallel work-streams of WFD implementation** can hinder feed-back and learning from each other, as illustrated in Box 5.4.1-1.
- Most of the countries evaluate their present status of implementation as being **“(well) in time”**.

QUESTIONS FOR DISCUSSION AT THE WORKSHOP

1. Is the current level of co-ordination between the “Pressures and Impacts” Analysis and the economic analysis sufficient? In how far is the comparability and compatibility of information on pressures and impacts and the economic analysis necessary? Where are improvements needed?
2. Which information is needed in order to develop a good view on the economic importance of a certain water use (for after 2004)? In how far do we need to *value* a water use and according to which methodology should / can this be done? Is it already needed for the economic analysis 2004?
3. Is it possible to identify the economic importance of all water uses by 2004 or should we concentrate on the assessments of those water uses creating the major pressures?

4. In how far could data management systems support and facilitate the use of the economic analysis *after 2004*? Can they facilitate the establishment of long-sighted approaches as opposed to “one-shot” data compilations?
5. What needs to be done in order to be able to use the compiled data after 2004 (e.g. increase accuracy, level of detail, adapting the scale to the needs)?
6. Since significant time is needed in order to adapt data collection procedures, “how long can we wait” until we initiate such a process?
7. What degree of stakeholder integration is necessary for the 2004 analysis on water uses?

6.2.2 Baseline Scenario

Work on certain aspects of the baseline scenario has started in nearly all of the countries investigated in this survey. However, a nationally accepted and documented **methodological approach of how to develop the baseline scenario has only been agreed on in a few countries**. In particular, the role and importance of the baseline scenario within the overall WFD implementation process seems to be unclear. Initial links between the baseline scenario and the subsequent risk assessment have only been established in a few countries so far, raising the question of whether this link is not considered as significant and, if that is the case, on which grounds it is disregarded.

Main issues emerging from the survey investigation include the following:

- Among those countries developing a **methodological approach to the development of the baseline scenario**, two different “lines of action” can be identified. One is to focus for 2004 on assessments and forecasts of major pressures as a realistic start, while the other attempts to cover all sectors. Considering that a large number of the countries investigated has not yet defined the exact approach with which they will develop the baseline scenario, exchange is needed on what is feasible until 2004 as well as on which approach is likely to deliver the best results, in particular also for use after 2004.
- The **availability and quality** of relevant projections have been mentioned as a difficulty by some of the experts.
- A main question is how existing projections can be combined to match the river basin approach, if they have
 - **Different underlying methodologies**
 - **Different time horizons**
 - **Different geographical scales**, which need to be made consistent.
- The linkages of (baseline) projections to pressures, impacts and finally to risks **need to be evaluated at the water body level after 2004**. These evaluations form a basis for selecting measures/reaching the environmental objectives of the WFD by 2015. Therefore, projections will need to be broken-down to the water body level, calling for a clear methodological approach which is still lacking.

- Great difficulties relate to the actual interpretation of the projections (**linkage of IMPRESS and Economics**), namely how to evaluate:
 - how big the increase/decrease of pressure on the environmental status (of a water body) resulting from certain projected developments (e.g. 5% growth in tourism) will be; and
 - to what extent a projected increase/decrease in pressure will lead to an increased/decreased impact/risk of failing the environmental objectives.
- An issue that has been raised by several experts is, in how far **projections on Europe-wide developments** i.e. regarding the consequences of the CAP reform, should adhere to a common approach or even be conducted at the European level. European-wide projections would enhance the comparability of obtained results, which will be of special importance for the development of baseline scenarios for international river basins, and avoid duplication of work. However, interpretations of the results of common projections will have to be done locally.
- A further question that has been raised with regard to the baseline scenario building is: in how far **policies or directives, which seem to be unrealistic** in their presently foreseen implementation time, should be adapted to a more realistic projection. This issue is of particular relevance for Accession Countries, since major changes of environmentally related policies are being implemented and planned for the future.
- Experts from EU Accession Countries stressed, that exchange on how to deal with projections of the **“impact of EU Membership”** within the overall scenario development would be appreciated.
- Different levels of **public participation and stakeholder involvement** have been reported by the national experts. Several experts stressed the importance of public participation for the baseline scenario, as early consultation will increase the acceptance of results.
- A majority of the countries evaluates the implementation of the baseline scenario as being “difficult to complete in time” for 2004.

