

Second AquaMoney Plenary Meeting

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Content

Summary	III
1. Definitions, guidelines and methodological issues	1
1.1 Introduction to program, main objectives and expected output (Roy Brouwer)	1
1.2 Introduction and discussion definition note (Ian Bateman)	1
1.3 Introduction and discussion draft guidelines and key methodological issues (Roy Brouwer)	1
1.4 Design WFD Valuation Scenarios (Berit Hasler)	2
1.5 Spatial Dimensions underlying Water Valuation (Marije Schaafsma)	2
1.6 Aggregation Principles and the Use of GIS (Ian Bateman)	3
1.7 Value Transfer and Common Valuation Design (Ståle Navrud)	3
1.8 Lessons learned from the first case study: <i>the Guadalquivir river basin</i> (Julia Martín-Ortega)	3
1.9 Interim results of the survey on policy maker demand for economic information (Benjamin Görlach)	4
2. Design of the AquaMoney Case Studies	4
2.1 Work plan for the Morsa case study (David Barton)	4
2.2 Work plan for the Nemunas case study (Daiva Semeniene)	5
2.3 Work plan for the Odense case study (Berit Hasler)	5
2.4 Work plan for the Humber case study (Ian Bateman)	5
2.5 Work plan for the Scheldt case study (Leo De Nocker)	5
2.6 Work plan for the Danube case study (Zsuzsanna Flachner / Michael Getzner)	5
2.7 Work plan for the Rhine case study (Jean Daniel Rinaudo)	5
2.8 Work plan for the Pinios case study (Mihalis Skourtos)	6
2.9 Work plan for the Po case study (Davide Viaggi)	6
2.10 Work plan for the Jucar case study (Manuel Pulido)	6
3. Discussion of a common research design for the AquaMoney case studies	6
4. Management and financial issues	7
5. Report dissemination activities and project website	8
5.1 Advisory Committee	8
5.2 Dissemination activities	8
5.3 Website	8
6. Planning of activities and next meeting	8

Summary

- The 2nd plenary meeting of the AquaMoney FP6 project team was held in Berlin on 26 and 27 March, 2007. It was attended by 31 experts from the 16 participating institutions.
- The draft guidelines (technical guidance for practitioners) were presented and the next steps for the finalisation of the draft guidelines discussed. It was agreed that the guidance should focus primarily on the measurement of the economic benefits of WFD implementation using economic valuation methods. Cost-based approaches for benefit valuation (such as avoidance cost methods) and financial cost/benefit approaches will be part of the overviews and referred to in this context, but will not be the main focus of the key methodological issues raised in the guidelines.
- A common valuation design (CVD) or blue print will be used where possible in the AquaMoney case studies. This CVD or blue print is not prescriptive for the entire study design, but rather consists of a set of common elements to be included in the case studies. The adoption of the CVD is voluntary. For the elements of the common research design, co-ordinated pre-testing is foreseen.
- The use of a CVD is crucial to allow of validity testing of economic value or benefits transfer. In view of the fact that this is one of the objectives of the AquaMoney project, some degree of comparability between the case study results will be necessary.
- One key methodological challenge discussed at the meeting concerns the translation of the WFD objective (good ecological status) into a credible, meaningful and understandable valuation scenario, whereby the status improvements are translated into possible human uses and benefits. The potential of a water quality ladder or some comparable device will be further explored in the design of the case studies, possibly using visual aids like maps and pictures.
- Another challenge concerns the procedure for aggregating benefit estimates across water bodies and water user (and non-user) groups in a catchment or river basin. A case study was presented demonstrating the effect of different aggregation procedures and how the use of uniform average values can significantly overstate total benefits. Spatial correlations measured through (GIS based) distance-decay functions are necessary to account for spatial heterogeneity in economic valuation of water resources use.
- Interim results from the policy maker survey were presented. The survey shows a preference for simple, practical, hands-on guidance, including definitions of key terms and practical recommendations for their assessment, supported by illustrative case studies and examples.
- With regard to the potential publications derived from or incorporating the CVD, a dissemination strategy was discussed, whereby the authors of the common design and their contribution are acknowledged in forthcoming publications.

