Participation for effective environmental governance? A comparative study of European water policy implementation in Germany, Spain and the United Kingdom

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1 Introduction

Claims abound that collaboration and participation¹ in environmental governance improve environmental outcomes (Koontz and Thomas 2006). Yet after decades of research and practice in participatory environmental governance, there is still a lack in understanding just how and under what conditions participation will lead to better environmental outcomes (Newig and Fritsch 2009; Young, et al. 2013; Gerlak, et al. 2013).

This paper, which is part of a larger ongoing research project², seeks to contribute to the growing body of evidence on the effectiveness of participatory governance. We study the implementation of the European Water Framework Directive (WFD), which mandates that European member states produce planning documents that detail how 'good water status' will be reached, in six-year cycles. Citizen and stakeholder participation is required in the preparation of these plans, which is why we term this mode of governance 'mandated participatory planning' (Newig and Koontz 2014). The implementation of the WFD provides an excellent test bed for studying the effectiveness of participatory governance in a comparative manner, because all over Europe participatory decision-making processes are mandated in the same time frame and in the same policy area. While participation, ranging from mere consultation up to intensive, deliberative and collaborative groups. Studying different instances of more or less participatory processes across Europe and setting these in relation to the respective (more or less environmentally effective) planning outcomes thus provides an excellent opportunity to study the relation of process and outcome.

This paper reports on implementation of the WFD in the three EU member states of Germany, Spain and the United Kingdom, reflecting three substantially different national approaches to water governance. We ask if and how participatory planning improved the environmental standard of outputs (River Basin Management Plans and Programs of Measures) and the quality of implementation. As such we seek to include structural, procedural and outcome factors into our research focus to cover the entire planning process. In search of causal links between participatory process and the quality of outputs and implementation, we look to process attributes – such as the openness and inclusiveness of the process, the directionality and intensity of information flows, the degree to which participants were afforded process and decision control – and examine their impact on outcomes. In particular, we consider how processes incorporated and integrated knowledge, fostered deliberation and understanding,

¹ In the remainder of the paper, we use the term 'participation' or 'participatory governance' due to the better compatibility with the European approach, acknowledging that there is a large overlap with the concept of 'collaboration' and 'collaborative governance' mostly used in the American context.

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supported collective learning, built trust and acceptance, and whether and how these enhanced substantive outputs.

In the remainder of this paper, we proceed as follows. In section 2, we explicate the conceptual framework in the form of four mechanisms on plausible causal links between participation and environmental outcomes of governance processes. In section 3, we first introduce the Water Framework Directive as a recent example of mandated participatory planning, report on our methodology and introduce the case study sites. We then give a more detailed account of the three – more or less participatory – planning processes in the three case study regions. In section 4, we compare the three case study accounts regarding their process design and substantive outputs as well as social outcomes. We further trace back factors drawing on the conceptual frame formulated in section 2 and additional contextual ones which explain outputs and outcomes within the three cases. We conclude in section 5 with a reflection on the insights gained from this study for the field of environmental politics and governance.

2 Conceptual framework: How participation should enhance effective environmental governance

Below, we present a number of key mechanisms that specify why and how participation should enhance environmental governance, and how participation may even be detrimental to environmental governance outcomes. To this end, we draw on the available literature as well as syntheses produced earlier (Newig and Fritsch 2009; Fritsch and Newig 2012; Newig, et al. 2013; Drazkiewicz, et al. 2015). The conceptual framework sketched in Figure 1 represents the key steps via which a (more or less participatory) decision-making-process (DMP) may impact on process outputs and outcomes and, ultimately, on environmental quality, acknowledging also the importance of the context in which the DMP is embedded.

What do we understand by participatory, and how can this be 'more' or 'less'? We acknowledge that participation is a multi-dimensional concept. There seems to be some agreement in the literature that three aspects, or dimensions, of participation are of particular importance. Participation can be more or less 'intensive' in each of these dimensions (Newig and Kvarda 2012; Fung 2006):

- 1. *Involvement of non-state actors:* The number of parties concerned (e.g. few interest groups or a broad range of public involvement).
- 2. *Communication / collaboration:* the manner, direction and intensity of information flows (for example, public hearings or intensive face-to-face-communication with the possibility of de-liberative processes).
- 3. *Power delegation to participants:* The intensity and possibility for participants to influence the decisions to be taken.

Mechanism 1: Opening up of decision making to environmental concerns

It has been widely argued that the inclusion of environmental interests in participatory governance structures leads to more environmentally beneficial decisions (Brody 2003, Smith 2009; Dryzek 2005; Smith 2003). The key argument is that public environmental decision-making processes that are conducted in a non-participatory way "often fail to incorporate the whole range of environmental values" (Smith 2003: 129). 'Opening up' a DMP means that stakeholders from many – often underpriviledged – sectors of society, can participate (Fung 2006), including environmental groups. Arguably, environmental groups or other actors with substantial environmental concerns will have a strong incentive to participate in a DMP on environmental matters and thus be rather strongly repre-

sented (Binder and Neumayer 2005, Larson and Lach 2008), such that "the values we associate with the non-human world can at least be articulated and defended" (Smith 2003: 67). But does the representation of environmental interests in a DMP affect the environmental quality of the output?

By taking part in a DMP, environmental actors have better chances to advocate for environmental interests than if they were not part of the process. The particular knowledge, values and arguments brought to the table by environmental groups can help revise or transform established approaches and enhance the environmental quality of outputs (Brody 2003). This may be aided via learning processes that occur as a result of convincing arguments and knowledge exchange, and induce changes in the policy positions of respective actors and coalitions engaged in the process (Smith 2009).

On the other hand, in participatory processes, environmental interest groups may be co-opted by more powerful groups and/or deprived of other, more effective ways to pursue environmental goals – such as litigation – outside collaborative settings (Berry 1981; Whelan and Lyons 2005). The cordial relationships often developed among parties in collaborative processes may lead to greater concessions on the part of environmental groups ('pacification' or 'seduction', Amy 1987). Moreover, the obligation for participants to act 'reasonably' can be used to stifle actors' expression of objection and frustration and to label this as irrational and non-constructive. In this way participation can serve to suppress and dilute the interests and convictions that environmental groups bring to the table, weakening their position. Professional facilitation or mediation by a neutral third party, along with clear rules and procedures, can help to avoid co-optation of (environmental) groups (Amy 1987, Cooke 2001).



Figure1. Conceptual framework: Hypotheses relating participation to outputs, outcomes and impacts. Adapted from Newig et al. (2013: 6).

Mechanism 2: Incorporation of environmentally relevant knowledge

A second argument emphasizes the potential of participation to generate factual information that would otherwise not be available for the decision maker. This holds true in particular for very local issues. The involvement of informed lay persons may help to provide detailed knowledge of special local characteristics and conditions (Pellizzoni 2003; Brody 2003). Local knowledge, of course, need not necessarily be environmentally relevant. But in certain settings local knowledge would be required to draft effective solutions to govern environmental and natural resource problems (Ostrom 1990). Participants' knowledge can contribute to strengthening both the environmental standard of an agreement as well as to draft practically implementable solutions.

