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**Marie-Curie Research-Training Network GoverNat:
Multi-level Governance of Natural Resources:
Tools and Processes for Biodiversity and Water Governance
in Europe**

UFZ-Discussion Paper

5/2008 – GoverNat 3

August 2008

WP1: Analysing Multilevel Water and Biodiversity Governance in their Context

Report

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“Multi-level Governance of Natural Resources: Tools and Processes for Water and Biodiversity Governance in Europe” (GoverNat)

Objectives

The **overall objective** of GoverNat is to develop new solutions for multi-level environmental governance and to facilitate their use by decision makers in an enlarged EU. The **central research objective** is to test the hypothesis that certain participatory processes and analytical decision tools are particularly useful for improving multi-level environmental governance. **Specific research objectives** therefore address the enhanced understanding of multi-level governance of natural resources, the development of methods of public and stakeholder participation to be used in such contexts, the effective utilisation of specific analytical decision tools in multi-level governance, and the reflective evaluation of such use. These four tasks are necessarily interdisciplinary. The **central training objective** is to give 9 doctoral and 3 post-doctoral fellows an interdisciplinary training 1) in research on environmental governance, particularly of biodiversity and water, in Europe, and 2) in designing legitimate and effective solutions for communication between policy makers, scientists and the public in science/policy interfaces.

Consortium

1. UFZ – Helmholtz-Centre for Environmental Research, Germany (F. Rauschmayer);
2. ECOMAN - Ecological Economics and Management, Lisbon, Portugal (P. Antunes);
3. NERI - Danish Environmental Research Institute, Copenhagen, Denmark (M. S. Andersen);
4. SRI - Sustainable Research Institute, Leeds, United Kingdom (J. Paavola);
5. ICTA – Institute for Environmental Science and Technology, Barcelona, Spain (S. van den Hove);
6. CSWM – Centre for the Sustainable Water Management, Lancaster, United Kingdom (W. Medd);
7. UStutt - Institute for Sociology, Stuttgart, Germany (O. Renn);
8. IF - Institute of Forecasting, Slovak Academy of Sciences, Bratislava, Slovak Republic (T. Kluvánková-Oravská);
9. IELM-SIU - St. Istvan University, Budapest, Hungary (G. Pataki);
10. IREAS - Institute for Structural Policy, Slovak Republic (V. Chobotova).

Characteristics

- EU Marie Curie Research Training Network with 9 doctoral and 3 post-doc fellows
 - Duration: 4 years (10/06 – 9/10)
 - Doctoral fellows: 4/07-6/10
 - Post-docs: 7/07-1/10
 - 10 partners and several praxis affiliates in 9 European countries
 - Coordination: Helmholtz-Centre for Environmental Research – UFZ (Dr. Felix Rauschmayer)
 - Total contribution of European Commission: 2.4 Mio €
- Links water and biodiversity, participation and decision tools in a governance perspective

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1 Introduction

The overall objective of the Marie Curie Research Training Network *Multi-level Governance of Natural Resources: Tools and Processes for Water and Biodiversity Governance in Europe* (GoverNat) is to develop new solutions for multi-level environmental governance and to facilitate their use by decision makers in an enlarged EU. Research to be conducted by the GoverNat fellows tests the general hypothesis that certain participatory processes and analytical decision tools are useful for improving multi-level environmental governance. The central training objective of GoverNat is to give 9 doctoral and 3 post-doctoral fellows an interdisciplinary training in 1) research on multilevel environmental governance, particularly of biodiversity and water, in Europe, and 2) designing legitimate and effective solutions for participation and communication between the policy makers, scientists, and other involved and affected parties.

The methodological novelty of GoverNat lies in combining (1) multidisciplinary training, (2) interdisciplinary research, (3) transdisciplinary case studies, and (4) an integration of these three elements. GoverNat's analytical framework will be used as a starting point by all GoverNat fellows. The framework guides analysis to systematical characterization and assessment of experiences in multi-level governance of water and biodiversity by combining concepts from economics, political and legal sciences, as well as from ecology, hydrology, philosophy and sociology. A tentative version of shared framework was drafted as a part of the process of developing proposal and work programme for GoverNat.

