

# **PUBLIC PARTICIPATION AND THE EUROPEAN WATER FRAMEWORK DIRECTIVE**

A framework for Analysis



Inception report of the HarmoniCOP project –  
Harmonising COLlaborative Planning

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## Preamble

Public and stakeholder participation is a central theme in many conferences on water. Governance is often perceived to be more important than technical solutions to deal with water resource problems. The issue receives a unique importance with the introduction of the European Water Framework Directive. Nevertheless, the theme has received comparatively little attention in the research community.

A lot of expertise is available – but it is fragmented. Most research projects and comparative analysis focused on national accounts. This is not too surprising given the strong influence of national regulation, cultural heritage and institutional factors that govern the setting up any participatory process.

The HarmoniCOP project aims at improving the conceptual base for participatory planning in river basin management. It has thus a clear scientific goal with the idea that an improved understanding of PP in river basin management is key to developing better practical approaches and implementation schemes. Comparative studies in a number of European countries will assist in defining what could be “European Governance”, while respecting national traditions.

At the same time HarmoniCOP will produce a handbook as a practical guide that allows users to tailor a participatory process to regional/local conditions. The handbook will give rules of good practice illustrated by a number of case studies. It should become a living document embedded in a community of practitioners, institutions and communities.

A basic premise of the HarmoniCOP project is that social learning is crucial to the development and implementation of management schemes that meet environmental targets and are economically and socially sustainable and accepted by the broad public. Hence PP should not be seen as a burden being imposed by law but as an opportunity. We expect to develop our research practical guidance on how to exploit this potential within the constraints of everyday practices and how to avoid pitfalls that are undeniably there.

The project has assembled a group of enthusiastic people with different scientific and practical background. In and of itself, the project presents a major challenge and a practical lesson in social learning in order to promote and guide the research process to profit from the diversity of knowledge and experiences. We welcome feedback and suggestions from anyone reading this report since it defines the basic structure of what we intend to do in the project.

All teams involved are grateful for the support of the European Commission in providing funds for this research and to the national organisations contributing to the project.

Claudia Pahl-Wostl  
Coordinator HarmoniCOP project  
February 2003



## **Executive Summary**

### ***Overview***

This report is the inception report of the HarmoniCOP project. The HarmoniCOP project has been set up in the framework of the 5<sup>th</sup> European Framework Programme for Research and Technological Development (Contract nr EVK1-CT-2002-00120). It aims to increase the understanding of participatory river basin management against the background of the European Water Framework Directive. The project involves 17 research teams from nine European countries. Its specific objectives are as follows:

- To prepare a “Handbook on PP methodologies“
- To provide insight into social learning in a multi-phase multi-level context
- To increase the understanding of the role of information and ICT tools (Information and Communication Technology) in PP
- To compare and assess national PP experiences and their backgrounds
- To involve governments and stakeholder groups

The project has started in November 2002 and will run until November 2005.

This inception report spells out our approach to PP and explores the main issues to be addressed in the project. The purpose of this is to facilitate feedback from the different governments and stakeholder groups in an early phase of the project and to improve our plans for research. (Chapter 1)

### ***The Water Framework Directive and Public participation***

The European Water Framework Directive (WFD) is the most important water directive of recent years. It requires Member States to manage their basins as a whole and reach a good water status for all their waters by 2015. The backbone of the WFD is a system of river basin management planning. Three times in the planning process the public has to be consulted. In addition, the Member States have to encourage the active involvement of all interested parties. Upon request access has to be given to background information. (Chapter 1 and 3)

To support the implementation of the PP provisions of the WFD a guidance document has been written under the responsibility of the European Commission and the Member States. However, more and different forms of PP may be needed. PP generally can result in better-informed and more creative decisions, more public acceptance, better implementation and more open and "integrated" government. Yet, it should be organised well, or else the opposite may happen. (Chapter 2)

### ***Public participation and social learning in river basin management***

The most important effect of public participation is social learning. Social learning could be described as learning by groups – authorities, stakeholders and experts – to handle issues in which all group members have a stake – such as the management of a river basin. HarmoniCOP will develop this notion further. A literature review will be made and methodological support will be offered to the teams that will conduct case studies in the HarmoniCOP project and to others. Moreover, criteria will be developed to assess the degree of social learning. A clear distinction will be made between learning at the local or sub-basin scale and learning at higher scales, which involves multi-level participation and interaction. (Chapter 4)

### ***The role of information and ICT tools***

Information and ICT tools play a very important role in participatory river basin management. River basin management can only be truly participatory if the models and information tools that are used to support and legitimise the management are developed in a participatory fashion. Moreover, ICT tools can support participatory processes. ICT tools can help to disseminate information, obtain information for water management and support discussions. HarmoniCOP will evaluate the use and usefulness of ICT tools for these purposes. The findings will be incorporated in the Handbook. (Chapter 5)

### ***National PP traditions and their background***

The present and future Member States of the EU have different histories, geographical and hydrological conditions, cultural backgrounds and levels of economic development. Consequently, they also have different PP traditions and preferences. Within the HarmoniCOP project the different national traditions and their backgrounds will be described and compared. This will facilitate cross-country learning and support the organisation of PP in transnational basins. It is a crucial step for developing the Handbook. (Chapter 6)

### ***Case studies and experiments***

Case studies and experiments will play a central role in the HarmoniCOP project. On the one hand, they are a means to try out and test the ideas developed in the more theoretical work packages. On the other hand, they are also a means to promote in practice what we study: social learning in river basin management. Criteria for selecting case studies include the degree of social learning and the use of ICT tools. No final selection of cases has been made yet, but we try to link these with ongoing initiatives, such as in the Elbe basin and the pilot river basins for testing the different guidance documents developed for implementing the WFD. The case studies are scheduled to start in November 2003. (Chapter 7)

### ***Final output***

The HarmoniCOP project will result in a Handbook on PP methodologies to promote social learning in river basin management in the context of the WFD. The Handbook will complement the existing Guidance Document on Public Participation and can be more ambitious since it is not part of the official implementation strategy for the WFD. The details of the Handbook will be worked out during the project. Already at this moment all potential users can express their needs and wishes and give comments and suggestion at the HarmoniCOP website <[www.harmonicop.info](http://www.harmonicop.info)>.

In addition, the results of the HarmoniCOP project will be published in peer-reviewed articles that are targeted especially at the academic community. (Chapter 8)

### ***Involving the stakeholders***

Finally, the HarmoniCOP project can not be complete without involving the stakeholders. This will be done in several ways through the case studies and experiments and through an international stakeholder group with representatives from national ministries, the Environmental Agency, an irrigation association, the Global Water Partnership, an environmental NGO, a Water Utility and a Farmers Association. This group will convene at least twice to discuss the project with the HarmoniCOP consortium, providing external comment and advice. In addition, close contacts will be maintained by e-mail and otherwise throughout the project. Moreover, national stakeholder meetings have been scheduled. Finally, the HarmoniCOP Website will play an important role. (Chapter 8)

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# 1 Introduction

## 1.1 *The Water Framework Directive*

On 22 December 2000 the European Water Framework Directive (2000/60/EC) was officially published and thereby entered into force. The WFD establishes a framework for water management in Europe and complements the many water directives that already exist. Its aims are as follows:

- To prevent further deterioration of the water resources and enhance their status
- To promote sustainable water use based on long-term protection of water resources
- To progressively reduce discharges of priority substances and cease or phase-out discharges of the priority hazardous substances
- To progressively reduce pollution of groundwater and prevent further pollution
- To contribute to mitigating the effects of floods and droughts (cf. art. 1)

The key objective of the directive is to achieve by 2015 "good water status" for all European waters. This means that by 2015 all present and future EU water quality standards must be met, groundwater resources must not be overexploited anymore, and aquatic ecosystems and associated terrestrial ecosystems may deviate only slightly from their natural state. There are some limited possibilities to extend deadlines and set lower environmental objectives, e.g. on the ground of technical infeasibility or "excessive costs". (art. 4)

The WFD contains five main instruments for reaching this objective (only the most important articles are referred to):

### 1. *Combined approach to pollution*

Member states should reduce pollution primarily by means of uniform emission standards and the application of the Best Available Technology (for point sources) or the Best Environmental Practice (for diffuse sources). Stricter pollution controls should be applied if this is necessary for meeting the quality standard for the receiving waters. (art. 10 and 16)

### 2. *Cost recovery*

By 2010 households, agriculture and industry need to contribute "adequately" to the costs of water services. In addition, water pricing policies have to be put in place that provide incentives for more efficient water use. (art. 9)

### 3. *System of river basin management planning*

The backbone of the Water framework Directive is a system of river basin management. Member States are obliged to identify their national river basins and the river basins they share with other countries and assign these to so-called "river basin districts". For all districts six-yearly river basin management plans and programmes of measures have to be developed. To ensure the necessary national and international co-ordination, member states have to identify, among others, a "competent authority". (art. 3, 11, 13, 14, 15, Annex VI, VII)

### 4. *Supporting assessments and continuous monitoring*

To know the present status of the European waters and find out what measures are needed to reach a good water status, the Member States have to analyse the characteristics of their river basins, determine the ecological reference conditions (which serve as the basis for determining the "good ecological status"), inventory the main pressures and assess their impact. In order to apply the cost recovery principle, they have to make an economic analysis of water use. (art. 5 and 8, Annexes II and III)

## 5. *Public participation*

### 1.2 *Public participation and the Water Framework Directive*

Public participation will play a key role in the implementation of the WFD. The collaboration of all water use sectors is needed to reach the ambitious objectives of the WFD. Water managers will need to listen to the water users, give them some influence and share responsibility. As preamble 14 of the WFD puts it, "The success of this Directive relies on [...] information, consultation and involvement of the public, including users."

Several provisions of the WFD refer to PP. Although the terminology used is quite confusing and not always consistent, it is possible to distil five PP requirements from the WFD:

1. The Water Framework Directive contains a general requirement to encourage active involvement in the implementation of the directive. (art. 14, first sentence; see section 2.3)
2. The Water Framework Directive moreover requires three rounds of written consultation in the river basin management planning process. (art. 14, second sentence)
3. The reactions of the public need to be collected and considered seriously. (Annex VII point A9)
4. On request, access has to be given to background information. (art. 14, Annex VII point A11)
5. Additional forms of PP are not required by the WFD, but may be needed for reaching its ambitious environmental goals and ensuring its success. (cf. preamble 14) These include for instance additional written consultations, oral consultations, sharing decision-making powers with the public, active dissemination of information and intervener funding. Some of these additional forms are mentioned in other EU directives and international conventions, such as the Aarhus Convention. (Chapter 3)

This interpretation of the WFD follows more-or-less the interpretation given by the Drafting Group on public participation, established under the Common Implementation Strategy of the European Commission and the Member States. The Drafting Group has developed the "Guidance on Public Participation in Relation to the Water Framework Directive; Active Involvement, Consultation and Public Access to Information." (Drafting Group 2002) The guidance was officially adopted at the EU water directors meeting in Copenhagen on 21-22 November.

The guidance on PP introduces the concept of PP and discusses questions such as who are the public, when to organise PP and at which scale(s) to organise PP. It analyses in some detail the three forms of PP required by the PP: active involvement, written consultation and access to information. Moreover, it discusses the importance of evaluating PP and the success and obstacle factors. Throughout the document inspiring examples are given. Annex 1 of the guidance contains a description of selected PP tools and techniques.