In other cases an information deficit of public authorities can more effectively be overcome by the mobilization of experts, the more so as many decisions in environmental governance are highly technical in nature and thus call for expert knowledge rather than lay contributions (Thomas 1995). But then again, intensive participatory processes may serve to educate and build capacity on the part of participants, enabling them to meaningfully contribute to bring in their knowledge relevant to decision-making (Beierle and Cayford 2002; Emerson, et al. 2011).

Mechanism 3: Dialogue and deliberation

Decision making processes characterized by dialogue among participants are hypothesized to produce more environmentally beneficial outputs and outcomes: "[John Dryzek] has stressed that deliberative institutions are likely to be more 'ecologically rational' than other social choice mechanisms, including liberal democratic institutions...." (Smith 2003: 61). Depending on the type of participant interaction (negotiation or deliberation), different types of benefits (mutual gains, and common good orientation) are expected.

For conflictual issues, participatory processes characterized by high mutual interaction are expected to create spaces for negotiation (bargaining in the sense of Elster, 2000). By developing an understanding of each other's capabilities, needs, demands and preferences, participants are thereby more likely to arrive at a solution that maximizes mutual gains, including benefits for the environment (Brody 2003, Delli Carpini, et al. 2004, Ansell and Gash 2008).

Intensive dialogue can also foster deliberation among participants, and provide a setting conducive to rational arguing (as opposed to bargaining or negotiation). In this context, deliberation entails an ideal situation wherein rational discussion and the 'weight of the better argument' prevail (Elster 2000). A (re)orientation of participants' views towards the common good implies moving beyond personal interests (i.e. a focus on solving the problem at hand rather than securing personal gains), towards an output that secures benefits for all parties and the environment (Webler and Tuler 2000).

Mechanism 4: Acceptance, compliance and implementation

In drawing in a range of actors and offering the possibility for a variety of interests to be represented participatory environmental decision-making is argued to foster acceptance of a decision among policy addressees and stakeholders more broadly. Acceptance is assumed to be positively related to implementation and compliance (Macnaghten and Jacobs 1997, Bulkeley and Mol 2003). Increased acceptance may be linked with stakeholders' satisfaction with the decision or output itself, or with the nature of the process.

First and foremost, it can be argued that the effective inclusion of actor groups with their respective preferences and interests into decision-making will enhance acceptance on their part of the final decision and thus improve implementation and compliance, just because the decision also reflects their interests (Papadopoulos and Warin 2007). However, the validity of this hypothesis depends to a considerable degree on the representation of legitimate interests; if this is not the case, acceptance by third party groups is likely to remain low.

Second, scholars of procedural justice argue that increased acceptance can even be observed when the final decision contradicts stakeholders' interests, so long as the procedure is perceived as fair and legitimate (Lind and Tyler 1988). However, scholarly literature has produced quite a diverse set of assumptions on how procedural legitimacy can be attained in a participatory process. While some stress the equal chance to have a say and to represent one's own interests (Webler 1995), others emphasize the transparency of the process, open communication structures, early participation in all stages of policy-making, consensus vote and a neutral and professional moderation between all involved actors (Susskind, et al. 1983). Many authors argue that rules of fairness are effective only if the actors involved will actually have a chance to impact upon the final decision. Hence acceptance rates are likely to decrease if important parts of the decisions have already been made elsewhere (Diduck and Sinclair 2002).

3 Local participation in implementing the Water Framework Directive in Germany, Northern Ireland, and Spain

3.1 The Water Framework Directive as an instance of Mandated Participatory Planning

The European Water Framework Directive is considered by many to be the single most important piece of recent European environmental legislation. It demands that "good water statues" is to be reached for all European waters by 2015, with possible extensions until 2027. The WFD mandates participatory river basin management planning across the EU. Justifying the Directive's endorsement of 'active involvement' of stakeholders and interested parties in planning, the European Commission is appealing to a distinctly instrumentalist view on participation, which holds that participatory planning will deliver better policy outputs and foster more effective implementation. Quite clearly, the guidance document on public participation relative to the Water Framework Directive specifies that "Public participation is not an end in itself but a tool to achieve the environmental objectives of the Directive" (EU 2002: 6). Moreoever, public participation is seen as *the* central element of the WFD planning process (European Commission 2003: 55) and a key success factor for the directive's implementation (Preamble 14 WFD). The Directive mandates successive six-year planning cycles that should ensure the iterative, participatory revision of planning structures and planning tools in the form of management plans and programs. These plans are supposed to be the main vehicles of policy implementation.

With the first planning cycle completed in 2009, however, the extent to which this 'mandated participatory planning' approach (Newig & Koontz 2014) has contributed to more effective environmental planning remains unclear. The environmental politics and governance literature certainly is ambivalent as to the instrumental value of participatory environmental decision-making (Newig & Fritsch 2009; Reed 2008), and the empirical evidence that might validate the claims of proponents is still lacking in the European context. Notwithstanding the expanding body of literature on WFD implementation, a rather traditional single case study approach seems to predominate. Comparative analyses that have been conducted between European Union (EU) member states, have examined political-institutional features (Bourblanc, et al. 2012), legal implications (Keessen, et al. 2010), or both (Liefferink, et al. 2011), and have used almost exclusively the lens of institutionalism to explain policy implementation. Empirical studies seldom extend beyond individual states, which limits the inclusion of significantly different contexts. The few papers that do apply cross-country comparative case studies tend to investigate very specific social process outcomes such as social learning (Mostert, et al. 2007, Borowski, et al. 2008). Only very rarely is a combination of social and substantive outcomes explored in the context of participatory policy implementation, such as plan quality and acceptance (Hophmayer-Tokich and Krozer 2008). Therefore, five years after the conclusion of the first planning cycle, the extent to which mandated participatory planning has advanced EU environmental policy implementation remains unclear.

3.2 Case selection and methodology

Our three case study member states (Germany, Northern Ireland, and Spain) were selected to cover variance in three key dimensions: Climatic, biophysical and natural contexts that contribute to different hydrological conditions and water management issues; institutional, political and legal contexts; and implementation structures and participatory processes given the different sub-national competent authorities responsible for WFD implementation. Despite variance along these dimensions, the selection of cases from within the EU aims to hold certain cultural-political factors constant. In particular, the European WFD context offers the advantage of a common timeframe and set of requirements for planning, implementation and reporting. In this way, participatory environmental governance under the Directive (and other EU environmental directives) constitutes a particularly apt testing ground and setting for comparative research.

Following an extended phase of desk-based research, drawing on published scholarly work on WFD implementation and grey literature from the EU, member states, and sub-national and cross-national planning authorities, we are conducting semi-structured interviews at multiple levels. An initial round of high-level interviews with competent authorities at national and regional levels initiated in October 2014 is now being followed by stakeholder and participant interviews at the level of localized, sub-basin planning processes, starting from February 2015. For the latter we identified at least two stakeholders representing opposing interests related to the most pressing problem within our case study areas. Currently, we have conducted 12 interviews (1-1½ h) with stakeholders and process organizers and 3 high level interviews (1-2 h) in the three case study sites we are presenting in this paper.