The central task of GoverNat's Work Package 1, *Analysing Multilevel Water and Biodiversity Governance in their Context*, was to elaborate the analytical framework and to ensure that GoverNat research focuses on issues that are perceived to be of highest value added in terms of policy significance and academic merit. The work package has been lead by the Sustainability Research Institute, School of Earth and Environment, University of Leeds, but all GoverNat partners have contributed to the development of analytical framework. This document reports on the activities conducted as part of the Work Package 1, and describes the revisions to the draft framework that are warranted in the light of the completed activities.

The Description of Work identified the following specific tasks of WP1:

1. Analysing the specific research context of governance of natural resources. This task was undertaken by senior scholars of the GoverNat partnership. It involved the preparation of 3 framework papers that examined the key aspects of the research problematic on the basis of most recent academic literature.
2. In-depth interviews with scientists, stakeholders and decision makers involved in past cases. This task was undertaken as a series of consultations with participants of environmental governance processes. The task was completed by the GoverNat early stage and experienced fellows under the supervision of senior scholars.
3. Comparing specifics along the analysis framework. This task was undertaken by all senior partners in the context of the Leeds and Lisbon Schools and Workshops, and by the Sustainability Research Institute team in conjunction with the writing of this report.
4. Report on governance of natural resources in two new member states in Central Eastern Europe (CEE) (referred to as 'CEE report'). This task was undertaken as a review of most recent published and grey literature complemented by personal consultations by the Institute for Forecasting, Slovak Academy of Sciences, and IREAS.
5. Insert analysis knowledge for project integration (month 34-40). This task will be undertaken in the end of the project and will not be reported on in this document.

In what follows, the next section will report on the key conceptual implications for the analysis of multi-level governance of natural resources that have arisen from the preparation of framework papers. The third section then reports on the results of the consultation process and the survey of experiences in the CEE countries. The fourth section will discuss the implications of the results of tasks 1 to 5 to the analytical framework of GoverNat. The fifth section outlines the research programme that emerges from the individual research projects of the GoverNat fellows. The final section identifies the implications of the tasks for the future training programme of the GoverNat.

2 Multi-level governance of natural resources

Environmental governance is in many ways a concept not unlike ‘sustainable development’: it means different things for different people. For some, governance in general refers to new ways of achieving social objectives in which states do participate but do not necessarily play a leading role (e.g. Rhodes 1996; Stoker 1998). To others, environmental governance relates to all institutional attempts for addressing environmental dilemmas (Davidson and Frickel 2004; Paavola 2007). The World Bank defines governance as ‘the traditions and institutions by which authority in a country is exercised for the common good. This includes (i) the process by which those in authority are selected, monitored and replaced, (ii) the capacity of the government to effectively manage its resources and implement sound policies, and (iii) the respect of citizens and the state for the institutions that govern economic and social interactions among them’ (World Bank, 2008). However, governance today moves beyond the concentration of the formal institutions and policy making processes of states and governments which is emphasised in the World Bank’s definition. Therefore, environmental governance now includes private partners and civil society, including NGOs and shows a multi-level reallocation of powers both upwards to supranational organisations and downwards to sub-national levels (Bache and Flinders 2004).

Whichever standpoint towards environmental governance is adopted, one observation is clear: in the past several decades, the range of institutional measures used in Europe for environmental governance has broadened, and as a result the institutional framework for environmental governance has both thickened and become more complex (Jordan 1999). Given the inflationary use (Watson 2005) and multiple interpretations (Kjær 2004) of the term governance, we refer here by environmental governance mainly to the establishment and implementation of EU policies in the union and the member states.

A key contribution of the political science literature to research on environmental governance is a distinction between specific governance interventions or ‘governance frameworks’, and broader ‘governance regimes’ which encompass all rules and norms that steer governance actions. For example, the Birds Directive and Habitats Directive are institutional frameworks for the governance of biodiversity in Europe, but governance regimes for biodiversity in Europe include far greater number of formal and informal institutions. These range from international conventions such as CITES to Water Framework Directive and Common Agricultural Policy of the European Union to cultural customs specific to sub-regions in member states (e.g. Baker 2003). This distinction acknowledges the ubiquitous interplay between different sets of institutions and reminds us of multiple causation of governance outputs, impacts and outcomes.