### 1.3 *The HarmoniCOP project*

The HarmoniCOP project has been set up in the framework of the 5<sup>th</sup> European Framework Programme for Research and Technological Development (Contract no EVK1-CT-2002-00120) in order to increase the understanding of participatory river basin management. The project involves 17 research teams (including two subcontractors) from nine European countries. (Box 1) Its specific objectives are as follows:

- 1: University of Osnabrück, Institute for Environmental Systems Research, co-ordinator (with Aberdeen University as subcontractor)
- 2: RBA Centre, Delft University of Technology, The Netherlands
- 3: Ecologic, Germany
- 4: Katholieke Universiteit Leuven, Centre for Organisational and Personnel Psychology (COPP), Belgium
- 5: RIZA, Ministry of Transport, Public Works and Water Management, The Netherlands
- 6: LATTES-ENPC, France
- 7: Cemagref, France
- 8: WL|Delft Hydraulics, The Netherlands
- 9: Colenco Power Engineering Ltd, Switzerland
- 10: ICIS, University of Maastricht, The Netherlands
- 11: University of Alcalá de Henares, Environmental Economics Group, Department of Economic Analysis, Spain
- 12: University of Udine, Italy
- 13: Budapest University of Technology and Economics, Hungary
- 14: WRc, United Kingdom (with Middlesex University, FHRC, as sub-contractor)
- 15: Autonomous University of Barcelona, Spain

**Box 1:** Consortium of the HarmoniCOP project (see Annex III for contact information)

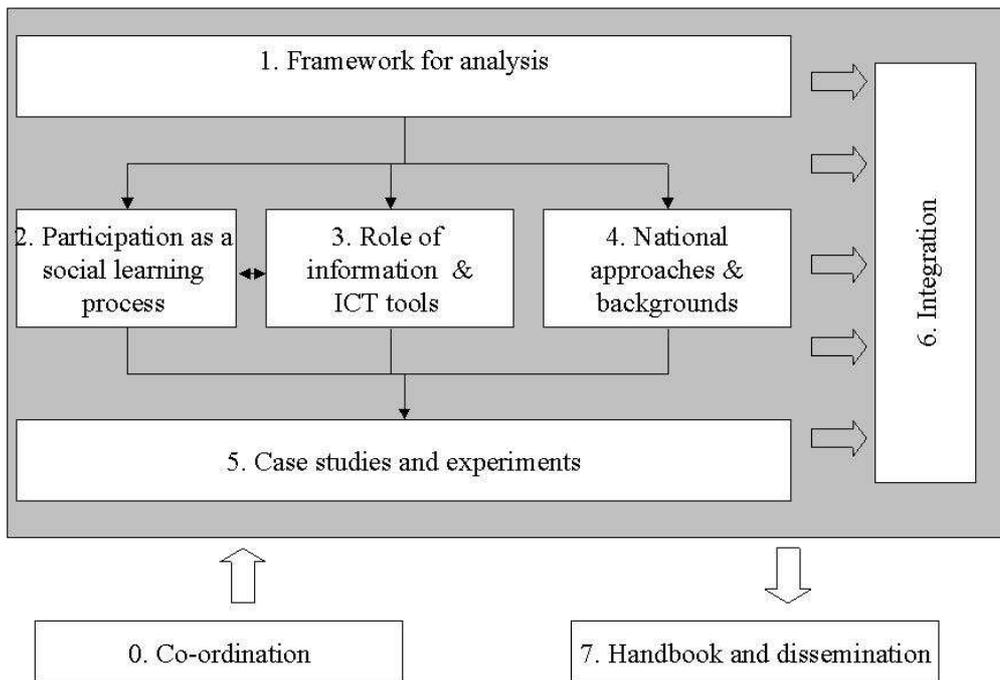
- To prepare a “Handbook on PP methodologies“
- To provide insight into social learning in a multi-phase multi-level context
- To increase the understanding of the role of information and information tools
- To compare and assess national PP experiences and their background
- To involve governments and stakeholder groups

The activities in the HarmoniCOP project, the "work packages", follow directly from the objectives. Figure 1 (next page) shows the different work packages and how they relate to each other.

Compared to the Guidance on Public Participation, HarmoniCOP will focus more on active involvement and on the "additional forms" of PP that may be necessary (section 1.2). The promotion of social learning in river basin management will be central. Secondly, the HarmoniCOP will pay more attention to the interface between science and policy and the role of information and communication technology tools in PP. Thirdly, HarmoniCOP is primarily a research project. Yet, it will not be ivory tower research. Interaction with stakeholders and the promotion of social learning are central. HarmoniCOP will critically reflect on and complement the Guidance document.

#### ***1.4 Purpose of this report***

The present report spells out our approach to PP and explores the main issues. The purpose of this is to facilitate feedback from potential end-users in an early phase of the project and to improve our plans for research.



**Figure 1:** Interconnection diagram of the HarmoniCOP project

### 1.5 Reading guide

The present report is structured largely according to the different work packages of the HarmoniCOP project. Chapters 2 and 3 briefly introduce the concept of PP and present the legal and policy background of PP in Europe. (Work package 1)

The chapters 4 to 6 go more into detail concerning three different aspects. Chapter 4 develops the notion of PP as a social learning process at different geographical scales. Chapter 5 focuses on the role of information and ICT tools in participatory processes. Chapter 6 discusses the different national approaches in PP and their background. (Work packages 2 to 4)

Chapter 7 describes our approach to the case studies and experiments that will be conducted in the HarmoniCOP project. The role of these case studies and experiments is to test and further develop the results of work packages 2 to 4. (Work package 5)

Chapter 8 discusses the final output of the project. It moreover discusses the involvement of the different stakeholders in the project. (Work packages 6 and 7)

The Annexes to the report contain a glossary, a list of contributors to this report, and contact information.

## 2 What is public participation?

This chapter introduces the approach to public participation (PP) used in the HarmoniCOP project. After defining the term (section 2.1), the potential benefits and complications of PP are discussed (sections 2.2). Furthermore, the different levels of PP and the different methods that can be used at each level are presented (section 2.3). Following, PP is placed in its broader context (section 2.4). The chapter closes with a few words on designing effective PP processes (section 2.5).

### 2.1 Definition

Public participation (PP) is a term with many different meanings. In the HarmoniCOP project PP is defined as direct participation in decision-making by the organised stakeholders and unorganised groups (the "general public"). This covers many different forms and degrees of participation (section 2.3). PP often incorporates different forms of representation. E.g. national NGOs that participate in decision-making may represent local NGOs, which in turn represent their individual members. The key characteristic of PP is that it complements the formal institutions of parliamentary democracy: elections, legislative assemblies and the different executive branches of government.

Some authors contrast public participation to stakeholder participation. Public participation then refers to participation by the general public only, and stakeholder participation to participation by organised stakeholders.

### 2.2 Benefits and complications

There are several reasons for organising PP (e.g. Pateman 1970, Delli Priscolli 1978, Roberts 1995, Webler and Renn 1995, Budge 1996, Scheer 1996, Woerkom, 1997, Pelletier et al. 1999, DETR 2000, Mostert 2003). First, PP can result in better-informed and more creative decision-making. Important information can become available, new perspectives could be opened and creative solutions could be developed. Moreover, PP helps to ensure that all relevant interests are heard.

Secondly, PP can result in more public acceptance or even "ownership" of the decisions, and therefore in less litigation, fewer delays and generally better implementation. (e.g. Andrews 1996, Beierle 1999, Laird 1993, Randolph and Bauer 1999, Todd 2001, Wirth 1996) Partly, this is the result of better-informed and more creative decision-making, but partly the possibility of the public to have its say is responsible. A concept often used in this context is procedural justice. This refers to the fact that the preferences regarding a decision depend highly on how the decision was reached. (Joss and Brownlea 1999; Pahl-Wostl, 2002a)

PP can also promote more open and more integrated government. To get better-informed and more creative decisions and more public acceptance, government should take the reactions from the public seriously and should not be preoccupied with its own internal problems, such as turf struggle. PP will fail if these conditions are not met, but PP may also stimulate that these conditions are met.

Furthermore, PP can enhance democracy. Many see PP as a democratic right of the citizens and therefore as a goal in itself. Moreover, PP may instil more democratic attitudes in the participants. (Pateman 1970, Budge 1996)

Finally, PP is essential for social learning. Social learning could be described as learning by groups – authorities, stakeholders and experts – to handle issues in which all group members

have a stake – such as the management of a river basin. Without some degree of social learning PP will have no benefits (e.g. Majone 1989, Hirschmüller 1993, Pahl-Wostl 2002b). Social learning requires long-term, ongoing participation and "capacity building" in a broad sense (building up awareness, knowledge, skills and operational capabilities). Because of the key role of social learning in river basin management, it has been chosen as the central theme of the HarmoniCOP project (chapter 4).

PP is not only important for decision-making, but also for the research supporting decision-making (e.g. Barker and Wood 1999, Fell and Sadler 1999, Rothman and Robinson 1997). In fact, the two cannot be separated completely. In research a lot of policy choices are already made, e.g. which alternatives to study and which not (e.g. Enserink 2000, Enserink and Monnikhof 2003, Monnikhof and Edelenbos 2001b, Monnikhof and Bots 2000). Moreover, research usually involves a lot of interpretation, and these interpretations are influenced – consciously or not – by the policy preferences and other biases of those giving the interpretations.

Involving the public in research not only gives the public more influence, it also maximises the possibilities for social learning. For the researchers the public can be an invaluable source of information, e.g. on the local circumstances. (Wildavsky 1992) In return, the researchers need to address the concerns of the public and provide them with the information the public needs for participating effectively in decision-making. They have a role to play in building up the public's capacity to participate effectively and contribute to the sustainable management of river basins. (Webler 1995) (Chapter 5).

Yet, PP should be organised well. Badly organised PP can result in limited and unrepresentative response from the public, in ill-informed response and in PP being "hijacked" by certain groups. Moreover, if public input is not taken seriously and if the promises of PP are not fulfilled, the public may get disillusioned, and the result may be less trust in government, less public acceptance, more implementation problems, and less social learning. This will also burden future participatory processes. Still, not organising PP is not an option anymore. (Chapter 3) The challenge is to make it work.

### **2.3 Levels and methods**

As discussed, different levels and forms of PP exist. Table 1 gives an overview of the different levels and the different methods that can be used at each level. The levels are based on Arnstein's "ladder of citizen participation" and subsequent variations. (Arnstein 1969; IAP2 s.d., Roberts 1995, Connor 1997, Creighton 2000, Edelenbos 2000) Arnstein focused on power issues and emphasised that many forms of so-called "citizen participation" did not give any real influence to the public. Table 1 also reflects other aspects of PP, such as social learning.

Discussion, co-decisionmaking and decision-making are the three main forms of "active involvement" as prescribed by the WFD, art. 14. At least discussion is required, but higher levels of PP can be useful or even necessary for reaching the goals of the WFD.

### **2.4 Public participation in context**

Public participation in water management is a very old phenomenon. For instance in Spain and The Netherlands water users associations have existed for more than 1000 years. (Ven 1993) The more recent attention for PP in North-America and Western Europe started in the 60's and resulted from demands for more democracy and more direct involvement in government (e.g. Arnstein 1969, Pateman 1970). Gradually, legal requirements for public commenting periods and public hearings were introduced.