We performed a content analysis on the basis of the transcribed interviews structured in context, process, substantive output, social output and environmental outcome and impact (138 codes). We furthermore compiled information from all additional case material within these categories into comprehensive case descriptions. Through this standardized format we sought to identify all relevant factors linking the whole policy cycle from process design to effective implementation. For the substantive output, we analyzed the respective River Basin Management Plans and Programs of Measures and then sought to trace the measures proposed by each of the selected processes. When no concrete link was observed, we analyzed additional output documents, which were frequently produced separately. Plan or output quality was measured in four dimensions: targeting of main water problems, specificity of measures, naming of addressees and feasibility. The following case descriptions, then, outline key aspects of context, participatory process design, actual process, and results for the first WFD planning cycle.

3.3 Overview of the case studies

In the three case study countries, we selected cases (see table 1) from among the participatory processes at the sub-basin level that were most decisive in terms of influencing the river basin management plans or outputs.

Our three case study sites are therefore sub-basins: the Planning Unit *Elbe-Lübeck-Kanal Süd*³ located at the southern part of the northernmost German federal state of Schleswig-Holstein, the *Belfast Lough and Lagan catchment* in the eastern part of Northern Ireland and the *Miera and Campiazo Basins*, which are located in the east of Cantabria in Spain.

³ Henceforth the Elbe-Lübeck Planning Unit.

	Germany - Schleswig- Holstein: Elbe-Lübeck Plan- ning Unit	Spain - Cantabria: Miera & Campiazo Basins	United Kingdom - Northern Ireland: Belfast Lough & Lagan Catchment
Environ- mental status of sample basin	 River Basin District: Elbe Size of planning unit: 506 km² Water status for all waters classified as problematic Main pressures: connectivi- ty, diffuse pollution 	 River Basin District: Cantábrico Occidental Size of planning unit: 620 km² Water status in 67% of water bodies problematic Main pressures: diffuse pollu- tion, point source pollution, connectivity 	 River Basin District: North Eastern Size of planning unit: 1,005 km² Water status in 97% problem- atic Main pressures: diffuse pollu- tion, point source pollution, connectivity
Prior water governance regime	 Spatial focus on administrative boundaries Only limited possibilities for stakeholder participation 	 Long history of river basin governance under hydraulic and technical paradigm Participation possible, but mainly restricted to water us- ers 	 Spatial focus on waterways Possibilities for stakeholder participation limited
Gover- nance re- gime	 Legal responsibility: Ministry of Environment of Schleswig-Holstein Responsibility for planning and implementation on the ground transferred to Water Boards 	 Legal responsibility: River Basin Authority (RBA) Government of Cantabria organized own process for its catchments trough the Office of Hydrologic Participation in Cantabria (OHPC) 	 Legal responsibility: Department of the Environment Of Northern Ireland (DOE) Northern Ireland Environment Agency (NIEA) responsible within DOE for practical planning and participation

3.4 Germany – Schleswig-Holstein: Elbe-Lübeck Planning Unit

WFD implementation in Schleswig-Holstein was built on two rationales that influenced the planning process significantly: voluntarism and effectiveness. It was supposed that local knowledge would guarantee implementation capacity, and acceptance of measures by relevant stakeholders would increase acceptance by the broader public. Therefore, a model of local participation with far-reaching decision and implementation powers embedded into a system of checks and balances by the Ministry was chosen.

34 planning units, each with one working group, were established at the sub-basin level. So-called water boards, associations that traditionally represent the interests of land owners, chair these working groups by public contract, which also transferred the responsibility of concrete implementation. Due to the associations' resources and contacts they were expected to be crucial for achieving acceptance among important stakeholders (Bruns 2010) and, as such, link decision-making and implementation.

Further, it was assumed that effective WFD implementation and the achievement of good ecological status would only be possible by including relevant stakeholders early in the planning process. Thus, the working groups initiated planning relatively early, in 2002, with a few carefully selected stakeholders, and held meetings generally on a monthly basis.

The working group responsible for the Elbe-Lübeck Planning Unit reflects this close selection, comprising eight stakeholders: Water Board (2), Association of Towns and Municipalities, Farmers' Federation, Nature Conservation Association (2), Fishery Association, Local Water Authority and as invited guest the Water and Shipping Agency. Additionally, a representative of the Ministry without voting rights attends the meetings.

The main water management problems in this case are poor connectivity due to water flow regulations and hydromorphological alterations, and diffuse pollution from agriculture. As the Ministry relied on voluntary implementation, an important benchmark for deliberations was the implementability of measures. In this context, the Ministry provided information and expert advice, and the Water Board prepared – with the support of the association's engineer - and guided the meetings, elaborating proposals on measures, giving introductions and mediating conflicts. The process chair was highly regarded by all participants being seen as well suited for the task, highly committed and motivated.



Figure 4: Overview of the river basin management planning process in the Schleswig-Holstein case.

Process chair and stakeholders describe the communication mode within the working group as calm, constructive and cooperative throughout the process. Participants were actively involved in the discussion, which was described as almost conflict-free and without intense negotiations, and their input was perceived as constructive and useful for achieving WFD targets. Most of the measures were proposed by the Water Board and participants had the possibility to adjust them. However, the representative of nature conservation was involved in the elaboration of one concept including various measures, while one concept was developed by all participants.

The decision mode of the working group is consensus-based in order to guarantee its feasibility and ensure the acceptance of all stakeholders (Grett 2007). Exclusively in the absence of consensus, the Ministry has the right to intervene. However, only two decisions were referred to the Ministry. All in all, significant power was transferred to the working group as it was responsible for the designation of

water bodies and the identification of measures. Two conflicts that occurred with the Water and Shipping Authority and the Local Water Agency support this view: In both situations a binding decision was made even though the respective state agency was strictly opposed.

After decisions were taken, they were submitted to a federal state database. Within the final River Basin Management Plan and Program of Measures only general measure types were listed instead of these concrete ones. They also were not recorded in additional documents, although the meeting minutes give a detailed account of measures. The process chair always communicated the final output as well as its implementation status, including remaining challenges, to the working group. The Ministry, State Environment Agency, process chair and stakeholders all accept the output and are very satisfied with the working group's success and the quality of implementation. However, they admit that some technical and ecological challenges remain.