The EU definition of governance indicates what good governance should look like rather than who is involved and how, thereby leaving the implementation open for multiple solutions:

‘governance means rules, processes and behaviour that affect the way in which powers are exercised at European level, particularly as regards openness, participation, accountability, effectiveness and coherence’ (European Commission 2001). In general terms, governance occurs in three broad ways, which can be combined in any particular set-up:

1. top-down methods that primarily involve governments and the state bureaucracy;
2. the use of market mechanisms whereby market principles of competition serve to allocate resources while operating under government regulation;
3. networks involving public-private partnerships (PPP) or with the collaboration of community organisations (adapted from Thompson et al. 1990) .

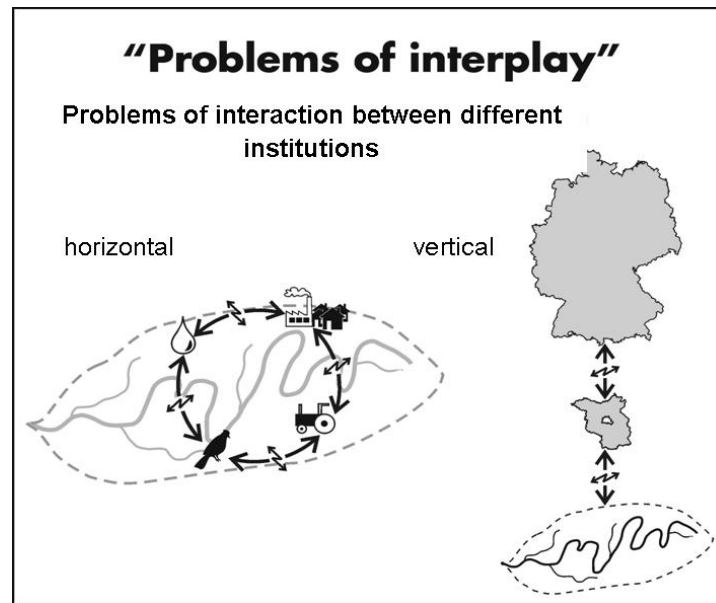
With regard to the question of how institutions and mechanisms of governance come into being there is the implicit assumption of an overarching organising power (the state, the market or evolution) that puts them in place. If this assumption is questioned, an additional dimension of governance is opened up: political processes of rule making. Governance then includes the creation, maintenance and transformation of social forms of organisation through interventions in and modulation of existing patterns of interaction. These rule shaping processes (e.g. public policy or organisational management) are institutionally structured themselves (Voß 2007).

These findings highlight the importance of considering the broader governance regime for biodiversity and not just the key EU directives on biodiversity. Conflicts in a number of member states over site designations in the 1990s had in part to do with a governance practice which omitted the relevance of institutions other than the Habitats Directive and Birds Directive, as well as the effect of markets. Markets generate development pressures which compete with preservation interests over space, something which was at the root of a conflict over the designation of the Humber Estuary in the UK, for example (Gibbs et al. 2007). These conflicts also highlighted the central role of scales in environmental governance. The narrow governance frameworks put in place were adopted at a European level and involved a one-way, top-down implementation process. Failure to engage multiple levels was another reason for the ensuing conflicts. The implementation experience to date suggests that multiple scales have gradually become engaged and that this has also brought into play a broader range of institutions that have de facto impact on the governance of biodiversity in Europe. This is why GoverNat explicitly deals with *multi-level* governance (MLG).

Water and biodiversity governance present challenges in common with multi-level governance of other natural resources:

1. high levels of uncertainty in these complex natural and social processes;
2. legitimacy of adopted institutional processes and of their consequences;
3. new modes of governance generate social dynamics;
4. costs of governance processes, policy implementation, and failed decisions.

As indicated above, they are also characterised by interdependence across spatial scales and by interactions with other policy fields (on vertical and horizontal interplay, see Figure 1).