1. Definitions, guidelines and methodological issues

1.1 Introduction to program, main objectives and expected output (Roy Brouwer)

In the introductory talk Roy Brouwer formulated the expected outcomes of the second AquaMoney Plenary meeting. They can be summarised as follows:

- Improvement of the guideline: In this respect comments and recommendations for further guideline development are expected from partners and policy survey to ensure that all relevant issues covered are covered by the document.
- Coordination of the set-up of case studies: Agreement on the methodological aspects covered, where they will be investigated and how this will be done.
- Firm basis for case study implementation: Development of a clear definition on what has to be done and how to ensure comparability of results.

After that the state of project was presented regarding the status of the different deliverables. At the moment, with one exception (D55 Benchmark stakeholder participation) all deliverables have been handed in in time. For the next steps, the option of an additional meeting to coordinate the set up of the case studies was discussed, but ultimately discarded.

1.2 Introduction and discussion definition note (Ian Bateman)

Ian Bateman presented a short talk to animate the discussion about the further development of the AquaMoney guidelines. He outlined the main challenges of the guidelines as:

- Definition of the benefits of better water quality and identification of the beneficiaries
- Provide assistance in revealing preferences for goods with which the general public is not familiar.

When taking about the different kind of benefits associated with improvements in water status, one can distinguish between production and consumption benefits. While the former are more specific (e.g. waste assimilation, irrigation or cleaning processes) the latter are more difficult to assess, since they involve use-and non-use or indirect use values.

Even when the benefits and the beneficiaries (i.e. the respective population) have been identified, it still remains a challenge to assess them, since the general public in many European countries has no experience with some of the benefit categories (such as bathing in rivers, which is an unfamiliar option for many Europeans, especially younger ones). Hence, often enough, “water clarity” is used as main criterion to assess the water quality, even though this criterion does not correlate with the actual water quality and is an inappropriate indicator for many water courses.

A second problem associated with the revealing of public preferences is the perception of risk and uncertainty. Theoretically, risk and uncertainty must be considered, because there is no certainty about the effectiveness of the measures to reach good ecological status. Hence there is always the risk that a measure fails to deliver. But in reality, a consideration of risk and uncertainty is difficult: experience shows that the understanding of risk and uncertainty by the public is different to the standard economic models, resulting in a high probability of substantial errors in the benefit evaluation, if a standard economic approach is used. It was recommended by the consortium to concentrate on simple scenarios in the design of the CV-studies and to calculate risk and uncertainty later on.

Furthermore, the problem of comparability of the results of different Member States has been stressed. The differences in the baseline/status quo of the environmental quality of the national river basins complicate this task. To ensure valuable results this problem has to be addressed adequately in the case studies.

1.3 Introduction and discussion draft guidelines and key methodological issues (Roy Brouwer)

Roy Brouwer presented the status quo of the draft guidelines to stimulate the discussion on how to proceed with the document. For a better recapitulation Roy highlighted the three main fields of application for the guidelines:

1. Technical guidelines for practitioners.
2. Standard terms of reference (TOR) for policy advisors
3. Policy briefs for policy makers

So far, the first of these guidance documents – the technical guidance for practitioners – is available in draft form. He recalled the aim of these guidelines as providing practical guidance on how to conduct and implement an economic valuation study to support the implementation of the WFD. The technical guidance should thus address specific problems of valuing aquatic resources and the challenges of transferring such values to demonstrate the limits of any economic evaluation. Hence the focus of the document should be more on the issue of estimating benefits than calculating costs, since the latter is more a question of data availability than a methodological challenge.

Following the discussion, the following aspects should be considered in the guidelines:

- In general, political decision makers favour standard values that are easily and quickly applicable. The feasibility of generating such numbers should be discussed as well as the risks involved with their use. In addition, the guidelines should help to decide which evaluation method suits best for a specific situation and whether alternative approaches such as benefit transfer or standard values should be considered.
- The guidelines should also stress the problem of financial and economic costs and benefits. Among decision makers there is often a confusion about the exact meaning of the different terms and the interpretation of the figures. To deal with this problem, the guidelines should provide clear definitions of financial and economic costs and benefits and point out that the primary focus of an economic evaluation should be on economic costs benefits.
- The same applies to cost-based approaches for the valuation of benefits (i.e. damage avoidance costs), which should only be used in cases where a benefit-based valuation is not possible. Consequently the main focus of the guidelines should be to give recommendations on how to measure the economic benefits associated with water quality improvements. This is in line with the expectations on the group from outside and the competence of the consortium. Cost based approaches, while relevant in practice, are not as valuable for a research project.
- To demonstrate the importance of using costs and benefits in a welfare economic sense, the guidelines should provide examples where shadow prices influence the results and CBAs are necessary for a proper decision making.
- In the discussion, it was pointed out that probably the most important factor for the accuracy of the estimates is rather at the level of the aggregation than at the level of the valuation exercise.