The high acceptance is rather surprising, in particular in the case of the nature conservation representatives. All measures address either connectivity or diffuse source pollution, although the latter to a much lesser extent. Consequently, all measures targeted the main problems of the sub-basin. Nevertheless, the measures failed to really address diffuse pollution, which puts rather high pressure on water quality in the planning unit, and focused only on connectivity. The implementability benchmark surely plays an important role, as the voluntary principle implied in most cases buying back land from farmers. A rapid rise in land values since 2007, due to the federal promotion of corn for biogas, was frequently identified as the main factor hindering implementation. Although the difficulty to buy land was openly thematized by the administration, the struggle to reduce diffuse pollution was not mentioned at all by stakeholders, even by nature conservation representatives. Stakeholders only focused on the success within the field of water flow regulation. Here, they achieved a considerable impact. Implementation of most of the measures, which started in 2010, has been completed. Within the scope of the RBMP for the second planning cycle a new inventory of water bodies was conducted. The results show that the number of natural water bodies increased from three to five, whereas the number of heavily modified water bodies decreased respectively (MELUR 2014). Moreover, the rivers are repopulated with trout. The water status, however, worsened in comparison to the first RBMP.

In terms of social outcomes, during the participatory process different learning processes occurred. Stakeholders improved their knowledge on technical water management issues and on the WFD and furthermore, the whole group learnt. Contacts between the participants intensified over time even though neither specific networks nor a common implementation project emerged at local level. Meetings are still characterized by an atmosphere of trust and mutual understanding.

A multiplier effect, in disseminating information and creating acceptance for measures among the wider public, seems to have occurred only to a minimal extent. On one hand, stakeholders did not perceive their role as reporting representatives for their entities and seem to have almost not used their contacts to agriculture – also the process chair and the representative of towns and municipalities have an agricultural background – in order to promote respective measures. The overrepresentation of agriculture within the group seems not to have been the main reason for the exclusion of the diffuse pollution topic, as no demands to do so were reported. It appears that the necessity to be seen to act reasonably, i.e. to decide on implementable solutions, was a major influencing factor, as well as the perception of success that emerged when observing the impact of measures within the field of water flow regulation in the real context – such as fish ladders or particularly the replenished fish stock.

3.5 Spain – Cantabria: Basins of Miera and Campiazo

The autonomous community of Cantabria in the north of Spain provides the interesting policy example of surpassing the basic requirements of WFD implementation. The majority of basins in Cantabria lie within the interregional river basin district of the *Cantábrico Occidental*, which is administered by its respective river basin authority (RBA). For such basins, which span across autonomous regions, RBAs are the competent authorities for WFD implementation in Spain. Irrespectively, the Government of Cantabria decided to implement an own participatory process in addition and complementary to the processes organized by the RBA. To this end, the Office for Hydrologic Participation in Cantabria (OHPC) was created within the Cantabrian Environmental Agency, to organize the processes.



Figure 2: Overview of the river basin management planning process in the Cantabria case.

The decision of the Government of Cantabria to design and organize its own participatory processes was according to the process organizer of the OHPC based on the concern that processes of the RBA would not be sufficiently local. In addition, the RBA is not highly trusted among the Cantabrian population and stands, furthermore, for a rather technical tradition of water management, whereas the government (newly elected in 2003), and the OHPC in particular, represented more the 'New Water Culture' – a new and important paradigm in the Spanish context at this time, which demanded a more holistic and integral view on water management (ISSTI, 2008).

The complementary participatory processes aimed to build legitimacy, as the main aims were to activate and include all potential stakeholders in the territory and elicit their opinion. One participant described the logic behind the process as "the search particularly for the social perception on the existence and relevance of problems" (Interview ENGO, p.6).

This logic was mirrored in the process design. Following an analysis of other participatory processes applied in Europe for water governance and the WFD, the OHPC initiated an extensive stakeholder identification process. While at the beginning of the planning cycle, sectoral meetings (i.e. involving only one stakeholder group) were held in each sub-basin, the OHPC did not consider this model sufficiently inclusive and initiated additional multi-stakeholder forums and also water forums open to the wider public in order to reach as many stakeholders as possible.

The processes in the Miera and Campiazo Basins started in 2008 and already comprised these three types of meetings. Apart from one official opening event in April, four sectoral meetings were held in May, six water forums from May to June and three multi-stakeholder forums in June in different catchments of the sub-basins. The aim of achieving a maximum of representation across the three sectors of economic, social and administrative actors, which even meant advertisements at strategic points such as churches and bars in the mountainous rural area of the basins, led finally to the participation of 644 persons and entities (Martínez & Fernández, 2010).

In preparation for the meetings the OHPC, together with the University of Cantabria, compiled all relevant information on water bodies and pressures in the sub-basins into an analysis document, which was supplied to all participants beforehand. In the upper basins, diffuse pollution is an issue due to agriculture, but even more pressing problems are point- and diffuse-source pollution by urban development and industry – in particular due to the capital city of Santander and its port in the north – as well as river flow regulation in the middle and lower sections of the basins.

The process was intended to achieve a collection and elicitation of information and proposals by stakeholders in the sectoral meetings and water forums, and subsequently a final consensus in the multi-stakeholder forums. According to both interviewees that attended the social and the economic sectoral meetings, those were not characterized by much discussion, as everyone agreed on main problems and generic measures.

Neither did intense discussion emerge within the water forums. Although the OHPC attempted to steer the meetings in order to produce a common view on problems instead of demanding local and individual stakes, the main aim of collecting as many opinions and proposals as possible undermined this attempt. The meetings sometimes developed 'an atmosphere of individual wish-fulfillment lacking collective goals or coordination' (ISSTI, 2008 p. 11). This meant, on the other hand, that equal possibilities to bring in one's opinion were always given; in large water forums, the OHPC for instance divided the participants into sub-groups in order that everyone could speak.

After the quickly-reached consensus in the sectoral meetings and the open input rounds of the water forums, the main clash between stakeholders played out in the multi-stakeholder forums, particularly in the last one that aimed for a final decision. Whereas facilitation and mediation were conducted by the OHPC in other meetings, this meeting used external facilitators. Categories of problems – as results of the foregoing meetings – were presented, discussed and finally voted on in terms of their urgency via a 'traffic light' system. Here, every participant, whether citizen or interest group representative, had one vote and 'consensus' was reached when more than 50% agreed. When the voting procedure was criticized by a representative of a large interest group, it was made clear that these were not final or concrete decisions or measures, but rather more of an idea map for further planning. Again, a common vision seemed to have been sometimes missing. Apart from discussions about major conflicts, such as that between economic interests related to the port and environmentalists, several additional minor conflicts emerged.

Following the prioritization of measures by stakeholders, the technical experts of the University of Cantabria carried out an analysis of feasibility and a selection of measures (ISSTI, 2008). The output is compiled in a document of 213 generic measures, which was published in 2010 (Martínez & Fer-

nández, 2010) and presented in 2011 at meetings in every catchment. The majority of measures target contamination caused by industry and urban development, followed by river flow regulation and measures to address the port. Yet, the very general character of measures must be highlighted. The measures lack not only concretization, but also bindingness in the sense of naming implementing addressees

The River Basin Management Plan produced by the RBA was published in late-2013, and includes all these measures, although within an appendix related to participation. No further explication on their integration into the actual Program of Measures is given, and there is no inventory of water bodies that would say something about the current water status or overall implementation status. According to the process organizer of the OHPC, many of the measures produced have not been implemented. Apart from the sometimes difficult coordination between RBA, Cantabrian Government and municipalities, two major external factors came to hinder implementation. First, due to the economic crisis of 2008/2009, it became clear already during the participatory processes that a lot of high-cost measures would not be implemented. Whereas it seems not very viable that the process to a halt. The OHPC was closed and no further participatory processes were organized in Cantabria for the second planning cycle.