Figure 1: **Problems of interplay** (from Moss, 2003)

As a consequence of these challenges, traditional disciplinary approaches and regulatory decision making can only suggest partial solutions for governance. For example, the economic theory of federalism sheds light on the optimal level of decision making and the theory of welfare economics provides estimates of the costs of different measures. However, these economic approaches ignore legal and social justice implications of nested decision procedures in multilevel governance. Recent political science theories analyse joint decision making, but they fail to identify improvements to current practices that would address the four challenges identified above. Networked governance (Jordan et al. 2003; Jordan and Schout 2006; Williamson 1979 and 1991; Stoker 1998; Jones et al. 1997; Goodwin 1998; Gulati 1998), heterarchic governance (Pülzl and Rametsteiner 2002), meta-governance (Jessop 2002 and 2004), and other new forms of governance demand co-ordination between policies, the public and science. Moreover, governance processes are highly complex and encompass different and interwoven levels (Heinelt et al. 2002).

As a consequence, of these developments, the analysis of governance requires contributions from several disciplines. Only an interdisciplinary approach integrating e.g. institutional economics, natural and political sciences, law, sociology and philosophy can generate a break-through in research and improve multi-level governance of natural resources. GoverNat aims to contribute to this break-through by studying MLG processes as they are taking place in real-life settings in Europe.

3 Consultations and CEE report

In order to ground the GoverNat research on MLG practice, and thereby to improve its relevance, consultations with key informants in water and biodiversity governance were carried out at the start of the project (WP1 task 2). Consultations with key informants highlighted issues where administrations have difficulties implementing water and biodiversity policies, in particular the relevant EU Directives: the Water Framework Directive, the Habitats Directive and the Birds Directive. The latter form the legal basis for the Natura 2000 network of protected

areas. In addition, an in-depth study of multi-level governance issues in Poland and the Czech Republic was carried out (WP1 task 4).

3.1 Data collection and analysis

Consultations with key informants in water and biodiversity governance were conducted by the GoverNat early stage and experienced fellows under the supervision of senior scholars.

Consultations took the format of semi-structured interviews following the guidelines distributed to all researchers (Appendix 1). Consultation questions focused on:

- positive and negative personal experiences of consultees regarding multi-level environmental governance. More specifically, the questions probed the multi-level nature of the experienced problems, interactions and conflicts between levels, views on the current priorities and challenges, and views on the future priorities and challenges.
- views on the role of participation in the governance of biodiversity and water in Europe. In particular, the questions probed who in the opinion of consultees had participated and to which degree, and whether that participation had been useful in their opinion.

A total of 49 interviews were carried out. The majority of consultees worked in different parts of public administration, many for an NGO, and some in academia. No members of the general public or their representatives were interviewed, nor employees of private companies¹. Most interviews were carried out in the fellows' country of origin or residence, including in the Czech Republic, Denmark, Finland, Germany, the Netherlands, Portugal, Serbia, the Slovak Republic, Spain and the United Kingdom. Most consultations comprised a general discussion on participation and implementation of the EU directives. Relatively few consultations dealt with a specific project. Most consultations focused on local and regional levels of governance, especially with the implementation of water and biodiversity policies at the local and regional levels.

The data for the in-depth study of multi-level environmental governance issues in Poland and the Czech Republic was collected by the GoverNat partners in the Institute of Forecasting, Slovak Academy of Sciences, and IREAS as a desk-study relying primarily on secondary data such as academic literature and other publications, project documents, and internet resources. A few experts were also consulted in order to access internal publications or statistics. The choice of the countries was motivated by their relatively similar resource characteristics but distinctive historical development of institutions for biodiversity management. Data collection was based on a list of general guidelines and research questions. They were aimed at analyzing the determinants, effects, and processes of institutional change in the two case study countries and their impact of biodiversity governance. The guidelines were organized around themes of democratization, decentralization, market emergence, and EU integration. The analysis covered the period from 1990 to present with a short summary of the situation prior to 1989.

3.2 Findings from consultations

Fact finding tasks such as the WP1 consultations cannot distinguish between a genuine problem and the opinion of the respondent of the problem. The way a problem is seen is shaped by beliefs, engrained patterns of behaviour, world views, roles in decision-making processes, culture and so on. While consultees clearly do have different views on MLG and participation, they do not often say explicitly what they mean by participation (in terms of who is involved and how are they involved) or how they think it ought to take place (who should be involved and in what manner). The following insights were thus derived mostly by 'reading between the lines' of

¹ although some state forestry organisations operate with the logic of a private company

the summaries of consultations. This is a first step in understanding the actors and in attributing meaning to this understanding: the art of interpretation is unavoidable in social science research (Weber 1949).