The following discussion concentrated on the use of the case study results within the guidelines. The consortium agreed that in general the guidelines should help to give insight into the following tasks:

- Transferability of results
- Defining valuation scenarios in terms of the good ecological status
- Development of a common research design with the use of choice experiments

1.4 Design WFD Valuation Scenarios (Berit Hasler)

Berit Hasler's presentation addressed the question of how to translate the ecological objectives of the WFD into valuation studies and how to construct useable, scientifically sound and understandable valuation scenarios. Hence the presentation focussed on how do respondents perceive information.

For this purpose she gave examples of CE and CVM studies dealing with this problem. Unfortunately there is only limited experience available. Nevertheless, available experience indicates that presenting concentration levels does not work and instead information should be provided in a qualitative way.

In the discussion it was mentioned that the water quality ladder could be a useful approach to communicate water quality. But main problems are that the ladder was developed for an other purpose and the categories are not always applicable and not of major relevance for WFD purposes. Indeed, the translation of the WFD objectives into suitability for human uses is far from trivial, and in some incidences ecological improvements may even run against the usability. It was also pointed out that value-laden terms (such as "good ecological status") should be avoided in the presentation of the valuation scenario. Rather, visual aids (photos, graphics) were suggested as useful tools to communicate the effect of the WFD on water bodies and their impact on human use options.

1.5 Spatial Dimensions underlying Water Valuation (Marije Schaafsma)

Marije Schaafsma introduced the subject of spatial dimensions in evaluation studies. It is a known effect that WTP decreases with distance which means respondents living closer to the good are willing to pay more. For the AquaMoney project it has to be discussed what the implications of this effect are for the use of local case studies for river basin wide or even nation wide decisions.

Main reason for the distance-decay effect are an increase in substitution possibilities and a decrease of use/visitation rate. But the effect can be observed for use as well as for non-use values. Since the effect depends on the scale of the valuation study the level of detail of the WTP is a crucial point. In respect to river basin evaluation it has to be discussed whether it makes more sense to estimate large-scale values for generic goods and services, or whether more site-specific information should be estimated, taking into account local characteristics and values. On the other hand sensitivity of scope and part-whole bias problems come into play, when sub-catchments are evaluated.

Nevertheless the consortium agreed on the fact that the spatial dimension topic is one major topic for the AquaMoney project, since the aggregation of individual WTPs is probably the main source of inaccuracy in the evaluation procedure (see also next chapter).

1.6 Aggregation Principles and the Use of GIS (Ian Bateman)

In his presentation Ian Bateman elaborated further in the issue of distance decay functions for WTPs and the implications for an up-scaling of local case study results. In this respect he stressed the question of the appropriate measure of distance. There is a rough rule of thumb that WTP is approaching zero after 20 to 30km. Nevertheless socio-economic characteristics are much more important than distance. GIS offers here the possibility to generate district specific WTPs. Based on this information it is possible to calculate either the true total economic benefits or the benefits for the relevant administrative/bureaucratic population, that has to bear the costs of the program. The latter is especially valuable, if distribution effects should be considered in a politically motivated CBA.

In the discussion, one particular challenge for the valuation of water status improvements in the WFD context was pointed out: in contrast to most valuation studies, where a change in one particular (part of a) river is valued, the WFD will improve water status in all water bodies throughout Europe. This will inevitably affect the supply of substitute sites, and thereby the valuation results – if water status is improved in all water bodies, then the improvement in a particular water body is not valued as highly anymore.

1.7 Value Transfer and Common Valuation Design (Ståle Navrud)

Ståle Navrud gave in his presentation an example on how to use and conduct benefit-transfer (BT) techniques. Different techniques such as unit transfer or benefit function have been tested within the EU-project *MethodEx*. Basis for this BT were studies on lake water quality from three different countries (Norway, Poland, Germany). The results show that the explanatory power of the conducted BT is low. The observed transfer errors are substantial (>30%). They decrease as more sophisticated unit value transfer techniques are applied. Best results can be obtained with the income elasticity approach. But interestingly benefit function approaches do not perform better than unit transfer. One suspected reason for the high errors is that the environmental quality changes are not directly comparable, and hence not captured in benefit function.