Consequently, the impact of the participatory processes is difficult to assess. It seems that there has been no implementation of measures at all. Although the measures are very general and sometimes resemble a 'wish-list', they definitely addressed the main problems of the sub-basins. Had they been more concrete, some stakeholders, such as industry, would not have agreed on them and the OHPC had probably exceeded its competences – particularly considering a certain tension between both institutions (ISSTI, 2008). Therefore it is questionable whether there would have been a viable alternative to this general measure listing. It seems that the economic crisis, the change of government and the tensions between the government of Cantabria and the RBA were the main reasons behind the fact that the measure list was only included as an appendix to the plan with little or no chances of actual implementation.

Apart from this substantive outcome, however, some social outcomes did occur. Common understanding and trust building was not very strong during the process due to a lack of repeated interaction. Neither were there strong dynamics of network building. Nevertheless, stakeholders learned from laylocal knowledge. Even rather knowledgeable stakeholder representatives stated that they learned from the process, and OHPC was frequently surprised by the relevant knowledge brought in particularly by rural people. Apart from this individual learning, according to OHPC all participants learned considerably; especially in the sense of environmental education and on water issues. One representative even valued the exchange of opinions and related learning process as the most important output of the whole process.

Further, the mere fact of participating in forums and being able to express one's opinion was evaluated as a highly satisfactory and positive experience, even though it is not known what happened with the proposals. Yet, different levels of knowledge among stakeholders were identified as one major disadvantage, and more expert input during the meetings was demanded. Hence, the plain elicitation of laylocal and stakeholder knowledge might have been less useful than an on-going exchange of this type of knowledge with expert knowledge.

3.6 United Kingdom – Northern Ireland: Belfast Lough and Lagan Catchment

WFD implementation in Northern Ireland followed a largely uniform approach consisting of the centralized development of river basin management plans and programs of measures, accompanied by public and stakeholder consultation. The Department of the Environment (DOE) is the competent authority for WFD implementation in Northern Ireland, and the Environment Agency within DOE (NIEA) is the lead body organizing implementation. Of the three RBDs designated in Northern Ireland, only one, the North Eastern River Basin District, falls entirely within the country. The nationallevel Northern Ireland WFD Stakeholder Forum provides top-level stakeholder input into WFD planning, while consultation and involvement at the sub-basin scale is organized via nine Catchment Stakeholder Groups (CSGs), which were set up in 2007 and have met biannually since then. Finally, towards the end of the first planning cycle, 26 Local Management Areas were defined to aid implementation at the local level. The CSGs were envisaged as the main forum for encouraging active involvement in WFD planning, through which stakeholders would influence the process, and the authorities would tap into local knowledge (NIEA 2008).



Figure 3: Overview of the river basin management planning process in the Northern Ireland case.

The Belfast Lough and Lagan catchment is located within the North Eastern RBD. It is relatively highly urbanised, taking in the bulk of the Belfast metropolitan area, including surrounding commuter areas and some 530,000 inhabitants. The main waterway is the Lagan River, which flows 86 km through County Down and into Belfast Lough and the Irish Sea. The main pressures in the upper reaches of the catchment result from agriculture (dairy and beef farming) via effluent spills or runoff, and erosion and sedimentation. In the lower reaches point-source pollution (including industrial, sewerage, and urban wastewater spills) is the main pressure, while barriers such as weirs and culverts, i.e. connectivity, are also an issue.

The Belfast Lough and Lagan CSG met five times between September 2007 and the end of 2009. The roughly biannual meetings were hosted at different venues within the CSG area, and the group was chaired by several officials from NIEA over the period. Meetings were usually attended by between 20 and 30 stakeholders, with officials from NIEA and other government departments sometimes accounting for almost half of all attendees. Other participants included representatives from local angling clubs and the national angling federation, nature conservation and natural heritage groups, electricity generators, recreational groups and Northern Ireland Water Ltd. (the government-owned water company). The typical format of the meetings was for the authorities to deliver or invite one or two presentations on water management issues, monitoring efforts, or proposed measures or initiatives, and for these to be followed by questions and discussion. The rationale behind the CSG process was to consult with local stakeholders on issues and measures in the catchment, and to incorporate local knowledge and expertise into the planning process.

The meetings were open to the general public and all interested parties, but in practice citizens and community groups were hardly present. Participation of citizens or residents was very issue-driven – e.g. in response to a local sewerage leak – rather than on-going. Farmers were represented at some meetings, but farmers themselves were seldom in attendance. Their participation was hindered by the time of the meetings (7pm being too early for most to attend), and by the tone of the meetings, which was considered hostile towards farmers seen as the source of water quality problems. Aside from government officials and experts, most participants attended in their capacity as representatives of organized interest groups. Most active in their attendance and engagement were angling groups, which used the forum to lobby persistently for enforcement of existing rules and sanctioning of polluters.

NIEA reports that it was useful in developing and improving the RBMP. The first CSG meeting in 2007 discussed the significant water management issues identified in the 'Water Matters' report of the North Eastern RBD (Environment and Heritage Service 2007). Participants made specific comments from the floor, completed questionnaires, and used post-it notes on a 'talking wall' to submit comments. Written feedback was collected, and notes were taken by Agency staff, and fed into a 'digest of comments' (Environment and Heritage Service 2008), which was published and released back to stakeholders. The Agency identified local issues in need of attention, and reported back on progress at subsequent meetings in April and October 2008. The early 2009 CSG meeting addressed the draft RBMP for the North Eastern RBD. Again, comments and concerns were recorded and used by NIEA, according to the Agency, to improve the plan (NIEA 2009). The final CSG meeting in the first planning cycle, in late 2009, focused on strategies for implementing the RBMP in the local context, and discussed the creation of the Local Management Areas and 'Local Action Plans' to carry forward implementation. Participants of the CSG could later on comment on these Local Action Plans through special feedback documents.

Precisely how outcomes of the CSG process have fed into the River Basin Management Plan and program of measures, however, is not clear. This is, because the Program of Measures only lists generic measures for the whole basin, which are not specified for the Belfast and Lagan catchments. Certainly the CSG process did not produce a clear output in the form of a decision or a (sub-) plan, but rather produced comments and questions in response to draft documents offered by NIEA for consultation. The Local Action Plans for Lagan Local Management Area and the Belfast Lough Management Area, published in 2010 (NIEA 2010) and 2012 (NIEA 2012), describe all measures planned for each water body of the catchment, as well as implementing agencies and expected date of implementation. Most of the measures target pollution caused by industry, agriculture and organic sources – which can be induced by agriculture or domestic an private sewage – and therefore seem to target two of the main pressures of the catchments that are diffuse and point source pollution by agriculture, industry and urban development. Nonetheless, all of these measures and the vast majority of all additional measures contain exclusively further investigations and assessments or environmental education and advice – rather 'soft' measures. Particularly in the field of water flow regulation it is quite surprising that the main measure taken is to carry out an inventory of all existing river channels and bank physical structures. This represents a rather overdue step of engaging with the problem, in comparison to already applying measures of withdrawal of infrastructure or renaturalization. The support of local stakeholder groups in raising awareness in their area and with local projects is mentioned as a measure for every single water body, although not further specified. In addition, two meetings of the CSG per year are scheduled in the plans.