<b>LEVEL OF PARTICIPATION</b>	<b>PP METHODS</b>
<b>1. Information</b> The public is provided with or has access to information (not genuine PP, but the basis for all forms of it)	<ol style="list-style-type: none"> <li>1. Leaflets and brochures</li> <li>2. Mailings</li> <li>3. Use of the media: press releases, press conferences</li> <li>4. Information centres</li> <li>5. Repositories (other than 4, e.g. libraries and city halls)</li> <li>6. (Travelling) exhibitions</li> <li>7. Information hotlines/ contact persons</li> <li>8. Open house</li> <li>9. Field trips</li> <li>10. Briefings (at meetings of residents' associations, women's clubs, etc.)</li> <li>11. Internet and other ICT tools (see chapter 5)</li> <li>12. Cultural events (e.g. street theatre, especially for raising awareness)</li> </ol>
<b>2. Consultation</b> The views of the public are sought	<ol style="list-style-type: none"> <li>13. Reply forms</li> <li>14. Opportunity to comment in writing</li> <li>15. Public hearings and meetings</li> <li>16. Interviews</li> <li>17. Opinion polls</li> <li>18. "Stakeholder analysis"</li> <li>19. Gaming</li> <li>20. Internet discussions</li> <li>21. Advisory commissions/ boards, focus groups</li> <li>22. Non-binding referenda</li> </ol> <p>Methods 4, 6, 7, 8, 9, 10 and 11 could be used too.</p>
<b>3. Discussion</b> Real interaction takes place between the public and government	<ol style="list-style-type: none"> <li>23. Small group meetings ("workshops", "charrettes", "coffee meetings", "round tables", "study circles", "brainstorm sessions", "planning cells", "citizen juries", etc.)</li> <li>24. Large group meetings involving splitting up into smaller groups and/ or rotation between front benches and back benches or between subgroups (e.g. working groups, "Samoan circle", "open space meetings", carousel)</li> <li>25. Virtual (Internet) discussions</li> </ol> <p>Methods 8, 9, 10, 11, 19 and 21.</p>
<b>4. Co-decisionmaking</b> The public shares decision-making powers with government	<ol style="list-style-type: none"> <li>26. Negotiations, e.g. resulting in a "voluntary agreement"</li> <li>27. Stakeholders represented in governing bodies</li> <li>28. Corrective referenda and all binding referenda initiated by government</li> </ol> <p>Some of the meeting formats mentioned under 23 and 24.</p>
<b>5. Decision-making</b> The public performs public tasks independently	<ol style="list-style-type: none"> <li>29. Water users' associations and other NGOs performing public functions</li> <li>30. Popular initiatives</li> </ol> <p>Some of the meeting formats mentioned under 23 and 24 .</p>

**Table 1:** Public Participation levels and methods (not exhaustive)

In the 80's dissatisfaction with these forms of PP grew, both in society and within governmental organizations. These forms did not promote a constructive dialogue. As PP was organised in a late phase only, plans could not be changed easily anymore and the only function of PP was to act as a means for voicing opposition. In addition, the economic crisis of the 80's took its toll, and democratisation was replaced by "no-nonsense policy" aiming at shorter decision-making procedures.

Yet, no-nonsense policy had to be implemented too. This often proved to be difficult due to opposition. Therefore, in the 90's "interactive policy making" and "open planning" were developed with the aim of increasing public acceptance of policy. This is also an important aim of PP in the WFD (cf. preamble 14). At the international level the UN-ECE Aarhus Convention from 1998 laid down legal rights on PP for the first time. (Chapter 3)

Outside of North-America and Western Europe the historical development of PP has been somewhat different. In the 60's several Southern European countries were not yet democratic and in Central and Eastern Europe democracy was only introduced after the changes of 1988/ 1989. Yet, older traditions of water users' associations often exist (Spain, Hungary since the 19<sup>th</sup> century). Outside of Europe PP is sometimes required by international donors in order to apply the international principles of integrated water management principles or simply to save on labour costs (e.g. Pradhan 1996).

Due to the difference in history, the national PP experiences and approaches differ quite a lot. Moreover, differences in the national culture are important (Hofstede 1991, Firth 1998). For instance, egalitarian cultures promote higher levels of PP than do cultures with a large "power distance". (Hofstede 1991, Mostert 2003) Other factors include geography, hydrology and socio-economic development. For instance, PP in a small basin in a rich country is quite different from PP in a large international and multilingual basin with more limited financial possibilities.

Understanding the different national backgrounds is essential if one wants to learn from other countries, for organising PP in international basins and for developing international handbooks or manuals. Therefore, chapter 4 will discuss the different national PP approaches in river basin management.

## **2.5 *Designing participatory processes***

A lot of literature is available on different PP methods and approaches (e.g. Roberts 1995, Connor 1997, Creighton 1999, 2000, Edelenbos 2000, Drafting Group 2002, Renn, Webler and Wiedemann 1995, World Bank 1996, DETR 2000, Creighton 2000, Borrini-Feyerabend *et al.* 2000, Asselt and Rijken-Klomp 2002). Different lessons can be drawn from this literature on how to design participatory processes. (Box 2) Moreover, more detailed guidance can be found on informing the public, organising consultations and meeting the requirements of the WFD (Drafting Group 2002). In addition, interesting discussions can be found on PP as a different way of governance, replacing hierarchical command-and-control steering by polycentric "horizontal" governance. (Minsch et al 1998, Philip 1998, Pahl-Wost 2002a)

Despite this rich literature, many questions still remain unanswered. Much of the literature comes from North America, but do the conclusions also apply in other countries? Moreover, how to coordinate PP in international river basins, how to deal with different national PP approaches and what are these approaches anyway? How to reach beyond the organised stakeholders to the unorganised water users? How to involve them in policy research? How to promote social learning given strict constraints, such as the fixed objectives of the WFD, and how to prevent that PP becomes a mere bureaucratic exercise – or worse? How to make PP according to the WFD work for the citizens and the environment of Europe?

1. Before using any PP technique, reach agreement between the different government bodies concerned on the scope of PP (what can be discussed and what cannot?), the purpose (what benefits are aimed for?, why PP?), the level of PP, the different publics to be targeted, the project organisation and procedures for exchanging information and deciding on follow-up.
2. Conduct some form of actor analysis.
3. Identify the relevant publics on the basis of (a) the interests they represent; (b) the information, ideas and skills they have; and (c) their influence on decision-making and implementation.
4. Make a process design.
5. Discuss the process design beforehand with the major stakeholders and develop "co-ownership". Important topics are the type of contributions from the public that are expected and what will be done with them. Do not build up false hopes.
6. Make clear afterwards what has been done with the input by the public.
7. More support for water management is a legitimate aim of PP, but if the input by the public is not taken seriously, PP may backfire and public support may decrease.
8. Approach the different publics actively to prevent limited or unrepresentative response. Intervener funding and/ or participatory training may be needed, especially if some publics have far fewer resources than others.
9. Consider the appointment of a professional outside process manager or facilitator to enhance the legitimacy and effectiveness of the process.
10. Start PP as early as possible, when still something can be done with the public input. Different publics may need to be targeted in different phases.
11. Organise PP on the different aspects of river basin management at the geographical scale (local, regional, river basin, etc.) that is closest to the most relevant publics for these aspects, while still keeping the process manageable.
12. Ensure smooth communication between scales and between units at each scale (e.g. different basin states).
13. Try to involve the different publics in policy research, if only to prevent technical controversies.
14. Prevent a "participation burnout." It is better to ask the public to participate in one integrated planning exercise than in 20 sectoral exercises.
15. Review and develop the PP capacity of government (personnel, skills, budget, openness, flexibility).
16. Choose "realistic" PP methods and techniques that fit the available resources, the concerned publics, the geographical scale, the type of issues to be addressed and the phase in the planning cycle.
17. Evaluate PP afterwards in order to learn for future processes and during the PP process in order to adjust to unforeseen developments.
18. Foster mutual trust and open communication.

**Box 2:** Lessons from the literature on PP initiated by government (PP levels "consultation", "discussion" and "co-decisionmaking")

### 3 The legal and policy background

The WFD constitutes a valuable contribution to the implementation of European environmental policy in general. Its public participation provisions need to be considered within the context of the international and European developments in this area. This chapter briefly outlines the relevant international processes (section 3.1) and the recent European developments (section 3.2). It shows how these are reflected in the respective WFD provisions (section 3.3). Furthermore, arising challenges are discussed (section 3.4). The issues are discussed in more detail in Kampa et al. (2003).

#### 3.1 International level

The most influential document with respect to public participation in the area of the environment on the international level is the Aarhus Convention (UN-ECE 1998). To date the Convention has been signed by 40 parties and ratified by 22. The Convention officially entered into force on 30 October 2001, after ratification by the sixteenth party.

The Aarhus Convention needs to be considered in the context of several preceding provisions on PP on environmental and human health issues. Perhaps the most famous is principle 10 of the Rio Declaration of 1992. Principle 10 already contains in a nutshell the requirements of the Aarhus Convention: *“Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities...”*. Agenda 21 emphasises the need for strengthening the role of major groups as critical to the effective implementation of sustainable development and outlines the different forms of PP.

The Aarhus Convention comprises three pillars of PP:

- Access to environmental information, including the collection and dissemination of this information (art. 4 and 5)
- Public participation in decisions on specific activities, in particular plans, programs and policies relating to the environment as well as executive regulations and other generally applicable legally binding normative instruments (art. 6-8)
- Access to justice in the form of a court of law or another independent and impartial body established by law (art. 9)

The Convention requires the establishment of structures that enable the public to exert the outlined rights with respect to public authorities and other institutions. Special emphasis is put on non-governmental organizations. The rights granted by the Convention apply to the public uniformly, independent from nationality or residency.

There are still enormous challenges with respect to the implementation of the Convention. Two of the implementation goals identified in the declaration drafted at the first meeting of the parties in 2002 are ensuring stable and predictable funding and financial resources for public involvement processes, and reporting systems for compliance control. (UN ECOSOC 2002)

In the water field several key international water conferences during the past decade have generated major impulses for PP. According to principle 2 of the International Conference on Water and the Environment (ICWE), held in Dublin in 1992, water development and management should be based on a participatory approach, involving users, planners and policy makers at all levels. The Ministerial Conference held in 2000 in The Hague, in conjunction with the second World Water Forum, furthermore identified transparent national

law, the participation of all stakeholders, and the improvement of consultation structures as major challenges to "govern water wisely".

Following, PP got attention at the International Conference on Freshwater (Bonn 2001). The Bonn Recommendations for Action strongly recommend the management of water at the lowest appropriate level and the need to centrally involve people in the management and governing decisions concerning water resources. These activities furthermore need to be supported by sufficient public funding for participatory action. A key recommendation of the Stockholm Water Conference held in August 2002 was to include the water users in the design of management approaches. Finally, the World Summit on Sustainable Development, held in Johannesburg in 2002, acknowledged the relevance of the involvement of the civil society in implementing a sustainable development, especially with respect to water management.

### **3.2 *European level***

These international processes have considerably influenced the recent developments at the European level. The EU has signed but not yet ratified the Aarhus Convention. The EU, as one of the signatories of the Convention, is obliged to implement these principles not only in its Member States, but upon ratification also in its own decision-making processes. This has considerably contributed to increased recognition of these principles at the European level. This increased recognition is also reflected in the recently published White Paper of the European Commission on European Governance, which identifies a need for more transparent and understandable decision-making at the EU level and for stronger interaction with the local governments and civil society. (Commission of the European Communities 2001)

At the EU level significant policy developments have taken place to accommodate the requirements of the Aarhus Convention and prepare for the ratification of the Convention by the EU. The most recent advancement, pertaining to the first pillar of the Aarhus Convention, is the adoption on 8 November 2002 of a new Directive on public access to environmental information, which replaced the earlier directive on freedom to access to information on the environment (90/313/EC). The new Directive provides that every natural or legal person, regardless of citizenship, nationality or domicile, has a right of access to environmental information held by or produced by public authorities, for instance data on emissions and discharges into the environment, their impact on public health and results of environmental impact assessments.

The Directive on access to information will be supplemented by a Directive providing for public participation in the drawing up of plans and programmes in the field of the environment. Currently (January 2003) a draft of this Directive is up for endorsement by the Parliament and the Council after passing the Council Conciliation Committee on 10 December 2002.

Another recent directive with strong PP elements is the Directive on Strategic Environmental Assessment (SEA Directive), adopted in 2001 (2001/42/EC). The purpose of the SEA Directive is to ensure that environmental consequences of certain plans and programmes are identified and assessed during their preparation and before their adoption. Environmental agencies and the wider public must be given an early and effective opportunity to comment on the draft plan or programme and the accompanying SEA report. The key objective is to facilitate informed decision-making. The requirements of granting public access to information and ensuring public participation as promoted by the Aarhus Convention and the respective new EU Directives are important integrative elements of the SEA directive. The SEA Directive and the EU Directive on public access to environmental information will

substantially influence and necessitate an amendment of the "old" Directive on Environmental Impact Assessment (EIA Directive; 97/11/EC).