Implications for the AquaMoney project would be to ensure that the same scenario is valued at all case study sites at the same time (or at least that a large share of the case studies uses similar / consistent valuation scenarios, or that some common elements are used in all valuation designs). This will imply higher protest rates in some countries, since a common scenario will not be equal suitable for all countries. Therefore an agreed common pre-testing is substantial.

1.8 Lessons learned from the first case study: the Guadalquivir river basin (Julia Martín-Ortega)

In this session Julia Martin-Ortega described a the assessment of the non-market environmental benefits associated with the implementation of the WFD in the Guadalquivir river basin in Spain. Special focus of the case study lay on (i) the develop of understandable WFD valuation scenarios, (ii) the sensitivity to scope (i.e. water quality levels) and (iii) spatial regional variability in WTPs.

The use of a choice experiment with three different scenarios allowed obtaining welfare measures of different policy scenarios. Hence the results can serve a decision support tool to estimate the cost/benefit ratios of policy options. Furthermore, the results have shown that improvements in different zones within the basin are valued significantly differently by the interviewed population. However, residents in different zones did not value improvements in the entire river basin differently. It can be concluded that the approach seems to be useful for the planned case studies within the AquaMoney project. Necessary financial resources are around 12,000€ for 600 interviews.

1.9 Interim results of the survey on policy maker demand for economic information (Benjamin Görlach)

To ensure that the planned AquaMoney guidelines are in line with the requirements of their potential users, a survey was conducted to elicit decision maker's demand for economic information in the WFD implementation. With the support of the project team, a total of 38 decision makers were surveyed (with written questionnaires, interviews and through a workshop). Some main results of the survey include:

- In the surveyed countries, economic issues tend to be centralised on the national level. At the same time, some economic expertise is given in most countries at the national level. On the regional / local level, only restricted economic expertise can be assumed. Subcontractors with economic expertise (research institutes, consultancies, universities) are likely to play a limited but substantial role.
- In terms of the guidance being used, most respondents indicated that they intend to use / are already using the Wateco guidelines; a lesser proportion also uses other CIS guidance such as the DG Eco2 information sheet. National-level guidance document is so far less common.
- Guidance should be comprehensive rather than brief, specific as to the policy decision it regards and pragmatic rather than overly scientific. Furthermore, the decision makers favour a modular design of the document.
- Main methodological questions of interest to decision makers are: (i) definition and assessment of disproportionate costs as well as (ii) definition of environmental and resource costs and calculation of cost recovery levels.
- To be useful and user-friendly, the guidelines should above all provide illustrative case studies, as well as practical explanation and worked examples of valuation methods. If valuation studies should come into use, they need to be user-friendly and inexpensive to apply.
- Economic valuation is seen as most relevant in the middle phases of decision making (describing, comparing, ranking, choosing options). It is not seen as helpful in identifying the need for action or setting the objectives (as these are determined elsewhere in the WFD).
- In terms of the different economic elements of the WFD, the results were somewhat surprising: according to the respondents, benefit valuation will be less useful for disproportionate cost tests (which are reminiscent of a classical CBA), and more useful for the selection of cost-effective measures (which are more reminiscent of a CEA, and hence do not normally require much benefit valuation).

Most of the presented survey results could be confirmed by the AquaMoney consortium. E.g. experience from Austria shows that decision makers often enough approve economic evaluation methods but do not apply them. In other countries economic studies are just applied for the estimation of costs. Especially for some eastern European countries, it must be kept in mind, that the absolute number of people dealing with the implementation of the WFD is rather small. In addition most of these persons are natural scientists, hence the economic experience is limited. The guidelines must ensure that they are understandable for laypersons. It was also pointed out that the situation that arose for the Article 5 reports should be avoided, where Member States felt left alone without supervision of guidance from the Commission. In this respect, the consortium discussed a broader approach towards informing decision makers on the merits and limitations of economic valuation. It was decided that this should be addressed in one of the policy briefs.