Assessment of the CSG process differs between NIEA and other stakeholders. Enthusiasm and engagement among stakeholders was generally higher earlier in the process, but some stakeholders appear to have become disillusioned with the process. Many felt there was limited scope for questions – let alone discussion and active participation – as meeting agendas were filled up with Agency presentations. CSG meetings were therefore not particularly deliberative and did not afford much opportunity for consensus building, learning, identifying common ground or developing mutual understanding among stakeholders. Some stakeholders cited frustration at the apparent lack of responsiveness of NIEA to their concerns and a perceived lack of influence on the planning process.

Nonetheless, several stakeholders cited other outcomes of the process. For NIEA a major benefit has been the bringing together of officials from the various responsible government agencies around local water management issues. For other stakeholders, the increased accessibility of important governmental and private sector actors via the CSG process has also been beneficial. Anglers, for example, cited the advantages of being able to speak directly with managers from Northern Ireland Water or with officials from the Rivers Agency. Perhaps the greatest advantage of the process for local stakeholders, however, has been the impetus it has given to already existing and new projects on the ground. Funding and support accessed via networks and relationships that emerged out of the CSG process were reported as having been instrumental in setting up and sustaining various projects (e.g. the Lagan Rivers Trust, the River Fly Monitoring Project, the Bog Meadows Nature Reserve). It is not necessarily the case that these projects would not have occurred without the CSG process, but interviewees claimed that the process had assisted to varying degrees. For some groups – e.g. anglers – the process has simply been an important avenue for lobbying NIEA on water quality. While these actors are not overly positive about the CSG process, they are keen to see it continue since it is their best direct line of access to NIEA officials.

Implementation of the North Eastern RBMP is on-going, and according to NIEA the focus of the second planning round will be on prioritizing and concretizing measures to target implementation in the Local Management Areas where issues are most pressing. Areas where there has been good progress – e.g. in addressing agricultural runoff through farmer engagement – tend to be already covered by other rules and plans, such as the Nitrates Action Plan, and are not easily attributable to the WFD process. The assessment of many stakeholders is that most of the measures included in the Plan were far too general and ambitious to be implementable, and that there is simply insufficient money and staff to implement them. The updated Local Action Plans, published in 2013 (NIEA 2013, 2013 b) draw a similar picture: although the majority of measures were targeted before 2013, only a small minority were marked as 'completed'. While there have been specific restoration and renaturalization projects in the catchment, water quality in the Lagan has not improved significantly, and pollution events and fish kills continue to occur quite regularly. The new inventory of water bodies show that the same amount of water bodies are in a problematic status, whereas some changed from bad to moderate and vice versa.

4 Cross-case analysis

4.1 Diversity of participatory process forms

What do we learn from the accounts of these local, participatory planning processes? First of all, we find a great variety of different process types across the three cases. Referring to the three dimensions of participation introduced in section 2, processes are varying in every respect (see Table 2):

- *Involvement of non-state actors:* Whereas in Schleswig-Holstein, small groups of less than 10 carefully selected stakeholders participated, Northern Ireland had larger groups of 20-30 participants based on open invitation, with Cantabria striving for extremely broad societal representation of participants, combining targeted invitation in sectoral and multi-stakeholder meetings with open water forums, with a total of 644 participants in the *Miera & Campiazo Basins*.
- Communication / collaboration: Consistent with the small groups in Schleswig-Holstein, communication was most deliberative in the *Elbe-Lübeck planning unit* with intensive collaboration on jointly drafting measures. Although the Cantabrian approach had to tackle a huge number of participants, there was nevertheless two-way information exchange (albeit without much discussion), whereas in Northern Ireland, despite the moderately sized groups, the process of the *Belfast Lough and Lagan catchment* was mostly restricted to information distribution and subsequent consultation with little interaction.
- Power delegation to participants: The Elbe-Lübeck planning unit was the only case in which stakeholders had a real influence on measures on the ground, to a degree close to local self-governance. In both the Miera & Campiazo Basins and the Belfast Lough and Lagan catchment, participant influence on planning was close to nil, although in Cantabria the local authority had made an effort to include measures in the plan, if only as an appendix.

We thus saw an intensive and collaborative small stakeholder group approach in Schleswig-Holstein with high power delegation, similar to a model of local self-governance "in the shadow of hierarchy"; a widely representative information gathering and vision building approach in Cantabria with some influence given to participants; and a much less intensive information-consultation approach in Northern Ireland with little opportunity to influence planning.

4.2 Environmental planning outcomes

When discussing planning outcomes, we distinguish outputs (agreements) from outcomes (action on the ground in terms of implementation and compliance) and impacts (actual changes in the environment). The WFD requires planners to produce River Basin Management Plans and Programs of Measures as the central vehicles for implementing the directive. While these were in fact produced in all case regions (albeit with considerable delay in Spain), our analysis suggests that these official plans are of little use for actual implementation of measures because they mainly remain too general and abstract to derive any concrete action on the ground. But what, then, is the policy output we are analyzing? All of the studied planning processes produced outputs more specific than official plans and targeting the local area of relevance. Below we will analyze such more detailed outputs together with official planning documents according to the criteria of targeting of main water problems; specificity of measures; naming of addressees and; feasibility of measures.

In the *German Elbe-Lübeck planning unit (Schleswig-Holstein)*, measures were developed that targeted the area of river connectivity, which was a main water issue in the area. This topic was covered in great detail and specificity. Concrete addressees were named (mostly the water board), and measures were obviously feasible, because almost all have already been implemented, subsidized almost completely with governmental funds, leaving to an increase in fish stock and general improvement of water bodies (more natural as opposed to "heavily modified" water bodies). Proposed measures were collected in a governmental-run database, giving them additional weight and transparency. Having said that, the other pressing issue – diffuse agricultural nutrient pollution – was completely left out.

In the *Spanish Miera & Campiazo Basins (Cantabria)*, the collected list of measures certainly addressed the main water issues. However, measures were not very specific, but rather reflected broad aspirations. Implementing addressees were not named. Although a feasibility check had been done through university, this was more in terms of "general" feasibility, less regarding the actual, short-term implementation of measures (in particular when compared against the *Elbe-Lübeck planning unit*). The River Basin Management Plan, which was not issued until 2013, has apparently not been informed by the list of measures developed in the Cantabrian participation process. Measures in the plan are general for all water bodies in the whole river basin. We find no evidence for implementation of these measures, which is likely due to contextual factors of economic crisis and overall lack of resources.