QUESTIONS FOR DISCUSSION AT THE WORKSHOP

1. In how far (and how) does the work on Impacts and Pressures need to integrate the baseline scenario development in order to have an overall risk assessment for 2015?
2. How can projections with different underlying geographical scales or different methodologies be combined into a consistent baseline scenario?
3. Is it realistically possible to develop an overall baseline scenario by 2004 or should we concentrate on projections for the major pressures/sectors?
4. Should a top-down or a bottom up approach to the baseline scenario be followed? Which option responds to which institutional set-up for WFD implementation?
5. At which stages of the development of the baseline scenario is stakeholder involvement particularly important? If you consult early, acceptance will be higher, but: is the amount of time available sufficient and do stakeholders have a good-enough understanding of the main issues involved?

6. Do we need consolidation – and for which issues – of different baseline scenarios developed for
- a) different river basins within one country
 - b) different regions
 - c) different countries of the same river basin
 - d) all countries of the EU

How could consolidation best be done in practice and who should be involved in this process?

7. How to deal with uncertainty in baseline? And what are the main uncertainties to be dealt with (Agriculture policy, EU enlargement, climate change?) ?

6.2.3 Cost-Recovery

On the issue of cost recovery, substantial efforts have been conducted in many countries, with mixed results. Many information sources exist but identifying all possible sources, assessing their quality, establishing a common scale and ensuring their coherence seems to be a time-consuming task. Therefore, **only initial estimations on cost-recovery** levels can be expected in most countries. The issue of environmental and resource costs has mostly been excluded so far and will be a main focus after 2004. Furthermore, the issue of contribution of water uses to the costs of water services has not been a main focus of the work done so far.

The following points emerge from the investigation as key issues:

- In the calculation of cost recovery, some countries follow a **case study approach** (instead of a river basin approach) as a practical first indication of cost recovery levels. Nevertheless, it is considered necessary to develop basin-wide calculations after 2004.
- **Environmental and resource costs are not taken directly into account** in most countries for the 2004 analysis, due to both a lack of methodology as well as of information. In some countries, existing economic instruments that are intended to partly internalise environmental and resource costs are considered separately in the cost recovery assessment. The avoidance costs approach seems to be judged as a realistic one for the future by the contacted experts, as well as potentially the method of benefit transfer for dealing with non-use values. Experts indicated that input from DG Eco 2 is anticipated on this issue.
- So far, the assessment of cost-recovery focuses in most countries mainly on **water supply as well as on sewerage services for industry and households**. Agriculture and self-services have not been addressed extensively until now. Some of the countries indicated that assembling a sufficient level of information on costs and cost-recovery for agriculture constitutes the main difficulty and will not be resolvable for the 2004 analysis.
- How the issue of **subsidies** (and cross-subsidies) is to be integrated in the calculation of cost recovery has not been resolved entirely in most countries investigated. It is however widely acknowledged that a clear indication and allocation of subsidies should be aimed at within the calculation of cost-recovery.
- Difficulties relate also to **breaking down information to the river basin level**, since information is often only available according to administrative boundaries.

- For identifying the levels of cost-recovery, information from different sources has to be combined and contrasted, and differences (in the data) need to be explained. Important obstacles can be related to **confidential** information, which makes it difficult to assemble the entire picture on cost recovery.
- Many experts stressed, that **exchange on the methodological approaches** employed for assessing cost-recovery would be of advantage, in order to enforce comparability and mutual acceptance of the obtained results. This could be of particular importance for international river basins: as foremost national approaches are being followed at the moment, problems of acceptance might arise at later implementation stages if this exchange is not ensured.
- It was stated that **communication with stakeholders** on what the meaning of investigations into cost-recovery actually is, constitutes one of the current biggest challenges.

QUESTIONS FOR DISCUSSION AT THE WORKSHOP

1. Would it be useful to agree at the EU level on common methodological approaches to accounting for subsidies for cost-recovery (although the national frameworks are different?)
2. How can the Issue of inter-boundary provision of water services be dealt with?
3. How to estimate the contribution of the different water uses (e.g. diffuse pollution of agriculture) to the cost recovery of water services? Any common approaches needed?
4. Which short term approach (for 2004) and which long term perspective can be followed with regard to environmental and resource costs?
5. At which scale to compute environmental and resource costs? How to calculate global environmental costs at the river basin scale?
6. Is it useful to establish a cost-recovery level in any case or is it more important to establish first a thorough and realistic overall framework for 2004 that can be used after 2004?
7. Which approach can be followed for water services on which limited information is available (agriculture, self-provision etc.)?
8. Is cost recovery assessment only important for water services or also for water uses having significant impacts (land drainage, flood prevention);
9. Does reporting on cost recovery differ according to the ownership situation of water services?
10. How much public participation/stakeholder communication is needed until 2004 on cost-recovery issues?