2. Design of the AquaMoney Case Studies

2.1 Work plan for the Morsa case study (David Barton)

The methodological focus of the Morsa case study will be on the following aspects:

- Marginal willingness to pay for water quality attributes of achieving “respondent perceived suitability” versus “good ecological status” in Vansjø Lakes (Morsa catchment)
- Distance decay of response rates and willingness to pay for achievement of “use suitability” for water bodies near respondent residence (“economic jurisdiction of a water body”)
- Disproportionate cost analysis (art. 4) for attainment of GES in Vansjø Lakes of programme of measures in Morsa catchment

Method applied for this task: choice experiment, using web-based panel from NORSTAT

2.2 Work plan for the Nemunas case study (Daiva Semeniene)

The methodological focus of this study will be on the following aspects:

- Testing of guidelines in Nemunas river basin
- Inclusion of environmental and resource costs/benefits in water pricing systems and full cost recovery
- Cost-benefit analysis of the WFD programme of measures to underpin possible derogations (WFD art.4)

Method applied for this task: *Contingent Valuation*

Additional remarks: The Nemunas team would need assistance for the value transfer tests.

2.3 Work plan for the Odense case study (Berit Hasler)

The methodological focus of this study will be on the following aspects:

- Identification of most beneficiary/cost-efficient action in the river basin to fulfil the WFD objectives,
- Identification of comprehensive, reliable and understandable indicators for the most important goods and services related to changes in each of the water bodies in the Odense river basin
- Design valuation to facilitate benefit transfer test and to reflect spatial differences
- Test scope and scale to secure appropriate aggregation and to secure potential for publication of the results

Method applied for this task: *Choice Experiment*

Additional remarks: The Odense team would like cooperate on eutrophication issues.

2.4 Work plan for the Humber case study (Ian Bateman)

The methodological focus of this study will be on the following aspects:

- Identification of sites
- Definition of water quality and useful description of changes in the water quality
- Multiple uses and their differing regards for water quality
- Seasonality and sampling strategy
- Aggregation of benefit values

Method applied for this task: *Travel Cost Study / Choice Experiment*

2.5 Work plan for the Scheldt case study (Leo De Nocker)

The methodological focus of this study will be on the following aspects:

- Break down WTP values for different ecosystem goods and services
- Spatial dimension of the WTP estimates
- Focus on recreational use and non-use values for an improvement in water quality
- Special common design-approach for Dutch and Belgium part of the river

Method applied for this task: *Choice Experiments* (presumably)

2.6 Work plan for the Danube case study (Zsuzsanna Flachner / Michael Getzner)

The methodological focus of this study will be on the following aspects:

- ERCB benchmarked to GES/GEP
- Range of ERCB based on investment/operating/maintenance cost of waste water treatment in Vienna (avoidance cost – abatement cost – defensive expenditure)
- Pricing of water services (full cost recovery, not only including ERCB)

Method applied for this task: *Abatement cost method and – benefits to downstream users*

Additional remarks: Information requested on abatement costs in other big cities and regarding the value transfers, values for concrete emissions, e.g. N, P removal)

2.7 Work plan for the Rhine case study (Jean Daniel Rinaudo)

The methodological focus of this study will be on the following aspects:

- Sensitivity to different quality levels

- Accounting for spatial differences
- Investigating differences in perception by users and non users
- Disentangling use and non-use values
- Comparison of different methods (CVM vs. CE)

Method applied for this task: *Contingent Valuation (France) Choice Experiments (NL)*

Additional remarks: Interest to make a bridge to groundwater protection, because there is a significant policy demand and lack of valuation studies. In addition there is the possibility to archive synergies with the BRIDGE project .

2.8 Work plan for the Pinios case study (Mihalis Skourtos)

The methodological focus of this study will be on the following aspects:

- Approaching resource cost from a welfare theoretic perspective (Estimation of (Ricardian) scarcity rent of underground water reserves and option price of future underground water availability)
- Comparison with a cost-based approach
- Dealing with uncertainty
- Spatial and scale consideration (values upscaling)
- Economize on cost of primary valuation studies (Combined CVM and CE)

Method applied for this task: *Combined Contingent Valuation and Choice Experiment Approach*

Additional remarks: Major problems foreseen are (i) Suitability of stated preference approaches for estimating scarcity rent, (ii) Attribute selection in CE for groundwater, (iii) Handling of quantity/quality interface

2.9 Work plan for the Po case study (Davide Viaggi)

The methodological focus of this study will be on one of the following alternatives:

- Option A: Focus on general water improvement benefit. Objective: total economic value of water quality improvement to level “good” (GES)
- Option B) Focus on agriculture water use and pollution. Objective: cost of constraining agriculture to guarantee good status (economic value of water uses by agriculture)

Method applied for this task: (A) *Contingent Valuation/ Choice Experiments* (B) *Meta-modelling of individual demand functions*