3.2.1 Culture and institutions

From consultation reports it can be concluded that national, and sometimes regional, culture and history play an important role in explaining MLG and participation in MLG. Differences in culture and history concerning MLG are related for example to:

- general governance culture, e.g. its predominantly hierarchal or egalitarian nature;
- previous experience with MLG as opposed to top-down governance by the state;
- dominant views on appropriate level of civil society involvement;
- discourse on public participation, e.g. framing it as ‘cooperation’ rather than as ‘participation’, which shapes the perceptions of MLG.

These general aspects of environmental governance could perhaps be summarised as ‘decision making culture’. Typically the scholarship distinguishes between adversarial, fiduciary, consensual and corporatist decision making cultures.

The impact of existing organisational structures on MLG was also highlighted in the consultations. For example, the additional administrative layer in the Federal Republic of Germany creates additional challenges for water governance. The federal level is responsible for reporting to the EU, but the states have to incorporate the Directives in their law, and they have done this in different ways. This makes it more difficult for the NGOs to share procedural information on how to respond to administrative requests. For the public administration it means that coordination within one river basin is more complicated and raises problems resembling international transboundary basin issues. Cooperation across international borders also becomes more difficult when there are no comparable structures on the other side of the border. This is the reality between the Netherlands and Germany, for example.

Some legal barriers to successful water and biodiversity governance were also identified. Depending on the country, these consist of 1) limited possibilities for legally binding agreements, 2) legal rights and obligations dominating choices to the exclusion of voluntary involvement, and 3) the need to change existing mind sets. The second barrier is relevant for example in the Netherlands, where national procedures require proof of effort but EU Directives requires attainment of goals. While legal rights to be consulted and to file complaints give possibilities for the involvement to non-state actors, the costs of legal action can be prohibitive, and they often fail because of formal mistakes. This results in limited involvement in practice, especially when formal complains need to be underpinned by detailed and extensive technical documents.

3.2.2 Participation in MLG

The term ‘participation’ can include the participation of everyone who is contributing in any way to MLG, such as actors from different sectors and levels of public administration, private companies, NGOs, representatives of the general public, and the so-called stakeholders. In a narrower sense participation is often interpreted as ‘public participation’ or the participation of ‘the general public’, ‘the people’ or ‘citizens’. In another way, participation can be interpreted as “stakeholder participation”. Here it needs to be clear what stakeholder means. For example, in the broadest interpretation of stakeholders, as those individual and non-individual actors influencing and concerned by a decision, stakeholder participation can be the same as public participation mentioned above. Most interviewees used these understandings of participation

interchangeably, but tended to emphasise their interactions with other public agencies and powerful organised stakeholders as this takes up most of their time and energy. Therefore, a detailed analysis of MLG would need to look at different participants within the different categories, as none of them is homogenous. It is clear from the consultation reports that each of these groups brings its own problems when they are included in a participatory process.

The general public

According to the consultation reports, the involvement of the general public in natural resource management is often limited to receiving information or helping to implement plans e.g. by cleaning up a river, even when procedures are in place for deeper involvement. Some of the consultees believe that public agencies are already democratically legitimized. Therefore, they act in the public interests and do not need to involve the public in their decision making, although they might use participatory processes to facilitate data collection. For other consultees, members of the general public are unsuitable as participants because they do not have the necessary technical skills and knowledge. These views can reflect the lack of political will to engage in more extensive participatory processes, but they can also reflect actual demands of full participation in some contexts. Other consultees recognise that especially at the local level the general public can contribute to better and more legitimate decisions. Local projects may be small in scope but they result in something concrete and help to engage the local actors. Appealing to the emotional ties people have with their environment is seen as way to start a participatory process at the local level. There was a general feeling amongst the consultees that it is the easiest to involve the public at the local level, because people are interested in developments that affect their lives directly. Specifically, the WFD river basins were identified as being too large to generate a general public interest for participation.