6.2.4 Preparing for the Cost Effectiveness Analysis

Preparations for the selection of the cost-effective sets of measures (due 2009) are **not yet considered to be a priority area**/do not seem to be one of the main fields of work for the 2004 analysis. A possible reason for this is that, since the precise content of the Annex III on this issue has commonly been judged as too ambitious ("enough information in sufficient detail [...] in order to [...] make judgements about the most cost-effective combination of

measures”), it is not specified so far what preparations / information / methodologies will be needed until 2004.

Interesting issues regarding the preparations for the cost-effectiveness analysis are:

- Most countries will **not be compiling data** on the unitary costs of key measures and/or estimating and collecting ranges of costs (minimum, maximum) for individual measures, along with key parameters influencing these costs for the 2004 report.
- At the same time, most countries indicated that **cost information on “traditional” measures exists**, less so on “non-traditional” measures (much more case specific/difficult to generalise; multiple impacts, therefore more challenging).
- There is an issue of **collecting and systematising already existing information** on measures in order to make it “usable” for the future(after 2004).
- A good source of information on costs of measures seem to be the **implementation plans for certain European Directives** (e.g. Urban Wastewater Directive), especially in Accession Countries.
- On the methodological side, cost-benefit and cost-effectiveness analysis have been performed in many countries for water management (projects), **but not within the context of the WFD** (except within some pilot studies).
- In addition, some countries are currently working on an **overall approach to the methodology for the selection of cost-effective programmes of measures** (or, as a preparatory step, are preparing a document on the methodological problems to be addressed on this issue). Such a framework then could form a basis for the work the selection of measures after 2004.

Box 6.2—2: The German handbook on „selecting measures“

Currently, a national handbook on cost-efficient water resources protection is being prepared (entitled “Kosteneffizienter Gewässerschutz”, due for completion in November 2003). The handbook is intended to help make the strategic considerations required to select measures for a more careful examination leading up to the creation of a programme of measures. This handbook also compiles cost information on a number of measures, both traditional and non-traditional. At the same time, it is clear that decisions on the most cost-effective measures for the river basins can only be arrived at later, that is after 2004.

This handbook is commissioned by the Federal Ministry of the Environment and developed by consultants in co-operation with LAWA-experts. Based on this, the LAWA will have to decide on the approach to be chosen for the selection of measures after 2004.

Source: Questionnaire for Germany.

- **Exchange on the preparation for cost-effectiveness is limited**, but there are some linkages (e.g. Germany, Netherlands and Austria have been exchanging views on the methodology for selecting measures).
- Work on the **linkages between WFD-derogations and cost-effectiveness analysis** has been limited so far: in some countries this issue is discussed, but no decisions have been taken yet on how to proceed. It rather is seen as task for after 2004.

- Since a subjective/political element is inherent in selecting measures (what is cost-effective? who pays for measures?) as well as in assessing derogations (what are disproportionate costs?), **early communication and exchange with stakeholders** seems important.

QUESTIONS FOR DISCUSSION AT THE WORKSHOP

1. Are clarifications needed on what is expected/needed as preparation for the cost-effectiveness analysis for 2004?
2. Will there be sufficient time for the preparation of programmes of measures, if limited activities take place before 2004 (“critical path” analysis needed)? Are there further developments needed e.g. on overall methodology/“disproportionate costs”?
3. What information is required for the selection of measures besides their costs?
4. Are there approaches on how information on measures (besides costs) can be systematised? Would a European approach be valuable?
5. Do we need special exchange on the issue of non-traditional measures?
6. How to judge “disproportionality of costs”, an assessment crucial for derogations (to be clarified: indicators, scales of analysis, links between economics and technical issues, sectors targeted, process developed)? Should we first develop national approaches and then compare – or should we commonly work on this early on?
7. Do we need more exchange on the preparations for selecting measures? In this context: What are measures, what are instruments – is the distinction important? If yes, do we need a common approach/understanding (especially for international basins)?