2.10 Work plan for the Jucar case study (Manuel Pulido)

The methodological focus of the Jucar case study will be on the following aspects:

- Use of the Marginal Resource Opportunity Costs (MROC) as indicator of aggregated economic impact of water scarcity & user’s WTP to mitigate that scarcity
- Assess the economic impact of certain measures on water users (changes in users’ welfare)
- Allocation of cost of certain measures (SCRB methods ...)
- Efficiency & equity analysis of water policies

Method applied for this task: *Hydro-Economic River Basin Model plus contingent valuation and Choice Experiments*

3. Discussion of a common research design for the AquaMoney case studies

As a result of the discussions on the case studies, it was agreed to develop a common research design for the AquaMoney case studies. This does not cover all aspects of the study design, but rather a number of features that can / should be included in the different case studies.

The objective of the proposed common research design is to conduct comparable studies across case studies. A suggested strategy is to include a common element as part of wider questionnaires. However, there is no obligation to join such an approach. All teams can undertake their own design.

Yet, a number of benefits could result from the proposed approach. A common design element would be developed in partnership with a 'common design team'. This team could include Roy Brouwer, Ian Bateman, Stale Navrud and others. It would then work together with the local teams. A common element to be included in all partners' questionnaires would have to be developed. It could consist of a joint choice experiment or contingent valuation design valuing water quality change. Underlying structures could be the combination of maps and water quality ladders. This could possibly be extended by using GIS to capture distance decay. There would be enough data available for at least two papers per team. One paper could be based upon a new analysis of all data sets of the common design element across the studies. A further paper could go into more detail and examine the findings from the design element with a single case study.

However, such an approach requires some commitments. Partnership is needed for local teams which develop and test the adaptation of the common design element. This would encompass for example the development of local maps and the testing of water quality ladders and questions and so forth. The 'common design team' should also be included within the authorship of those local team papers, which report on the common design element. However, lead authorship will be reserved for the local team members. In turn the 'common design team' should undertake the analysis and head the authorship. All those who collaborate in the common design approach will then also be co-authors of the paper. Yet, work carried out independently of the common design should be authored by local teams alone.

In the meantime there will be some specific tasks to be carried out. The 'common design team' has to share survey material from previous studies in terms of maps and water quality ladders. Short term tasks for each partner group would be to

- Define the case study area,
- Develop maps of the study area, which illustrate current water quality levels,
- Construct maps in such a way that they can readily be changed to illustrate modified water quality levels,
- And to consider the suitability of existing water quality ladders for the study in question.

In all cases groups have to communicate developments back to the 'common design team'. The common design element has to be consistent across teams. Therefore the 'common design team' will provide for the choice experiment or contingent valuation design. This would include the definition of attributes and levels. The local teams would then carry out the survey and feed back using cleaned data sets. Analysis will then be undertaken by the 'common design team' and results send back to local teams. Finally, both local groups and the 'common design team' collaborate in writing up the local team paper and the common analysis paper.

For those who want to participate, the following timetable was suggested.

- Presentation of the proposed common research design by early May
- Pretesting in June
- Presentation of first results in the Bologna meeting in September

For the set-up of the different case studies it was suggested to cover a broad range of different types of (i) water bodies as well as (ii) functions and types of goods and services, (iii) rural or urban settings, (iv) morphology

4. Management and financial issues

Roy Brouwer provided an overview of the project progress up until now. With one exception, all deliverables required by the end of the first project year (March 2007) have been submitted. Roy also explained about the upcoming first progress report (due in Mid-April 2007), and outlined the requirements necessary from each partner and from the Work Package leaders for the completion of this report.

Also based on the discussion within the Scientific Council, a common approach to the issue of intellectual property rights / authorship was discussed. This concerns in particular case study results integrating the common research design; for publications arising out of these case studies, the authors of the common research design would need to be included.

5. Report dissemination activities and project website

Benjamin Görlach presented the progress on Work Package 5, which covers dissemination activities and the integration of policy maker demand.

5.1 Advisory Committee

The AquaMoney Advisory Committee comprises 24 high-level decision makers from different EU Member States, relevant CIS working groups, NGOs as well as the European Commission DGs Environment and RTD. The Advisory Committee was involved in the project through phone and email exchange and personal communication on the phone or in the margins of other events. Advisory Committee members were informed of the project progress, and invited to comment on relevant documents produced within the project, such as the definition note. They were also invited to specify the needs and expectations for guidance material as part of the WP1 assessment of policy maker demand.