With the adoption of these Directives, the EU has taken a decisive step towards the implementation, at least legally, of the first two pillars of the Aarhus Convention. With respect to the third pillar, access to justice in environmental matters, the Commission is currently preparing a legislative instrument ensuring that concerned citizens and environmental groups can challenge violations of environmental law in court. The official proposal is to be expected within the next months.

### **3.3 *Public participation requirements of the WFD***

Before entering into force, the WFD had undergone a long process of negotiations and amendments. The core article on public information and consultation in the draft of February 1997 – article 17 – actually contained more restricted provisions for PP than the current version of the WFD in force, article 14 (Commission of the European Communities 1997). Only one round of consultations was foreseen, while the incitement for active involvement was missing completely. The current wording of the WFD was introduced in the draft of 17 June 1999, shortly after the signing of the Aarhus Convention. (Commission of the European Communities 1999)

In the final version of the WFD (2000/60/EC), public participation is regulated by Preamble 14 and 46, article 14 and annex VII A (points 9 and 11). (Box 3, next page) Preambles 14 and 46 stress the need and the importance of sound information policy and active involvement of the public. Preamble 14 underlines that the success of the WFD depends directly on a successful involvement of the public. Preamble 46 highlights the importance of timely information to ensure public participation.

The core PP provision of the WFD is Article 14, "Public Information and Consultation". Three levels of participation are mentioned in this article – information, consultation and active involvement – which are modelled after the first two pillars of the Aarhus Convention. In three rounds (December 2006, 2007 and 2008), the Member States have to publish the necessary documents in the river basin management planning process. In each round the public is invited to comment in writing within six months. Upon request Member States have to provide additional background information. For this purpose contact points and procedures have to be included in the river basin management plan (Annex VII A.11). Annex VII A.9 of the WFD moreover requires that the management plan documents the measures taken to inform and consult the public, the results of the consultations, and the respective changes made. This gives the European Commission the means to monitor compliance and initiate infringement proceedings if a Member State does not fulfil the PP requirements of Article 14 WFD. (Jekel 2002)

The third level of participation mentioned by Article 14 is active involvement. Active involvement is a higher level of participation than consultation and "shall be encouraged" by the Member States. Active involvement implies that interested parties are invited to actively contribute to the planning process, discuss the issues and contribute to their solution. There are three levels of active involvement: 1) participation in the development and implementation of plans, 2) shared decision-making and 3) self-determination. (Drafting Group 2002, p. 20). The Member States themselves can decide on the level of active involvement. Encouraging the first level is the minimum requirement for active involvement, while the other two levels can be considered as best practice in specific cases.

In the end the appointed competent authorities are responsible for the outcome of the successful implementation and they finally decide to what extent they are going to share their power with other stakeholders. The rationale behind leaving the choice of the level of

#### Preamble 14

The success of this Directive relies on close cooperation and coherent action at Community, Member State and local level as well as on information, consultation and involvement of the public, including users.

#### Preamble 46

To ensure the participation of the general public including users of water in the establishment and updating of river basin management plans, it is necessary to provide proper information of planned measures and to report on progress with their implementation with a view to the involvement of the general public before final decisions on the necessary measures are adopted.

#### Art. 14:

##### Public information and consultation

1. Member States shall encourage the active involvement of all interested parties in the implementation of this Directive, in particular in the production, review and updating of the river basin management plans. Member States shall ensure that, for each river basin district, they publish and make available for comments to the public, including users:

- (a) a timetable and work programme for the production of the plan, including a statement of the consultation measures to be taken, at least three years before the beginning of the period to which the plan refers;
- (b) an interim overview of the significant water management issues identified in the river basin, at least two years before the beginning of the period to which the plan refers;
- (c) draft copies of the river basin management plan, at least one year before the beginning of the period to which the plan refers.

On request, access shall be given to background documents and information used for the development of the draft river basin management plan.

2. Member States shall allow at least six months to comment in writing on those documents in order to allow active involvement and consultation.

3. Paragraphs 1 and 2 shall apply equally to updated river basin management plans.

#### Annex VII

##### River Basin Management Plans

A. River basin management plans shall cover the following elements:

[...]

9. a summary of the public information and consultation measures taken, their results and the changes to the plan made as a consequence;
11. the contact points and procedures for obtaining the background documentation and information referred to in Article 14(1), and in particular details of the control measures adopted in accordance with Article 11(3)(g) and 11(3)(i) and of the actual monitoring data gathered in accordance with Article 8 and Annex V.

**Box 3:** The main public participation provisions of the Water Framework Directive (2000/60/EC)

active involvement to the responsible authorities is pointed in preamble 13, which stresses that “there are diverse conditions and needs in the Community which require different specific solutions”.

At the European as well as the national level, PP is repeatedly raised as one of the most pressing and problematic issues in ensuring the prompt and adequate implementation of the WFD and the achievement of river basin management. (Harrison 2001) Under the Common Implementation Strategy for the WFD a Drafting Group on Public Participation has been established, which drafted the “Guidance on Public Participation in Relation to the Water Framework Directive – Active Involvement, Consultation, and Public Access to Information”. This Guidance was adopted by the Water Directors in Copenhagen in November 2002. (Drafting Group 2002; section 1.2)

### **3.4 Challenges**

The provisions of the WFD are closely linked to a complex legal and political background, which is heavily influenced by recent international developments in the area of PP, in particular the Aarhus Convention. Ensuring public consultation and participation enhances public advocacy for the decisions to be taken. This will enable more informed and accountable decision-making and greater consensus. (Declaration of Environmental Commissioner Margot Wallström upon the adoption of a new proposal for the SEA Directive) Consequently, the decisions are likely to be of a better quality and likely to be better implemented and respected.

A major issue with respect to the viability of the WFD is the co-ordination of its requirements with (1) those of other EU Directives that equally pertain to public participation and contain comparable provisions, such as the SEA Directive and the Directive on Access to Information; and (2) the requirements of international agreements such as the Aarhus convention. Taking a closer look at the provisions of these legal documents, it becomes clear that they contain some requirements additional to those of the WFD. For example, the Aarhus convention contains provisions for regulating the access to bodies of justice and provisions concerning the financing of interest groups. The SEA Directive requires public consultation with respect to both plans and programmes, while the WFD requires consultation on the river basin management plans and not on the full programme of measures (which is included in the management plans in a summarised form only). (WFD Annex VII)

These discrepancies may complicate the implementation of the WFD. A coherent approach of granting access to information and public participation across the different systems is necessary. The main challenges are to implement the requirements of the different Directives and Conventions in a co-ordinated way, to define the respective administrative competences, and to avoid duplication of work. This will be especially crucial at the level of the authorities in charge. Duplication of work not only uses up more human and financial resources, but it may also lead to contradictory results and decisions. Careful legal and institutional analysis is needed to achieve co-ordination and integration at the different levels.

In some cases the other Directives and Conventions considerably help the interpretation of the provisions of the WFD. For example, the WFD does not give a definition of the "public", but a definition can be derived from the SEA Directive and the Aarhus Convention (“one or more natural or legal persons, and [...] their associations, organisations or groups.”).

Due to the limited specificity of the EU Directives, problems and discussions will arise with respect to the scaling aspects, i.e. how public participation should take place at the local, regional or European level and how to coordinate among the different levels. The Directive leaves this up to the respective Member States and thus creates the need for further national

regulations. This allows for the consideration of the respective national situations, but it also results in a heterogeneity of approaches throughout Europe. Especially with respect to the international river basins this might lead to considerable problems.

Another important fact to consider is that the WFD assumes an interested public that is knowledgeable about water management issues and its own PP rights. However, one needs to keep in mind that the public perception of the WFD may not be as high as necessary for PP since many of the issues regulated may not be salient to the broad public. This may lead to an implementation gap.

Other pertinent issues for the success of the Directive are compliance monitoring and clarity concerning financial support for the administrative and other costs of facilitating PP (consultations, networks, focus groups, etc.). This is not explicitly regulated by the Directive either.

The information provided within the process of developing a management plan puts interested parties in the position to also participate in the *monitoring* of the implementation process. Claims of failing the objectives of the Directive or particular measures can be based on sound arguments. If the WFD is not implemented correctly, the European Commission can start an infringement procedure and if necessary bring the Member State concerned before the European Court of Justice. Already at this moment some 60% of the infringement procedures opened by the European Commission are based on complaints by citizens or NGOs. (Roller 2003)

Finally, the many demanding requirements of the WFD (description of river basins, assessment of pressures and impacts, drafting the management plans, etc.) may result in too little attention for the PP requirements. This is a threat in all Member States, but in particular in the accession countries, since there the problems of financing PP activities are most acute. In addition, the political culture is often different from that in the "old" western democracies. This complicates the implementation of the PP provisions of the WFD. Hence it is a crucial task to show the potential of PP to support economically, socially and environmentally sustainable river basin management plans and to support its practical application.

## 4 Constructing a social learning concept for river basin management

Whereas public participation is the main topic in the HarmoniCOP project, social learning is the main theme. Social learning is a relatively new concept, generating high expectations from policy makers. Diverse actors are using this label and attribute different meanings to it. In general the connotations of the concept are positive, although there are also some critical voices. Because it is a fashionable notion, there is a risk that more traditional concepts and theories get translated in social learning terms, without any impact on practice.

The added value we expect from a social learning approach stems from the attention it draws to social process aspects in dealing with societal issues. In the past societal issues were framed predominantly in terms of their structures and their technical-economical characteristics. In work package 2 of HarmoniCOP we want to explore the potential of the concept to respond to the challenges of sustainability and interdependence in the domain of water and other natural resources management, and more specifically to the challenges posed by integrated river basin management. We have to highlight not only the potential, but also the limits, the inner contradictions, possible critical factors and necessary contextual conditions for social learning.

This chapter explores the origins of the concept (section 4.1) and discusses the levels and scales of learning (section 4.2), the relation between social learning and communities (section 4.3) and participation as an essential means for social learning (4.4). Moreover, this chapter pays attention to social learning as an alternative for regulation (section 4.5), to issues of direct and indirect participation, representation and multi-level participation (section 4.6) and to governance challenges (section 4.7). The chapter closes with a discussion of the value-laden character of social learning (section 4.8) and of "learning to learn" (section 4.9). Each section concludes with implications for the HarmoniCOP project (*in italics*).

### 4.1 *Social learning, where does the concept come from and what is it used for?*

The social learning concept has its roots in different social science disciplines. Organizational psychology, human resources and knowledge management constitute some very important contributing streams of literature. Authors in those domains have emphasized learning in organisations and organisational learning. The starting point for analysis and study is the interaction between individuals and groups in organizations, the so-called "micro-social space". An interest in change has led to the acknowledgement of learning as a basic process to be considered. (Argyris and Schön 1978, 1996, Kolb 1984, Senge 1990, Wenger 1998, 2002)

In the educational sciences, with their primary interest in learning, we find another perspective on the social learning concept. Some educational scholars and practitioners state that learning is a phenomenon that takes place and must be understood not only at an individual, but also at a social level. (Wildemeersch et al. 1998)

Still another important contributing stream comes from sociology and political sciences. This connects the social learning concept with the desirable functioning of the new macro-social network structures of so-called "late-" or "postmodern" societies, challenged by governance

problems due to increasing complexity, interdependency and fragmentation of interests and identities.<sup>1</sup> (Castells 1996, Giddens 1990)

Through the latter stream practitioners from the field of the natural resources management have come in contact and embraced the social learning concept. They hope to discover ways to deal with the challenges of the present environmental crisis. Natural resources are not infinite, so the main challenge can be formulated as follows: how can different groups learn to take joint decisions related to these resources, in which each has a specific stake and interest, in order to arrive at collective sustainable solutions? (Pahl-Wostl 2002b, Social Learning Group 2001)

In addition to the concept of social learning, there are a lot of other concepts, with partly overlapping or related meanings and even more overlapping connotations. These include for instance multiparty collaboration, (stakeholder, public) participation, (responsible, active) citizenship, communities (of interest, of practice), identity and identification, governance, sustainability, networks, etc. *The study of the potential of the social learning concept for river basin management necessarily will have to explore the related conceptual domains as well.*

#### **4.2 Levels and scales of learning**

When we see knowledge as something relational that is embedded in communities, we have to take into account the different social levels where knowledge can be situated:

- in small groups
- between groups integrated in broader organizational contexts
- between different interdependent organizations that are part of broader, geographical and/or thematic, multiparty domains

Some authors use the concept “social” learning in a general sense to refer to learning at all social levels mentioned and distinguish it from “individual” learning. Others distinguish between group learning, organizational learning and social learning and restrict “social learning” to learning at a societal level, between interdependent organisations in multiparty domains. In relation to river basin management, according to the moment and the place concerned, each of them comes to play, and so its understanding has some relevance.