In the *Belfast Lough and Lagan catchment (Northern Ireland)*, generic measures were centrally drafted for the whole basin in the River Basin Management Plan and Program of Measures. Following up on these official plans, Local Action Plans were drafted in 2010 and 2012. They do, in principle, cover the important water issues in the respective area, but contain "soft" measures only, such as stimulating more research; awareness raising; consultation; and specifying the drivers of pollution (which is an exercise closer to an inventory than to actual measures). These measures did, however, address concrete stakeholders and are likely also feasible, but again, they do not directly target the relevant water problems. So fare, we see no evidence on implementation of measures.

4.3 Mechanisms linking process and outcome

Mechanism 1: Opening up of decision making to environmental concerns

In all cases, we find the involvement of environmental concerns into decision-making, embodied in particular by environmental NGO participation. Most notably in the *Elbe-Lübeck planning unit* – with 2 out of 8 participants from ENGOs – and in the *Miera & Campiazo Basins*, where environmental interests were proactively sought to participate, in line with the local "new water culture" as a countermodel to the dominating technical approach pursued by the River Basin Authority.

But did this environmental group participation benefit environmental outputs and outcomes? In our conceptual frame we identified two factors as enabling or potentially hindering effective outputs: advocacy by and co-optation of environmental groups. A third important factor possibly influencing on these is neutral mediation.

In the *Elbe-Lübeck planning unit*, both, advocacy and co-optation seem to have occurred. Regarding the issue of river restoration and river connectivity, the two ENGO representatives were quite active in supporting the issue that did in fact get treated comprehensively. On the other hand, the pressing issue of agricultural nitrate was not an issue at all. It does not appear unlikely that ENGO representatives were in fact co-opted into an agricultural frame that "tabooed" the issue. It thus seems that the collaborative atmosphere forbade ENGOs to pressure an issue that most other actors (agriculture, water boards) would obviously not welcome. Moreover, the water boards seem not to represent a neutral process mediator, as they usually have a stake in agricultural topics. The 'success' of constructive collaboration on river restoration thus seems to have come at the cost of sparing the arguably as important issue of nitrate. What supports this interpretation is the fact that ENGOs in Schleswig-Holstein

were not participating directly in the working groups did critically question the fact that agriculture and nitrate runoff was not touched (NABU 2010).

In the *Miera & Campiazo Basins*, environmentally oriented stakeholders contributed actively to shaping the list of measures, which was rather complete in addressing all relevant water issues. Comparing this with the *Elbe-Lübeck planning unit*, one could argue that the less collaborative atmosphere in the *Miera & Campiazo Basins* made environmental groups less prone to co-optation. In the end, however the whole "new water culture camp", composed of OHPC and pro-environment stakeholders did not succeed in integrating these concerns into the plan (only symbolically through appendix), due to a number of exogenous factors to the process, particularly the economic crisis and a subsequent lack of resources and the tensions between RBA and Cantabrian government. An additional endogenous process factor, not covered by our conceptual framework, appears to have been the lacking bindingness and 'wish-list character' of the output. Advocacy of environmental interests did not actually conflict with different stakes. Opposing stakeholders agreed on the priority list after they were assured about the not binding but merely symbolic meaning.

In the *Belfast Lough and Lagan catchment*, none of the participating groups appear to have had a significant influence on the planning documents. There seems to have been some conflict (resulting in "farmer bashing" through environmental groups), but this does not seem to have impacted on planning simply due to how the process was designed. Lacking power delegation to participants did not allow actual advocacy to occur.

Mechanism 2: Incorporation of environmentally relevant knowledge

The emergence of environmentally relevant knowledge, which leads to improved output quality, has been defined to depend on additional knowledge brought in by stakeholders, characterized by lay-local or expert knowledge.

In the *Elbe-Lübeck planning unit*, the most knowledgeable "stakeholder" arguably were the water boards, who were leading the participatory processes (but who are still non-governmental). They hold important lay-local, but also expert knowledge, as every measure was prepared with or revised by the association's engineer. Also ENGOs brought in their expert knowledge. In general, all local stakeholders were quite familiar with issues around particular water bodies and could provide some useful local information that certainly shaped the concrete and well-implementable measures.

In the *Miera & Campiazo Basins*, expert and lay-local knowledge was brought in by stakeholders, such as ENGOs or local groups. For instance, the thorough knowledge by mountain farmers or fishermen was repeatedly highlighted. Yet, there was at no point expert knowledge integrated into the discussions that scrutinized the proposed measures in terms of feasibility, such as in the *Elbe-Lübeck planning unit*. This missing exchange between expert and lay-local knowledge was also criticized by some stakeholders. It seems to be also reflected in the output. Although a feasibility check of proposed measures was conducted in the aftermath of participatory meetings, the priority list conveys the already mentioned 'wish-list character'.

In *Belfast Lough and Lagan catchment*, again due to the process design, there is little evidence of the role of stakeholder knowledge. The process seems to have been led mainly by expert knowledge, brought in by the administration.

Mechanism 3: Dialogue and deliberation

Within this mechanism, we assumed that dialogue and negotiation can lead to the identification of mutual gains, which might also be beneficial for the environment. An even more far-reaching factor would be the development of a common-good orientation due to deliberation.

Interestingly, none of the cases showed intensive dialogue or deliberation. In *Belfast Lough and Lagan catchment* this was once more not foreseen by the process design, as the main communication mode was consultation.

In the *Elbe-Lübeck planning unit*, collaboration was the dominant mode of interaction and arguably conducive for producing effective outputs. Nonetheless, as the main potentially conflicting issue was left out, a consensual atmosphere emerged, in which no open conflicts were voiced. Consequently, mutual gain identification was almost not necessary to reach consensus. Also deliberation did not take place in the sense of changing the views of participants towards the common good.

In the *Miera & Campiazo Basins* there was hardly any discussion or deliberation, let alone collaboration due to the process design. Due to the aggregation of all measure proposals – apart from those contradicting the WFD – an emerging discussion potentially leading to mutual gain identification was foreclosed. Further, a lack of common good orientation was in fact observed. Some of the groups were simply too large for intensive deliberation, which leads us to detect a trade-off between broad representation of stakeholders and the possibility for effective joint deliberation.

Mechanism 4: Acceptance, compliance and implementation

Regarding acceptance and subsequent enhanced implementation we identified to main factors: the reflection of stakeholder interests in the output and the perception of a fair and legitimate procedure. The latter can be further split into different conditions (equal chance to have a say, transparency of the process, open communication structures, early participation, consensus vote and neutral as well as professional moderation). We suggested further that all these fairness sustaining conditions are none-theless only effective if actors can actually impact the decision.