5.2 Dissemination activities

The AquaMoney project was presented at a number of workshops, seminars and conferences, attended both by decision makers, practitioners and administration officials involved in the implementation process, academia and the wider research community. This includes presentations devoted entirely or predominantly to the AquaMoney project given at

- An international conference on water valuation held in Santiago, Spain, on 24-26 May 2006 (Roy Brouwer);
- The 2006 Hydronòmica Convention on The Costs and Price of Water, 13-15 November 2006 in Barcelona (Julia Martín-Ortega and Julio Berbel);
- Expert workshop on Cost Benefit Analysis and the Water Framework Directive on 20 November 2006 (Benjamin Görlach);
- 2nd Workshop of the InterReg project “WaterCost” in Newcastle on 23 November 2007 (Benjamin Görlach);
- envecon 2007: Applied Environmental Economics Conference, London, 23 March 2006 (Roy Brouwer and Benjamin Görlach).

Further presentations are scheduled for the 2nd meeting of the CIS Drafting Group on Environmental Objectives and Exemptions, in Brussels on 18 April 2007, and two international workshops on WFD and economics in Alsace in May 2007 and in Berlin in June 2007. AquaMoney will also be represented at the ESEE 2007 conference in Leipzig as part of a symposium on the issue of disproportionate costs.

Project team members were invited to mention the AquaMoney project in presentations and publications on related issues, and asked to notify Benjamin Görlach as the work package leader about such activities.

5.3 Website

The project website has been set up at the address www.aquamoney.org in mid-2006. It currently presents some background information on WFD and economics, information about the AquaMoney case studies, the project partners and members of the Advisory Committee etc. It also provides access to the project results that are in the public domain yet. In addition, a password-protected Members Area has been established for the project partners. This contains a filesharing platform to share and disseminate information and material, a discussion forum and internal information on the project meetings.

It was pointed out that the uptake of this discussion forum by the project team members has been very slow up until now; project team members were invited to make more use of the tool.

6. Planning of activities and next meeting

There are a number of deadline approaching. Deadlines and responsibilities of forthcoming deliverables and activities are depicted in Table 1.

Table 1: Deadlines and responsibilities of forthcoming deliverables and activities

Deliverable/activity	Date	Responsibility
Progress report	15 April	Roy
Comments on draft guidelines	15 April	Roy
Finalisation of draft guidelines	31 May	Roy/Stav

Case study status report	15 April	Manuel
Policy survey	15 April	Ben
List with draft criteria	31 May	Ben
'Educational' policy brief	30 April	Roy/Ben
Comments on policy brief	15 May	Roy/Ben
Maps/photographs	30 April	Roy
Common valuation design	15 May	Roy/Ian/Stale
Comments on CVD	1 June	Roy/Ian/Stale

The objectives of the second meeting are the presentation and discussion of the following:

- draft guidelines,
- empirical testing of guidelines in case studies,
- set-up of a case studies
- policy survey results and their translation into guideline criteria

There are several outcomes expected. First, comments and recommendations for further guideline development from partners and the policy survey should be received. A question here is, whether all relevant issues are covered. Second, a co-ordinated set-up of case studies is expected. This should include answers on which methodological aspects are covered and where and how these are included. In addition a basis for case study implementation is needed. This should clarify what is going to be done and how.

The third AquaMoney Meeting will take place in Bologna, either on 27-28 September or 1-2 October. The objective of the workshop will be to come up with presentations and discussions of the following:

- the final design of case studies,
- first empirical test results from the case studies,
- preliminary 'best practice recommendations', which include 'dos and don'ts' as well as terms of reference for policy advisors,
- the inclusion of illustrative case study results in guides,
- the feasibility of a GIS based value map, and
- the interim mid-term review (D8)