6.3 Economic Analysis and the selection of measures: Co-operation in International River Basins

As discussed in section 6.2, the economic analysis for 2004 should be one of the preparatory steps for the future selection of cost-effective sets of measures.

In the case of international river basins, the challenge of selecting measures at the river basin scale is even greater compared to purely “national” basins. So, it is important to start preparing the potential approach to this selection of measures at an early stage. This approach should on the one hand consider the specificities of the different countries being part of the international river basin, but at the same time enable a common understanding in order to deal with the issue of cost-effectiveness in a productive and transparent manner.

For most international river basins in which EU Countries are involved, international commissions are responsible for the co-ordination of the WFD implementation. Relevant activities have been initiated in most cases; they focus for the time being on the 2004 requirements.

On economics, special working groups have been established in many international river basins in order to specify approach, structure and precise content of the economic analysis for 2004. In many international river basins a “two-tier approach” has been chosen (which is

also valid for the implementation of other WFD reporting requirements):

Most river basins (including the Danube) will not be dealing with the issue of preparations for the cost-effectiveness analysis in the “roof report” of the economic analysis, since it is not considered as a real requirement for the 2004 reporting. Therefore, this point will be discussed in the national reports and is seen as a task to be dealt with after 2004 at the international river basin level.

Nevertheless, it is of interest to consider how the current activities on data/information collection, agreement on methodologies etc. concerning the main aspects of the economic analysis 2004 (water uses, baseline scenario, cost recovery) will be used at a later stage. It is also crucial to identify the main questions for which agreement needs to be found in order to enable a co-operative selection of measures based on the “spirit” and requirements of the WFD.

Box 6.3—1: The Economic Analysis in the Danube River Basin

The role that the “International Commission for the Protection of the Danube River” (ICPDR) will play for the implementation of the WFD in general follows the overall approach formulated in the relevant ICPDR documents: A two-tier approach will be followed for the preparation of the economic analysis document for 2004, consisting of a

- Part A, an umbrella or roof report, giving all relevant information of basin-wide importance (consisting of descriptive text, illustrative maps on the DRB overview scale and a description of the methodological approach) and
- Part B consisting of national reports giving all relevant further information on the economic analysis.

The Part A report will be prepared on the basis of the national analysis; therefore, a common approach for conducting the economic analysis will be needed in order to allow for the compilation of Part A.

The decision on which parts of the economic analysis will be reported at the Danube level (under the responsibility of the ICPDR) based on information from the DRB countries is currently in preparation by the ICPDR Economics Expert Sub-Group (Econ ESG).

QUESTIONS FOR DISCUSSION AT THE WORKSHOP

1. On which thematic issues (assessing the economic importance of water uses, cost-recovery, baseline) does international co-ordination constitute a necessity/priority? What challenges have to be faced in order to make co-ordination operational?
2. Which common definitions are needed in order to approach a basin-wide selection of measures that are cost-effective?
3. In most international river basins, the issue of cost recovery is dealt with at the national level (and not in the “roof report”): is there a need for common definitions? How to achieve them?

4. Is transboundary co-ordination (for reporting) sufficient for integrated river basin management for transboundary basins - or does it only represent the first step? What is needed for the future?
5. Does an exchange take place between the new CIS working groups and the international river basin commissions? In what form? Is it sufficient?
6. Would European “guiding principles”/ common methodological documents on how to select cost-effective measures (especially for international river basins) be valuable/possible?

7 Outlook

The present document has a specific intention, that is to prepare the Berlin workshop :”The Economic Analysis according to the WFD – Status of Implementation (October 2003): An International Exchange of Experience”. The information compiled on the current implementation status of the economic analysis 2004 in the different EU Countries should serve as an information base for the participants of the workshop. The identified main issues as well as the questions raised in this document will be presented at the workshop and form the starting point for discussions.

It is expected that through the presentations, discussions and the work done in the working sessions of the Berlin workshop, interesting information/ideas supporting the further implementation of the economic analysis will be identified. These will feed into upcoming activities/events related to the implementation of the economic analysis.

The results of the workshop will be compiled and distributed within two weeks.

8 Annexes: A Review of the National Implementation Status

The Annexes are compiled in a separate document.