In the *Elbe-Lübeck planning unit*, it is quite evident that the self-drafted measures were in fact accepted by stakeholders, and subsequently implemented. Both, the reflection of interests in the output and a fair as well as legitimate procedure, can be found to have fostered acceptance and subsequent implementation. Stakeholders praised particularly the consensus vote, even if this meant in a few occasions to agree on less favored options. Also the early and persistent participation was stressed in this context. An additional factor not mentioned in our theoretical scheme, which was repeatedly brought up, was the possibility to see tangible results. All participants seemed to be highly satisfied with their decisions as they could observe the actual results on excursions. Connectivity problems lend themselves for this, as all related measures mean usually a reduction of infrastructure or the construction of new, more sustainable one. This might be another explanation for the exclusion of diffuse pollution from the agenda, as several related measures such as controlled drainage or changed management practices are not as easy to note.

In the *Miera & Campiazo Basins* and *Belfast Lough and Lagan catchment* there was no actual integration of stakeholder interests into the output and, further, in the *Miera & Campiazo Basins* none, and the *Belfast Lough and Lagan catchment* minimum implementation. Yet, something surprising happened. Acceptance and stakeholder satisfaction was almost exclusively related to the participatory process. The stakeholder valued the Cantabrian process as very fair and legitimate, in particular due to the equal chances to have a say (and especially the first time to have a say), open communication structures, a neutral mechanism for consensus reaching as well as neutral moderation. Although everyone knew that the produced priority list was not actually part of the plan and had not been implemented, they were highly satisfied with the process and even assured that they would participate again.

In the *Belfast Lough and Lagan catchment*, acceptance of output was also hardly an issue. The main dissatisfaction was expressed regarding the process. Concerning implementation on the other hand, networks of local actors did take the initiative for local actions, partly supported by the government.

This may in part have been due to the stakeholder meetings, but rather in the sense of creating additional venues than the official output to achieve the inclusion of ones interests.

Table 2. Overview	of case	study	processes.
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	Germany - Schleswig-Holstein:	Spain - Cantabria: Miera &	United Kingdom - Northern
	Elbe-Lübeck Planning Unit	Campiazo Basins	Ireland: Belfast Lough & Lagan
	-	-	Catchment
Organisational Unit	Organised in 34 sub-basins	Organised in 8 sub-basins	Organised in 1 Catchment and 2 Local Management Areas
Main forum	Working Group	 3-tier approach: sectoral meetings for specific stakeholder interests, open water forums, multi-stakeholder meetings 	Catchment Stakeholder Group
Process organ- iser/ chair	Local Water Boards	Department for participation within Cantabrian Environmen- tal Agency	Northern Ireland Environmen- tal Agency (NIEA)
Timeframe	Monthly meetings (2002-2009), still convening on less frequent basis	Overall 14 meetings in summer 2008, distributed over enclosed catchments	5 meetings between 2007 and 2009 (on a biannual basis)
Participant Selection & representation	Targeted selection of 8 partici- pants representing the water board, municipalities, agricul- ture, nature conservation, fish- eries, local water authority, (Ministry representative with- out vote)	Open invitation (water forums), targeted invitation (sectoral & multi-stakeholder meetings); overall 644 participants repre- senting main stakes	Open invitation; 20 – 30 participants represent- ing angling, nature conserva- tion, natural heritage, agricul- ture, recreation, electricity, water works; overrepresentation of agency staff
Public outreach	Limited; no citizens involved; few publications	High: intensive invitation and inclusion of citizens	Medium low: Citizens were formally invited but only spo- radically involved
Communication structure	Deliberative setting	Two-way information exchange	Information distribution with consultation
Decision mode	Consensus	Majority vote	No decisions taken
Decision scope	Binding decisions on measures on the ground	Non-binding vision-building: collection of priority measures	Commenting on suggestions of the agencies
Output	Decisions on app. 20 priority measures; mainly concerning connectivity	List of 213 measures collected from stakeholders and assessed for feasibility by technical experts; measures included in official plan as an appendix	Comments on agency sugges- tions and draft plans and Local Action Plans; influence of these comments remained unclear
Implementation	All measures were implement- ed	Hardly implemented; implementation gap: lack of resources (crisis), change of government	On-going; implementation gap: lack of resources
Social out- comes	 Stakeholder learning Empowerment Trust building Acceptance Envisaged function of multiplying the outreach was not met 	 Some trust building Empowerment Mutual learning Acceptance Some network building 	 Some participants became disillusioned during pro- cess Few opportunities for learning or empowerment Network building

5 Conclusion

The implications which can be drawn from our case studies are two-fold: on the one hand, they shed light on planning modes in EU policy and on the other hand on specific conditions of participatory processes, which impact independently or in the combination of other conditions on the substantive output and outcome as well as social outcomes.

Regarding policy planning modes, our preliminary findings shed light on the variety of experiences in participatory water governance under the European WFD. We find that in all cases planning documents were actually produced, although not always on time. In all cases, however, these documents did not appear to play the decisive role envisaged by the Commission – many actually remain quite descriptive and somewhat vague about measures to be taken. In all of our three cases, however, additional outputs (database, suggested measures, Local Action Plans) that guided or were supposed to guide subsequent implementation were produced, but often bypassed the official EU planning process. Including further mandated participatory planning, we found an increasing quality of these additional outputs with increasing intensity of local participation. On the downside, the model of local collaborative governance in 'the shadow of hierarchy' of Schleswig-Holstein nevertheless suggests co-optation of environmental groups to have somewhat weakened environmental outputs. Subsequent implementation also occurred exclusively within the Schleswig-Holstein model.

We found, further, factors that influenced the environmental quality of outputs and effective implementation within our three case studies. These could be derived from our conceptual framework of four mechanism clusters. In addition, we found that the combination of factors played an important role, sometimes also with additional internal or external factors, which were not covered by the theoretical frame. There had been, for instance, important advocacy of environmental interests in two cases, but in one case lacking bindingness of input weakened this advocacy. Likewise, mutual gain identification and common good orientation could not emerge simply due to missing conflict (excluded by the process design or by issue selection) that hindered intensive dialogue or deliberation.

Other factors were in line with our mechanisms, such as the importance of lay-local and expert knowledge. Here, the key point seemed to be an equal exchange of these knowledge types. As mentioned above, we could also find co-optation of environmental groups because of missing neutral mediation. These findings indicate the importance of the process design for effective participatory planning.

Finally, the reflection of stakeholder interests in combination with perceived process fairness and justice enhanced acceptance and subsequent implementation. Yet, in this context, two case studies yielded that stakeholder acceptance seems to be rather related to processes than to outputs. Surprisingly, the claim of literature that rules of fairness are only effective if actors have the chance to actually impact on final decisions was entirely contradicted by one case study. Apart from substantive outputs and impacts, local participation has led in all cases to important social outcomes, be it collective learning, empowerment or the formation of networks and alliances conducive to improved implementation.

Given the variety of (often conflicting) findings to be found in the continually expanding crossdisciplinary literature on participation in environmental politics and governance, we suggest that our multi-level paired case study design stands to yield novel insights into the relationship between participation and effectiveness of environmental governance, as well as the factors upon which effective participatory planning and governance are contingent. The case studies offered important indications about the conditions under which mechanisms linking participation and environmental outcomes are effective.

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