The basic processes of learning at different levels - groups and teams, organizations, multi-sectoral parties – are essentially the same. They involve the creation of knowledge, based on the interaction between individuals belonging to different communities of practice. But the concrete mechanisms to make learning happen can be very different, according to the scale considered. In relation to river basin management, *this implies that we will have to specify what works on a local or on a small sub-catchment scale, and what can eventually be applied on a broader basin scale.*

#### **4.3 Social learning and communities**

Social learning takes place in and between social actors. In river basin management, as in dealing with other natural resources and societal issues, three actor perspectives seem to be extremely important: the perspectives of experts local users’ communities, and political

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<sup>1</sup> In addition, “social learning” has been used previously in psychology to designate a quite different behaviorist learning theory. The term has been spread in the first place by Albert Bandura, a Stanford psychologist concerned with the effects of mass communication media, whose major premise is that an individual learns in the first place just by observing others. (Bandura 1977)

decision makers. As these actors have very different institutional forms, this prominence can easily lead us to a structural analysis of the issue under study: are there certain structures that can be imposed to interrelate social actors so that learning between them takes place?

We believe that a structural approach will not give us an adequate understanding of social learning, which refers basically to social processes. Instead, *the study of social learning in river basin management has to focus on the quality of the ongoing relationships between social actors and the characteristics of their community-in-the-making process.*

#### **4.4 Social learning and participation**

It seems that participation is an essential concept for understanding the relational and process character of social learning. Social learning can take place, not just because people are part of communities, but because they can take an active part in the construction of their communities. This means that through their participation they can contribute and receive elements that are meaningful for themselves and for the broader social unit to which they belong.

However, participation is not an “all or nothing” phenomenon. Distinguishing between different degrees and forms of participation (chapter 2) is very relevant from the point of view of social learning. The degree of participation can be set out on bi-polar scales, e.g. going from top-down and restricted to bottom up and full participation. We assume that the fuller the participation is, and the more chances for self-mobilisation by all participating actors there are, the more social learning can take place.

By identifying participation as a crucial factor explaining social learning, we have to take care not to resort to a black box concept without deeper explanatory value between social negotiation and its learning outcomes. Actors learn because they participate: so what? *Within the HarmoniCOP project we need to come to a more in-depth understanding of what happens exactly among participants during their interactions, leading to what is recognized as “social learning”.*

#### **4.5 Social learning versus regulatory solutions**

Challenges and problems faced by society basically can be dealt with in two ways. First, one actor with the capacity to influence the actions of all the other actors involved can impose regulations (e.g. a decree from a legally recognized instance). Secondly, social learning can take place among actors who come to understand and accept their stake in a complex and interdependent problem and its solution. The first option is problematic as governments generally lack sufficient authority to do so. It should also be questioned whether their regulatory decisions are technically sound and socially just, meaning that they take into account the perspectives of all relevant stakeholders. From this point of view social learning is a means to arrive at decisions that can be implemented better and become more technically sound and socially just.

For these reasons social learning, like participation, is a very attractive concept for democratic politicians. However, it is hard for them to accept the consequences. Social learning is a slow and complex process. Social learning works best when all parties involved can jointly develop and set the direction of a common domain, but then there is no central governing instance anymore. For governmental representatives it might be hard to accept that they have to negotiate and share the development and enforcement of regulations – their “prerogative” – with other actors, to assure more adequate decisions and a higher level of acceptance and implementation. Governmental representatives are, in the end, legally mandated to govern so

they might wonder why they have to negotiate with other stakeholder representatives who lack that kind of accountability.

Governments wanting to promote participation and social learning may end up in a contradictory position: issuing top-down regulations, such as the WFD, to support emerging, bottom-up practices. There is an important tension here that has to be addressed by our study: *how can governmental regulations support social learning practices without endangering these practices by bureaucratic enforcement of the regulations?*

#### **4.6 Indirect - direct participation and social learning**

The claim for participation in our society is one for direct participation. Political decisions in our democratic systems are supposedly also the result of participation, but in an indirect way, through elected representatives. This claim for direct participation seems to reflect a worldwide observed mistrust in “politicians”: they are elected to represent people’s interests, but once elected they do not live up to the expectations. (Why this is happening, is an interesting question for political scientists.) Citizens need to learn how they can jointly manage the issues that are of interest to them, through the groups of which they are part.

Yet, we have to be aware that there is no strict dichotomy between direct and indirect participation. Social learning can only take place between people who can engage in direct and meaningful interactions. This means that social learning can only take place between a relatively limited number of participants. To handle issues on a macro-social level, representation mechanisms are necessary to scale up and integrate the perspectives of different local communities sharing certain interests or local practices. *A social learning perspective can highlight the importance of mechanisms that enable overall involvement, like multilevel participation and interactions between different levels, including the functioning of representatives.*

#### **4.7 Governance: the paradox of promoting individual citizenship**

The call for more direct participation in our society seems to come from movements that advocate an active *individual* citizenship. Stressing and strengthening individuality can make it very difficult to govern our society challenged by social and environmental issues that go beyond the isolated interests of each individual. It is often believed that there is a fundamental difference between setting up a participatory process with organised stakeholders and with individual members of the general public. However, we should remember that unorganised individuals too are in the first place social beings, who at the group level make sense of the world around them, learn and develop their “interests” or “stakes”.

A social learning perspective makes us aware that knowing and learning are essentially social activities. This means that as individuals we arrive at knowledge and learning through engagement in group practices that make our knowledge relevant. At the same time, however, social learning between groups is only possible because individuals take part in practices of different groups. There is therefore no distinction between individuals and (stakeholder) groups contributing to social learning: social learning is always about learning among individuals being part of different groups.

*In the context of river basin management this raises questions concerning ways to promote the awareness of the public of its “water stakes”, their organization as so-called stakeholder groups, and their mobilization to defend their rights and fulfil their obligations.*

#### **4.8 A value-laden concept.**

The social learning concept seems to generate high expectations because of its positive connotations. In fact, this is the result of the combined connotations associated with the basic concepts “social” and “learning”. There is a hope that social learning can solve problems of sustainability, governance, lack of social justice and conflicts on a global scale. Yet, when we take the concept in its most restricted sense as “what is learned by social entities”, a lot of learning by social groups does not contribute to sustainability, justice and peace. Terrorist networks, for instance, can be examples of communities where social learning is very successful. However, most people would condemn this type of learning.

In order to avoid such a suspicious and ambivalent interpretation of the concept, it seems convenient to restrict the social learning concept for instance to ways of learning that are aiming at socially more encompassing forms of action, based on a permanent analysis of who is included or benefiting from the actions, and who is excluded or harmed. By doing this, our social learning definition gets an “ideological” sense, that can deter some scholars. But then again we argue that there are no “neutral” concepts. *What we are advocating is a systematic and explicit reflection by the participants on the ethical aspects of social learning in HarmoniCOP, and in all the other initiatives where it is introduced: are we progressing towards more inclusiveness and collaboration?*

#### **4.9 Learning about social learning**

We believe that the best way of learning on social learning is by trying to practise it in HarmoniCOP. Although there are still important questions concerning how social learning contribute to sustainable and integrated river basin, a body of knowledge and experiences exist that can be applied in the project. They are based on principles like: identifying relevant stakeholders and integrating them in a process of learning-by-doing and critical reflection on joint experiences, creating mutual trust and open exchange, etc. An important challenge of HarmoniCOP is to apply the social learning principles internally while we are involved in a shared process of discovering and developing them. This implies that we cannot limit our work on social learning to a merely academic literature review – although this is an important part of work package 2. It has to be complemented with an analysis of past and ongoing relevant experiences, based on action-learning and participatory action research principles.

Specifically, we plan to undertake the following activities in work package 5:

- Realize a critical multidisciplinary literature review on social learning and related concepts, addressing the main issues and questions mentioned in this chapter and others still to be identified. This will result in methodological and conceptual contributions to the other work packages of the project (see below), in a direct input for the Handbook produced by HarmoniCOP, and in different publications in peer-reviewed scientific journals belonging to the social science and water management domain.
- Offer methodological support, based on action learning and participatory action research, which is especially relevant for work package 5 of HarmoniCOP (case studies), but also for the HarmoniCOP project at large and for other joint planning and management initiatives in the water domain, where social learning is at stake.
- Elaborate criteria for assessing social learning, which is directly relevant for work packages 3 to 5 of HarmoniCOP, as well as for other participatory initiatives in the water domain.

## 5 Information and Communication Technology

Information and ICT tools (Information and Communication Technology) play a very important role in participatory river basin management. River basin management can only be truly participatory if the models and information tools that are used to support and legitimise the management are developed in a participatory fashion. Moreover, models and ICT tools can actually support participatory processes. This last notion is central to this chapter.

This chapter discusses the role of ICT tools in participatory processes and in the HarmoniCOP project. Section 5.1 gives an overall introduction to the subject. Section 5.2 describes the types of ICT tools that will be studied in the HarmoniCOP project. Section 5.3 discusses criteria for evaluating the use of ICT tools in participatory river basin management. Section 5.4 gives some more particulars on what will be done in the HarmoniCOP project concerning ICT tools.

### 5.1 *The role of ICT tools*

The importance of PP in the WFD leads to the emergence of new stakeholders in river basin management besides the water experts and decision-makers. It suddenly widens the diversity of "real world representations" (Kitchin 2000), skills, stakes, ways of thinking, logics of decision and action. If we add to this the complexity of integrated river basin management planning and the fear of changing habits, this raises the crucial issue of information design, storage and retrieval (knowledge and data) and communication to the stakeholders in ways that are relevant for them.

"Communication" in this context is not restricted to one-way mass media communication. It also includes the exchange of information between stakeholders to foster mutual understanding, shared representations and social learning on complex issues. Communication is omnipresent during all the stages of a project. It can be used for raising collective water awareness, for disseminating data and knowledge that are useful for diagnosis and developing scenarios, and for deciding about actions and criteria of monitoring and evaluation (Table 2, next page).

Effective communication is all the more essential as PP is highly time-consuming due to the increasing number of interactions and the difficulties to combine expert and non-expert knowledges, even if this process is fruitful (Pahl-Wostl 2002a, Garin 2001). Recent feedback concerning the implementation of the SAGEs (water management plans) in France pointed out the importance of information and communication (AELB 2001, AERMC 2002).

ICT tools present real opportunities to take up the communication challenge, but they also form serious risks if they are not mastered in a proper way. Here are some risks:

- The ease of gathering unqualified data and information on Internet (i.e. without any meta-information about the origin and accuracy) can lead to controversies in the case of inconsistencies or misuse or if data were provided on the condition that access was to be restricted. (Stakeholders may be willing to communicate sensitive information to a limited group only.)
- Exclusive use of ICT at the expense of traditional media and direct contacts can result in even *larger inequities*. Many people still have no access to Internet or are not familiar with computers at all.