Annex 1 Program

Monday, 26 March 2007	
09.00-10.00	Registration
10.00-10.15	Welcome and introduction program, main objectives and expected output (Roy Brouwer)
10.15-10.45	Introduction and discussion definition note (Ian Bateman)
10.45-11.30	Introduction and discussion draft guidelines and key methodological issues (Roy Brouwer)
11.30-11.45	<i>Coffee break</i>
11.45-12.15	Introduction and discussion ' <i>Design WFD Valuation Scenarios</i> ' (Berit Hasler)
12.15-12.45	Introduction and discussion ' <i>Spatial Dimensions underlying Water Valuation</i> ' (Marije Schaafsma)
12.45-13.30	Lunch
13.30-14.00	Introduction and discussion ' <i>Aggregation Principles and the Use of GIS</i> ' (Ian Bateman)
14.00-14.30	Introduction and discussion ' <i>Value Transfer and Common Valuation Design</i> ' (Ståle Navrud)
14.30-15.00	Lessons learned from the first case study: <i>the Guadalquivir river basin</i> (Julia Martín-Ortega)
15.00-16.00	Discussion key methodological issues to be tested in the practical case studies
16.00-16.30	<i>Coffee break</i>
16.30-17.00	Presentation policy survey results (Benjamin Görlach)
17.00-18.00	Discussion survey results and translation into concrete guideline criteria
18.00-19.00	(Scientific Council Meeting)
19.30	Dinner

Tuesday, 27 March 2007	
08.00-08.30	Presentation and discussion <i>work plan Morsa</i> (David Barton)
08.30-09.00	Presentation and discussion <i>work plan Nemunas</i> (Daiva Semeniene)
09.00-09.30	Presentation and discussion <i>work plan Odense</i> (Berit Hasler)
09.30-10.00	Presentation and discussion <i>work plan Humber</i> (Ian Bateman)
10.00-10.30	Presentation and discussion <i>work plan Scheldt</i> (Leo De Nocker)
10.30-10.45	<i>Coffee break</i>
10.45-11.15	Presentation and discussion <i>work plan Danube</i> (Zsuzsanna Flachner)
11.15-11.45	Presentation and discussion <i>work plan Rhine</i> (Jean Daniel Rinaudo)
11.45-12.15	Presentation and discussion <i>work plan Pinios</i> (Michalis Skourtos)
12.15-12.45	Presentation and discussion <i>work plan Po</i> (Davide Viaggi)
12.45-13.15	Presentation and discussion <i>work plan Jucar</i> (Manuel Pulido)
13.15-14.00	Lunch
14.00-15.30	Discussion research design issues in case studies: <i>are all relevant issues covered across the different case studies?</i>
15.30-15.45	<i>Coffee break</i>
15.45-16.15	Management and financial issues (Roy Brouwer)
16.15-16.30	WP5 report dissemination activities and evaluation project website (Benjamin Görlach)
16.30-17.00	Planning of activities and next meeting

Annex 2 List of Participants

Participant	Institution	Land
1. David N. Barton	Norwegian Institute for Water Research	Norway
2. Ian Bateman	University of East Anglia	United Kingdom
3. Line Block Christensen	University of Aarhus	Denmark
4. Ingo Brüuer	Ecologic	Germany
5. Steven Broekx	VITO	Belgium
6. Roy Brouwer	Institute for Environmental Studies	The Netherlands
7. Leo De Nocker	VITO	Belgium
8. Alex Dubgaard	University of Copenhagen	Denmark
9. Zsuzsanna Flachner	Hungarian Academy of Sciences	Hungary
10. Stavros Georgiou	Institute for Environmental Studies	The Netherlands
11. Michael Getzner	Alpine-Adria University of Klagenfurt	Austria
12. Benjamin Görlach	Ecologic	Germany
13. Berit Hasler	University of Aarhus	Denmark
14. Eduard Interwies	InterSus - Sustainability Services	Germany
15. Sándor Kerekes	Corvinus University of Budapest	Hungary
16. Areti Kontogianni	University of Aegean	Greece
17. Szilvia Luda	Corvinus University of Budapest	Hungary
18. Thanassis Machleras	University of Aegean	Greece
19. Julia Martín-Ortega	University of Córdoba	Spain
20. Simon Milton	Corvinus University of Budapest	Hungary
21. Stale Navrud	Norwegian University of Life Sciences	Norway
22. Teodora Palarie	University of Bucharest	Romania
23. Manuel Pulido-Velázquez	Universidad Politécnica of Valencia	Spain
24. Meri Raggi	University of Bologna	Italy
25. Richard Ready	Norwegian University of Life Sciences	Norway
26. Jean Daniel Rinaudo	BRGM	France
27. Rasa Sceponaviciute	Center for Environmental Policy	Lithuania
28. Marije Schaafsma	Institute for Environmental Studies	The Netherlands
29. Michalis Skourtos	University of Aegean	Greece
30. Angheluta Vadineanu	University of Bucharest	Romania
31. Davide Viaggi	University of Bologna	Italy