PHASE IN THE PLANNING PROCESS	OBJECTIVES OF INTERACTION BETWEEN PARTICIPANTS	EXAMPLES OF USABLE ICT TOOLS
Identification of problem	<ul style="list-style-type: none"> <li>• Problem awareness</li> <li>• Diagnosis of the system (common problem definition and recognized interdependence in a complex world)</li> </ul>	<ul style="list-style-type: none"> <li>• Multi-actor information system (Schouten et al. 2001)</li> <li>• GIS (SIEE 1995)</li> <li>• Web-based GIS (Kingston et al. 2000, IWRA 1999)</li> <li>• Role playing games and Multi-Agent based models (Barreteau et al. 2001)</li> <li>• Virtual world: Virtual Reality technology (Orkand et al. 2001)</li> </ul>
Analysis of options	<ul style="list-style-type: none"> <li>• Establish common goals</li> <li>• Joint information search for establishing baseline data</li> <li>• Explore options for change</li> </ul>	<ul style="list-style-type: none"> <li>• Online map survey (Al-Kodmany 2001)</li> <li>• Integration of quantitative data and knowledge (Kukuric and Hall 1998)</li> <li>• Role playing games and Multi-Agent based models (Barreteau et al. 2001)</li> <li>• Virtual world in the field of architectural planning (Gardener and Ritchie 1999)</li> <li>• Decision Support Systems (e.g. Flood Management along the Rhine: Most et al. 2002)</li> </ul>
Identification of strategies for actions	<ul style="list-style-type: none"> <li>• Elicit stakeholders' preferences</li> <li>• Evaluation and choice of actions</li> <li>• Design of monitoring and control systems</li> </ul>	<ul style="list-style-type: none"> <li>• GIS and multicriteria analysis (Joerin et al. 2001)</li> <li>• Interactive Computer-Assisted Negotiation Support System (ICANS) (Thiessen et al. 1998)</li> <li>• The monitoring management chart of the "Rhône Méditerranée-Corse" Masterplan for water development and management (SDAGE) (Piegay et al. 2002)</li> <li>• Decision Support Systems (e.g. Flood Management along the Rhine: Most et al. 2002)</li> </ul>
Implementation and adaptive management	<ul style="list-style-type: none"> <li>• Communication of impacts, monitoring and new knowledge</li> <li>• New common diagnosis of the system</li> </ul>	

**Table 2:** Phases and steps in natural resource planning, objectives of interaction and ICT-tools that can be used (adapted from Selin and Chavez 1995, Heathcote 1998, Hisschemöller et al. 2001, Bentrup 2001)

- The growing use in the water experts community of GIS (sometimes integrated in a Decision Support System or "DSS") is currently leading to an abundance of maps. Maps are highly communicative forms of spatial representation, but they are not always complemented by textual explanations. This may result in very different interpretations, especially when some users do not master map-reading techniques (Miellet 2001, Caquard 2000). The status of maps as expert and definitive representations of reality may *reduce the richness of initial co-operation* with the stakeholders and *bias the points of view* that the stakeholders communicate, without enriching their deeply-held convictions.
- Another typical risk is the use of ICT tools that are either *too sophisticated for efficient learning* by non-specialists given the time constraints, or *not open and flexible enough* to incorporate local knowledge.

Within the HarmoniCOP project the characteristics and the uses of ICT tools for river basin management planning will be studied. In addition, their impact in terms of social learning will be evaluated. Based on these results, recommendations on their use will be given in the Handbook on PP methodologies.

## 5.2 *Types of ICT tools in the HarmoniCOP project*

Communication techniques used by the agencies in charge of the water planning process are of three types (Heathcote 1998):

- Techniques for *disseminating information* allow the agencies to influence the information the public receives. Examples include information meetings, open houses, TV and radio coverage and various printed materials.
- Techniques for *obtaining information*, such as surveys, key informant interviews and public hearing. These do not permit dialogue or negotiation.
- *Two-way communication techniques* that allow for gradual modification of positions and may encourage satisfactory resolution of controversial issues. These techniques are used in different participatory methods, based on small group meetings (working committee, focus group, scenario analysis, joint field trips, etc...), large group meetings (citizens juries, consensus conferences, etc.) and on what might be termed “detached methods” whereby the various parties do not actually meet face to face (exchange of views by letters or e-mails, open TV or radio programs, public cleanup events, etc.). See Asselt and Rijken-Klomp (2002) for an overview of these techniques.

As the main interest of HarmoniCOP is to strengthen public participation, the main focus will be ICT tools that permit two-way communication. They will be analysed on three aspects:

- *Their role in collaborative management.* (See Table 2)
- *Their characteristics* in terms of 1) data collection and organization; 2) interaction support to stimulate public participation ; and 3) models.
- *The general approach to integrating the ICT tools in the planning process.* How can ICT tools contribute to "cognitive enhancement" (learning about the state of the system, the possible solution, others values and interest, etc.), and to "moral development" (learning how to co-operate with others on collective problems). (Weber et al. 1995)

Two different approaches for integrating ICT tools in the planning process are possible. In an argumentative approach ICT tools are used to help problem structuring in a stakeholder dialogue. The objective of the process manager in such an approach is to identify, confront and – where possible – integrate the divergent points of views with respect to the problematical situation. (Hisschemöller et al. 2001) GIS and Decision Support Tools based on formal calibrated and validated models, for instance, can contribute to this common examination of facts. They can support interactions and simulate alternative futures.

In a cognitive approach ICT tools are used to broaden the participants' views by giving them new roles, identities and decision contexts. The objective is to move participants outside of their normal habits and encourage creative thinking (Parson 1996). Role playing games and multi-agent based models are particularly useful for this purpose (Moss and Davidson 2001, Pahl-Wostl 2002a, 2002b). This approach may be adapted in the context of uncertainty that characterizes many aspects of water management. There are numerous sources of uncertainty, particularly in ecosystem management, linked to variability (of natural processes, human behaviour, social dynamics, etc.) and to limited knowledge (lack of observations, practically immeasurable data, etc.) (Asselt and Rotmans 2002). The stake is to convince all

participants that the decision process is at least as important as the decision output, because the decision output will have to be modified in the future due to uncertainty (Funtowicz et al. 1999).

In the HarmoniCOP project we will pay special attention to the place of computer models and data bases in river basin management because they could help in assembling, integrating and synthesizing knowledge and in generating both explanations of the present situation and explanations of policy (Harris 2002). A large number of Decision Support Tools for river basin management have been developed in the past 20 years. These can not only serve the experts but they may also serve as vehicles for communication with the organised stakeholders (Welp 2001, Most et al. 2002) and sometimes with the broad unorganised public. However, in many countries they are rarely applied in real planning processes. When they are applied, they are often not capable of solving the problems they are supposed to solve (Waveren 1999).

One of the major issues for work package 3 of the HarmoniCOP project is to understand the gap between the production and the actual application of these tools in river basin management. In addition, a link will be established with the concerted action HarmoniCA (Harmonizing Modelling Tools for river basin management). Within the HarmoniCA project guidance documents will be developed on how to include stakeholder perspectives and requirements into the model building process. The HarmoniCOP project will provide important input for this.

### **5.3 Evaluation criteria for ICT tools**

ICT tools can be evaluated from two points of view. First, we can evaluate the implementation of the tools from a technical point of view. Indeed, poor design of ICT tools and difficulties of implementation can lead to user confusion, frustration and discomfort and to inefficiency. Secondly, we can evaluate the impact of ICT tools on the participation process.

In this section some evaluation criteria are given, derived from literature on the evaluation of PP (Rowe et al. 2000, Van den Hove 2000, Webler et al. 2001), on the evaluation of tools (Halvorsen 2001, Lim, 2000, Swinford and Jeffrey 2002, Ubbels and Verhallen 2000), and on participation in integrated assessment and modelling for environmental management (Parker et al. 2002, Argent et al. 1999, Pahl-Wostl 2002a).

#### *a. Implementation of the tool*

##### *“User –friendliness”*

Was the tool easy to use for the people involved, given their different backgrounds, levels of information, etc.? This criterion focuses on the user interface, ergonomics, cumbersomeness, visualization of the result, outputs (1D, 2D, 3D, static, dynamic, mono or multimedia, etc.), guidance to use the tool, built-in help and intelligibility. Other relevant aspects are background knowledge needed, information formats (technical data, professional languages, layman languages) and resource needs. Resource needs include access to appropriate and relevant information (to implement the tool or for the participant's understanding), human resources, material resources (hardware, etc.) and time. Which investment is needed from the users and tool-builders (money, persons, time, knowledge)? The resource needs may be analysed and compared to the benefits of the new tools.

##### *Legitimacy and fairness*

How is the tool judged? This criterion focuses on representativeness and legitimacy of the tool initiator and people who implement it and of the tool users (expert/ lay persons), on the transparency of the tool and on its uses (data choices, assumptions, constraints and uncer-

tainty). Was the design of the tool participative? Did it allow to incorporate local knowledge? How was the confidentiality of data, information and results ensured? How could the input data and the final output be archived for later use?

#### *Suitability to the context*

How was the tool applied in the local context and was it suitable to the adopted participative approach (i.e. focus group)? What were the goals and objectives of the tool concerning the local issues? Which public was targeted and which public felt concerned and participated? Was it easy to involve people? Which goals and objectives were identified? To what extent did it answer to an expressed question, a local problem? On which discipline did it lean? This criterion also focuses on the tool longevity.

#### *Adaptability and flexibility*

Adaptability and flexibility are key issues to deal with in social learning. Was the tool capable of incorporating user remarks, local knowledge, new information and new issues? Did it allow to handle metadata, especially the lineage of co-constructed results? Was it multimedia (text, graphic, image, voice)? How interactive was it? Which scale(s) could be addressed (in term of geographical extent, number of people)? Was it sensitive to local context (in term of local culture, local data, local models)? Could it address international river basin management issues? At which pace could it be adapted? Could it be manipulated or diverted?

### *b. Impact on the participation process*

Van Den Hove (2000) focuses on the effects of participatory approaches. She presents three broad categories of effects, which we will use to evaluate the impact of ICT tools on participation processes.

#### *Substantive effects*

Did the use of the tool influence the quality of the resulting decision? The result is gauged against different criteria: environmental, economic, technological and social. Most of the evaluation criteria discussed in the literature are procedural rather than substantive (Rowe et al. 2000). Indeed, evaluating substantive effects is quite difficult, because of the nature of the data that are usually available: actors accounts and archives.

#### *Procedural effects*

Did the use of the tool influence the decision-making process? Did it improve the set of information used to decide or the utilization of the information? Did it widen the set of scenarios? Did it widen the range of stakeholders involved? Did it marginalize some stakeholders or not? Did it speed up the process? Did it improve conflict management by the actors or the legitimacy of the decision-making process? Did it change the roles of actors or the power balance?

#### *Contextual effects*

Contextual effects include effects which do not directly relate to the issue at hand but to the information systems around the decision-making process and the social context in which it takes place. The HarmoniCOP project will focus on public and stakeholders' information and education, improvement of participation ability, decision ability, change in representation (understanding) of the context, change in conflicts and power distribution and changes in confidence. The notion of social learning is very useful here. Do the tools, as a focus of interaction, trigger social learning? Do they allow communication between people?

#### 5.4 *Outline of the research*

The main collaborative product of work package 3 of the HarmoniCOP project will be a protocol and a template of analysis for the case studies and experiments (work package 5). As will be discussed in chapter 7, two kinds of case studies will be conducted: "historical cases" (review of completed participatory processes) and "real-time cases" (ongoing processes). For the historical cases two main sources of data will be used:

- Literature review (minutes of meeting, expert papers, press reviews, etc.)
- Interviews with the main stakeholders involved

Depending on the specific situation, the group of stakeholders to be interviewed may include the tool developers and the tool users, such as government officials, planners, experts and representatives of environmental or economic interest groups. In addition, stakeholders may be included who, for whatever reason, did not work with the tool.

The questions to be addressed during the interviews fall into eight categories (Smith-Korfmacher 2001, Webler, Tuler and Krueger 2001):

- Where? scale of the project or of the area concerned in a given phase of the project
- When? phase of the project and period of use of the ICT tool (life cycle)
- What? technical description of ICT tools
- By who? who developed the ICT tool?
- To whom? who used the ICT tool (number of person, knowledge and skills, stakes)?
- How? how was the ICT tool produced (expert, co-construction, ...) and used in PP?
- Impact? on the social learning process
- And if? interests and limits (feedback from the stakeholders based on their experiences with ICT tools)

In the real-time cases the same aspects will be given attention. The main difference is that in addition to evaluating the use of ICT tools, the researchers may also give advice on which tools to use and may actually apply the tools themselves. Moreover, real-time cases make an additional source of data possible: direct observation.

## 6 National approaches and their background

Within the HarmoniCOP project, work package 5, an overview will be made of the knowledge of and experience with public participation (PP) in the different countries involved in the HarmoniCOP project. The analysis will focus primarily on river basin management. Where possible, the effect of the public participation will also be considered. In addition to individual national reports, a synthesis document analysing commonalities and differences between countries will also be produced.

This chapter will first discuss why it is important to study the different national approaches to PP and their backgrounds (section 6.1). Moreover, it will discuss the results and outcomes (section 6.2) and how they will be produced (section 6.3). Finally, a few words will be said on ensuring uniformity within the HarmoniCOP project.

### 6.1 *Why study national approaches?*

A knowledge and understanding of the strengths and weaknesses of past national experiences is critical for providing a basis from which new experiences can be evaluated. Without such knowledge our study will be limited and may prove to be nothing more than an overview of each approach, providing no real insight or understanding. Public participation in any study area is to a large extent constrained by historical and other factors, which will generally determine any future public participation work initiated in that area. In other words, current processes are conditioned by past experience. Therefore any detail that can be acquired from past experience should serve to enrich the current process.

In order to produce such a foundation of knowledge, the research needs to be both contextual and historical. Consequently, it is necessary to explore specific influencing factors including institutional, legal, cultural, geographical and physical aspects. This will enable the individual country studies to evaluate lessons learnt and develop practical criteria for evaluating participatory river basin management planning. There is value in considering historical experiences as ‘demonstration projects’ that help evaluate the success of public participation in river basin management and offer potential for all stakeholders to learn from practical experience. In terms of studying public participation it is necessary for the researcher to have knowledge not just on the types of public involved in the study but *how* they were involved and the problems that were encountered. However to enable this to be collected it is essential that background information is made easily available and accessible.

The HarmoniCOP project will provide an opportunity to share information and experiences by involving experts and stakeholders from the water community within nine European countries. Each national approach study will provide information that can later help to understand to what extent current practice is constructed by past experience.

In addition, comparing and analysing national experiences also has a very practical purpose. Many European river basins are transboundary, and this means that a lot of international co-operation will be needed, also concerning PP. Developing co-operation will be helped greatly by increased knowledge of the different national PP approaches and by increased understanding of their differences.

Ultimately the study and comparison of national approaches will provide the necessary background knowledge and guidance for work package 5 – Case studies and experiments – and work package 7 – Handbook on PP methodologies.

## 6.2 Results and Outcomes

It is expected that much intangible and tangible knowledge will be learnt and gained from studying the national approaches. The intangible knowledge can be seen as a form of capacity building. The tangible products will consist of the following:

### a. The National Reports

National reports will be produced by each national coordinator and will detail country specific information. To frame this information, a more detailed content outline will be developed by the coordinator of the pertinent work package (4) in close collaboration with the national co-ordinators (Table 3). This is discussed in detail further on.

COUNTRY	(COORDINATING) INSTITUTE
1. France	LATTS-ENPC
2. Germany	Ecologic
3. Spain	University of Alcala de Henares
4. Switzerland	Colenco Power Engineering Ltd
5. Netherlands	RBA Centre Delft University of Technology
6. Italy	University of Udine
7. U.K.	FHRC, Middlesex University
8. Hungary	Budapest University of Technology and Economics
9. Belgium	COPP, Katholieke Universiteit Leuven

**Table 3:** Coordinating institutes for the national reports

### c. The Synthesis Report

A synthesis and evaluation of the nine national reports will be made, drawing together the experiences from each participating region. The report will serve as an overview of the use of participatory processes in river basin management and also a useful source of knowledge for other work packages, especially work packages 5 and 7.

## 6.3 Content and approach to national studies

A key element in studying the national approaches is the development of a set of research criteria, or terms of reference. This will ensure greater consistency between, and allow for comparability across, the national reports. This is particularly important for the preparation of the synthesis report. Each national co-ordinator will use these as guidelines to collect and organise information. These criteria and the generic outline for the national reports are being developed by the work package leader (ICIS) in close collaboration with the national co-ordinators. Although the aim is to produce standard guidelines with which each National Approach can follow, it is appreciated that a certain degree of flexibility is needed within the contextual boundaries of each study, to allow for consideration of different cultural dynamics, such as political structure; decision-making processes; the value of specific river basins to citizens; and other more uncontrollable factors such as susceptibility to natural hazards.

In constructing the terms of reference, a broad range of socio-economic and physical features are being considered. More specifically, attention needs to be paid to current administrative

and political boundaries. The current administrative and political boundaries important for decision-making processes in water resources management will be analysed and compared to the hydrological boundaries. The national studies need to acknowledge not just formal involvement but also true participation. They also need to reflect upon the effectiveness of PP, bearing in mind future developments in river basin management planning, as well as linking to the WFD. This can help to establish commonalities and patterns of more and less successful practice in terms of PP, highlighting criteria such as necessary preconditions for the effective use of PP, or factors related to scale or history.

The national studies need to reflect as much as possible experiences with different forms and levels of PP (information, consultation, active involvement), at different scales (local, regional, national, international), and with different participants (organised stakeholders, unorganised citizens, traditional and new water users).

Based upon the discussions during the kick-off meeting of the HarmoniCOP project in Osnabrück, November, 2002, a general structure has been developed for the national reports. (Box 4) The extent to which these key issues are adequately discussed depends largely upon the success of each national team in accessing the necessary information. As mentioned earlier, the availability of information is thus a critical determining factor. Of course, this will vary between countries.

- A general overview of the use of PP in the country – reflecting *innovation, tradition, history, and cultural dynamics*
- A general overview of river basin management planning in the country
- A review of the use of PP in river basin management in the country, emphasizing:
  - Impetus for PP – top-down mandate vs. bottom-up push
  - Extent of PP – number of persons involved, what groups represented
  - Level of PP – help to develop plans, comment on proposals, passively receive information
  - Impact of PP on planning and implementation
- Lessons and Conclusions
  - Barriers and opportunities
  - Best practices with reference to social learning
  - Innovative practices
- Critical (contextual) factors for success

**Box 4:** Suggested structure for the national reports

Given the above structure, the developers of the synthesis report will then be better able to use the information collected in the national reports. This report will highlight key commonalities and differences both across countries and across different experiences within countries. From these, more general lessons and conclusions, along the lines of those presented in the national reports can be derived.

It is important to engage stakeholders already at this early stage of constructing the terms of reference for the national approaches. This will serve to strengthen long-term commitment to the process of involvement, and it will help to develop co-ownership of the process design. The National Approach study is considered a critical part of the process of the HarmoniCOP project. It evaluates past knowledge and experience of PP in river basin management and

therefore it is critical that stakeholders, who hold this information, are properly engaged into the process.

#### **6.4 *Links to other work packages***

To ensure uniformity across the whole project it will be necessary to incorporate definitions of key concepts discussed in other work packages. For example, the concept of social learning considered in work package 4 will correspond with the interpretations outlined in work package 2. Conversely, the results of work package 4 will be used by other work packages. For example, work package 5, Case Studies and Experiments, will need to design its research criteria using the key findings and study criteria from work package 4.

## **7 Case studies and experiments**

The aim of the work package 5, Case studies and experiments, is to gain first-hand experience of public participation (PP) in river basin management in order to examine how social processes work and how ICT tools are used in practice. WP5 will explore the issues identified in the earlier work packages 2-4 and test the ideas that were developed.

This chapter identifies our approach to the case studied and experiments and some of the issues identified at this stage in the project. It first presents a typology of cases studies and experiments (section 7.1) and then goes on to discuss the comparability of the case studies (section 7.2). Furthermore, the template for conducting the case studies and experiments will be discussed (section 7.3). The final section (7.5) will say a few words about the proposed output of this work package.

Most importantly, this chapter will discuss the choice of case studies (section 7.4). Ideas on this are developing and contacts are being made, but no definitive choices have been made yet. This reflects the fact that the case studies are scheduled to start only in November 2003. It also allows for a lot of stakeholder input at this moment.

### ***7.1 Typology of Case studies/ experiments***

A number of case study types have been identified, as shown in Table 4 (next page). Each of them holds relative strengths and weaknesses, both in terms of inputs and outputs. The choice of case studies used will be decided, in part, by issues beyond the control of the HarmoniCOP project. The timing and nature of public participation exercises which will occur independent of this project will hold a great deal of bearing upon which type of case study can be completed.

A minimum of nine case studies in total will be completed, allowing for the fact that in some countries more than one case study may be undertaken. Ideally these will combine numerous different types (H1-2, RT1-3) and allow the opportunity to explore the interaction of stakeholders at different scales, ensuring a wide mix of variables for comparison.

### ***7.2 Criteria for Comparability***

The criteria for comparability between case studies selected will be developed from results of previous work packages. Suggested criteria at this stage are the following:

- Management issues at different scales (local, regional, national, transnational river basins)
- Main stakeholders (river basin authority, NGO, etc.)
- Involvement of the public at large (issues of "best practice" cases or "standard practice" cases)
- Extent of social learning
- Main issue(s) under consideration
- Models/ information tools used.

### ***7.3 Template***

Case studies will be conducted using a template for the description and analysis of the findings. This will guide those completing the study and allow for comparability.

CATE- GORY	TYPE OF ANALYSIS	DESCRIPTION OF ANALYSIS	LIKELY IN- PUT/ TIME REQUIRE- MENTS	STRENGTHS AND WEAKNESSES OF OUTPUTS
H1	Historical: Literature Review	Review of a completed participatory process using the original documents, e.g. a draft plan, the minutes, written reactions, etc.	Low	Limited opportunities to test results of other WPs. The PP process might not be directly relevant to the WFD, river basin management planning, or ICT tools. The literature may be limited in the type of information it provides and difficult to access. However, it might provide insight into longer-term benefits of PP processes.
H2	Historical: Interview- based	Review of a completed participatory process using the original documents (as in H1) and interviewing the participants (stakeholders, members of managing authority).	Low	The strengths and weaknesses are similar to those of type H1. Interviews may fill in the gaps left by the available original documents, but this depends on the validity and extent of the recollections of the participants.
RT1	Real-time: Observing	A real-time PP event, in an observational capacity.	Medium	First hand experience of PP at the river basin level but limited to observing only. (NB All real-time studies will depend upon managing authority for their time-scale, which will have to be compatible with the time scale of the HarmoniCOP project).
RT2	Real-time: Participat- ing	A real-time PP event, participating in the organisation of the process (e.g. in an advisory capacity).	High	First hand experience of PP at the river basin level, with the opportunity to influence the process. This gives limited possibilities to test ideas generated by other WPs and e.g. try out ICT tools and methods of social participation. This (limited but active) role of the researcher in the case itself could be seen as problematic by those aiming at objective scientific knowledge.
RT3	Real-time - Designing and Partici- pating	Participating in the design and organisation of the case study.	High	The strengths and weaknesses are similar to those of type RT2. However, the possibilities to influence the case and test ideas generated by other WPs are greatest.

**Table 4:** A typology of case studies/ experiments

The template will be developed in time as the work packages progress. Careful consideration will need to be given to the standardisation of reporting. The template and the criteria for comparability need to be specific enough to guide reporting and result in comparable case study descriptions. Yet, they should offer enough flexibility to cope with the wide variety of cases and national contexts, including the subtleties of language and national cultures. Participants completing the (real-time) studies will need to consider their personal involvement within the process, including how they might develop the trust of the stakeholders, and how to distinguish between being an observer and a participant in the process (if indeed this is at all possible).

#### **7.4 *Cases being considered***

Case studies have not been confirmed at this stage in the project. However consideration is being given to a number of possibilities, including real-time cases (RT1 – RT3). Possibilities are also being explored to use the pilot river basins which are testing the different guidances developed under the Common Implementation Strategy (CIS) of the WFD, including the guidance on PP.

#### **7.5 *Outputs***

The work package will produce nine national case study reports based upon the agreed template, providing an assessment of the findings, and the relative successes and failures found within the process. The findings from these reports will be evaluated and incorporated into an overall report on 'Good European Practices for Stakeholder Involvement – Lesson from Real Planning Processes'. The case study reports and the overall report will in turn contribute to the "Handbook on PP methodologies", which is discussed in the next chapter.

## 8 The HarmoniCOP project

In one sentence, the HarmoniCOP project is about public participation and social learning in river basin management. The background of the project is the Water Framework Directive, but it does not aim to write another guidance document on how to implement the WFD. (Drafting Group 2002; section 1.2) It tries to go further. Its aim is ambitious: to foster social learning in river basin management. The WFD is in this respect both a facilitating factor – its PP provisions – and a constraining factor – its fixed objectives and its reliance, although not exclusively, on regulation.

The HarmoniCOP project is not only about social learning, it also aims to contribute to social learning. This chapter discusses how we intend to do that. Section 8.1 discusses the final products for both the practice and the scientific community. Section 8.2 gives more details on the planned Handbook on PP methodologies. Section 8.3 contains the time schedule of the project. Section 8.4 discusses how we intend to involve the stakeholders.

### 8.1 *What will we produce?*

The scientific output of the project will provide insight into the conceptual base and the usefulness of social learning as a concept for river basin planning. It will integrate expertise from a wide range of disciplines. The role of ICT tools will be explored and suggestions will be made how to improve their design to be more effective in supporting management decisions. These will support the development of "guidance documents" in the concerted action Harmonica (Harmonizing Modelling Tools at Catchment Scale) that will support both future research and the use of ICT tools in the implementation of the WFD.<sup>2</sup> The scientific results will be documented in papers in peer reviewed journals. Given its interdisciplinary nature, the HarmoniCOP project has the potential to address a wide scientific audience and establish links to the expertise in different scientific communities.

The project will generate social capital inherent in the social relationships fostered by processes of social learning in the case study river basins, across the research teams and other groups involved. The social capital will be maintained in activities that will continue after the end of the HarmoniCOP project, e.g. in the framework of a Network of Excellence.

### 8.2 *What will the Handbook look like?*

The main practical result of the HarmoniCOP project will be the "Handbook on Public participation methodologies". Handbooks on water management and/or participation already exist in several countries of the European Union. Some European countries elaborated their own guidelines or handbooks for the implementation of the WFD. The recently developed Guidance on Public Participation mentioned before deals specifically with the implementation of the PP provisions of the WFD (Drafting Groups 2002). The handbook that will be developed in the HarmoniCOP project will go beyond the implementation of the WFD and focus on PP as a means to foster social learning. It will help water managers and stakeholders to participate in and design their own participatory processes.

It is too early to give details on the contents of the Handbook: HarmoniCOP has only just started. Nonetheless, it is clear that it could take different shapes. It could focus on the de-

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<sup>2</sup> These guidances are not to be confused with the guidance documents developed under the Common Implementation Strategy for the WFD, such as the guidance on PP (Drafting Group 2002).

scription of tools or it could present the experiences in the cases studied in detail. It could focus on local issues or on international issues. Etc. (Box 5)

To get a better idea on how the handbook should look like, a short questionnaire has been developed to elicit the needs, wishes and expectations of the potential users concerning the handbook. The questionnaire will also result in more information about the potential users themselves. Questions about main working fields, educational backgrounds, age groups, nationality and even gender support the profiling of potential users and the adaptation of the handbook to their needs. This supposes that a sufficient number of persons take the time to fill in the questionnaire. An important constraint in this respect is that the questionnaire is presently only available in English. The questionnaire appears as a pop-up menu on the Webpage [www.harmonicop.info](http://www.harmonicop.info). The first results are expected to be discussed in September/October 2003.

- A focus on the international, national, regional and/ or the local level?
- Detailed explanations or short descriptions?
- Rather 50 pages or rather 150 pages?
- Specific information on PP and the WFD or information on PP and water management more generally?
- Focus on participation by organised stakeholders or participation by unorganised citizens/ the broad public?
- How much information on designing participatory processes and how much on individual methods and techniques?
- How many practical examples and what level of detail?

**Box 5:** Issues for developing the Handbook on PP methodologies, as reflected in the questionnaire ([www.harmonicop.info](http://www.harmonicop.info))

### **8.3** *What will we do?*

The main "work packages" of the HarmoniCOP project have been introduced in chapter 1, Figure 1, and the chapters 4 to 7. Table 5 (next page) shows the time table for the project (from November 2002 to October 2005). It shows how the different Work packages are interlinked in time.

### **8.4** *Whom are we going to involve and how?*

Since the HarmoniCOP project is about public participation and social learning in river basin management, it is quite logical that its products cannot be produced without the active involvement the stakeholders at all stages of the project. Three different groups can be distinguished:

#### *a. The stakeholders and unorganised citizens in each case study*

The level of involvement will depend on the case study design (chapter 7). The lowest level of involvement will include interviews with a few selected representatives from a region. The highest level of involvement will include action research and active participation in the design of ongoing decision making processes.

Task	Month																																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36			
<b>WP 0 Co-ordination</b>	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
<b>WP 1 Framework for analysis</b>	■	■	■	■																																			
<b>WP 2 Participation as a social learning process</b>				■	■	■	■	■	■	■	■																												
<b>WP 3 The role of ICT tools</b>				■	■	■	■	■	■	■	■																												
<b>WP 4 National approaches and backgrounds</b>				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
<b>WP 5 Case studies &amp; experiments</b>													■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
<b>WP 6 Integration</b>																																							
<b>WP 7 Development of Handbook and dissemination</b>	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

**Table 5:** Time table HarmoniCOP-project (November 2002 – October 2005)

*b. The stakeholder group to advise on the project*

The project will be accompanied by representatives from stakeholder groups that have an interest in the project's main output. The group will attend the main annual project meetings, participate partly in the activities and working group sessions. Their advice will be invaluable to improve the usefulness of the results and the use of the Handbook at a later stage. Ten European stakeholders from seven countries have accepted to become a member of this group. They represent the following stakeholder groups:

- Ministry of Environment
- Environmental Agency
- Irrigation Association
- Global Water Partnership
- Environmental NGO
- Water Utility
- Farmers Association

This small group will function as an external advisory board. Their regular presence during important HarmoniCOP meetings will assure an ongoing critical evaluation and feedback from the side of practitioners. They will have unlimited access to project outputs. Meetings are scheduled for March 2003, September/ October 2003, September/ October 2004, and July 2005 (to be discussed). Liaising from the beginning with potential Handbook users and those that may recommend the use also helps to disseminate the contents and outcomes of HarmoniCOP. The involvement of major stakeholders represents the beginning of a strong European network that does not only comprise water scientists but practitioners too.

*c. Practitioners and user group*

We intend to involve a wider group of interested people (scientists and practitioners) to review the outcomes of the project during their preparation. Internet consultation may be the right means to do so. It will be important to build a user community and make the handbook a living document. Users can report on the usefulness of the proposed methods and concepts and scientists can support additional evidence to support or, as the case may be, contradict our conclusions. This will require additional financial support beyond the duration of the HarmoniCOP project. We envisage to get such support through additional funding via the EU (e.g. specific support action in the policy programme).

In addition, the HarmoniCOP project will benefit from an international exchange with projects e.g. in Canada and Australia. This will be possible by establishing an internal collaboration platform on the HarmoniCOP Webpage. Besides the protected internal platform an open forum can be used to engage into discussions with the general public. The Internet will therefore play an important role for the internal project communication, for information to the general public on HarmoniCOP and for obtaining feedback from interested persons and parties. The HarmoniCOP handbook will be made available on the Internet. Its open format will help to integrate contributions from other parties that further enrich the handbook. After finalisation the handbook can serve as a reference document for public participation methodologies and the WFD and could be used as a training tool.

With this we conclude the inception report of the HarmoniCOP project. We have presented the ideas we have at this moment, but the discussions will continue, not only within the HarmoniCOP consortium but hopefully also with the different stakeholders. Reactions to this report are welcome, by -mail, at the first international stakeholder meeting in Leuven, or otherwise. Annex III contains contact information.

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## Annex I: Glossary

In order to enhance the practical relevance of the HarmoniCOP project, this glossary conforms to the text of the European Water Framework Directive (2000/60/EC) and the interpretations given by the drafting group on PP (Drafting Groups 2002). However, it also gives alternative meanings of the different terms.

*Active involvement:*

Any level of *public participation* above *consultation*. Active involvement implies that the interested parties participate actively in the planning process by discussing issues and contributing to their solution. Essential to the concept is the potential for participants to influence the process. It does not necessarily imply that they also become responsible for water management.

*Broad public:*

See *general public*.

*Case study/ experiment:*

A case study is detailed original research on a specific case, in the HarmoniCOP-project a participatory process. Where the researcher plays an active role in the process (e.g. acts as advisor or facilitator), the term "experiment" is also used (Table 4, R2 and R3).

*Consultation:*

Level of *public participation*. The government makes documents available for written comments, organises a public hearing or actively seeks the comments and opinions of the public through for instance surveys and interviews. "Consultation" in art. 14 of the WFD refers to written consultations only. Preamble 14 and 46 and Annex VII refer to consultation in general.

*Experiment:*

See *Case study/ experiment*

*General public:*

Unorganised members of the *public*, as opposed to organised *stakeholders*.

In the WFD the term is used loosely in relation to water users and then seems to refer to both the unorganised members of the public and the organised stakeholders (preamble 46 WFD, cf. preamble 14). This is also the meaning given to the term by the Guidance Document, but this meaning seems to conflict with ordinary usage. The guidance document uses the term "broad public" to refer to unorganised members of the public.

*ICT:*

Information and Communication Technology

*Interested party:*

Term from art. 14 WFD. Considered to be synonymous with *stakeholder* in a broad sense.

*NGO:*

Non-governmental organisation

*PP:*

*Public participation*

*Public:*

“One or more natural or legal persons, and [...] their associations, organisations or groups.” (Aarhus Convention, SEA Directive (2001/42/EC)) Government bodies are usually not considered to be part of the "public".

*Public involvement:*

See *public participation*.

*Public participation:*

Direct participation in decision-making by *organised stakeholders* and unorganised groups (the *general public*). When public participation is contrasted to *stakeholder participation*, PP refers to participation by the general public (unorganised citizens) only, and stakeholder participation to participation by organised stakeholders. Direct participation includes for instance consultation and public discussions, but it excludes voting, as this is an indirect form of participation. It may incorporate different forms of representation, e.g. national NGOs representing local NGOs representing their individual members. Information provision to the public on its own is not participation, but it is a precondition for it.

The WFD uses the term participation (by the general public) only once and distinguishes at several places between (*active*) *involvement* and *consultation*. (preamble 46; preamble 14 and art. 14)

Note that some authors use the term *public involvement* as generic term and distinguish between public consultation and public participation.

*River basin management planning:*

The planning process as prescribed in art. 14 of the WFD, including all preparatory activities and implementation activities.

*Social learning:*

Learning by groups to handle a common issue. In the HarmoniCOP project the common issue is the management of river basins and the group concerned are the authorities, stakeholders (in a broad sense) and experts.

*Stakeholder:*

Any person, group or organisation with an interest or “stake” in an issue, either because they will be affected or because they may have some influence on its outcome. Stakeholders may include other government bodies. Sometimes, the term is reserved for well-organised and active groups and organisations, thus excluding the *general public*.

*Stakeholder participation:*

See *public participation*.

*WFD:*

Water Framework Directive (2000/60/EC)

*WP:*

Work package

## **Annex II: Contributors**

This report is the result of discussions between all partners in the HarmoniCOP consortium. It has been edited by Erik Mostert. The different chapters were written by the following persons:

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