Generally it was felt that involving the public directly will increase the quality and legitimacy of decisions. However, even with this kind of positive attitude towards involving the general public, difficulties were experienced in the integration of their opinions and knowledge. This indicates that there is a need to improve existent participatory processes.

NGOs

Representatives of the NGOs amongst the consultees consider that they have insufficient human resources and knowledge to participate effectively. On the other hand, they also consider themselves to have a privileged position because their views are sought by the public authorities and because they can exert influence by working together as NGOs. In order to be able to act effectively, they need to be aware of the alternatives that have not been presented. The NGOs feel that frequently they are not able to obtain the required level of information absent alternatives. Some consultees representing the public sector had a rather negative attitude towards the NGOs, considering them too forceful and single-issue oriented. However, the participation of NGOs is also appreciated, especially in their role as intermediaries between the public administration and the general public.

Stakeholders

Strictly speaking, all participants in a participatory process have a stake in its outcome, not least the organisers of the process, but the term 'stakeholder' is often used in a narrower sense to refer to organised interests such as water companies, private landowners and forestry companies. These actors are seen to be effective and influential lobbyists. They are considered to have the capacity to obtain favorable solutions by bypassing organised participatory processes if they feel they need to. This can also be a problem for water and biodiversity governance.

3.2.3 Horizontal and vertical interplay

Interestingly, the consultees representing public administration reported that they experience frequent difficulties when working with other sectors or levels of public administration. This situation arises because there is a need to integrate several (competing) agencies and authorities within a state when addressing specific environmental issues. One significant aspect of state-oriented decision making cultures is the dominance of intra-administrative concerns – this was highlighted by consultations with civil servants (see also horizontal interplay in Figure 1). These views highlight the problems that arise as a result of a lack of coordination between different policies. In particular, the implementation of water and biodiversity policies is often in conflict with strong economic interests. These kinds of conflicts surface particularly when implementation reaches the local level where concrete decisions have to be made. The consultees consider intra-administrative issues as important barriers to water and biodiversity governance.

Power relations between levels of public administration are another source of difficulties for the implementation of the EU directives (vertical interplay, Figure 1). A ministry could refuse to fund regionally agreed solutions because the hierarchical decision making procedures were not adhered to, or the implementation of regional water bodies might be blocked by national and municipal authorities who do not want to give away their accustomed authority. A few consultees also indicate that sometimes powerful stakeholders successfully bypass existing participatory processes and directly lobby decision makers in order to influence choices.

As well as having to compete with other policies, the interviewees also mention as an obstacle the lack of implementation of existing natural resources management provisions, for example those on agricultural pollution, illegal abstraction or logging. The failure to implement existing regulations and provisions may be due to a lack of political will. Lack of political will may also manifest as a denial to fund environmental organizations or actors. For example, the new Portuguese regional water bodies are not funded by the central government and need to raise money from water tariffs instead. The implementation of water tariffs is in turn blocked by the municipalities who are traditionally powerful actors in water resources management. This leaves the new water bodies without financial means to fulfil their legal obligations. Lack of funds for compensatory payments is also indicated as a barrier to biodiversity conservation. Finally, many consultees recognise that organising a participatory process requires special skills and financial resources, both of which are often lacking in government bodies. The consultees also find a more profound problem with the applicability and acceptability of different participatory approaches to different actors.

Comments about the influence of the EU regulation on the national level suggest that European directives are a major driver of national action both technically, e.g. to increase monitoring, as well as procedurally, e.g. to increase participation. However, EU directives can also have negative effects if they are less strict than the existing national regulations, or if EU subsidies are made available even when EU regulations are not complied with. In terms of integration of the EU directives with existing national regulation, policies and customs, some consultees find the WFD adaptable to local needs but others think that it does not recognise different realities when it imposes general rules applicable to all member states. While the whole current administrative set-up does not need to change, the WFD increases the need for coordination between levels and between departments.

3.3 **CEE report: MLG in Poland and Czech Republic²**

Institutional changes in the formerly socialist countries of Central and Eastern Europe since the late 1980's have amounted to massive political, economic and social changes. The two most important institutional change processes in the CEE countries are the transformation and the EU accession. Transformation started in the late 1980's and is still ongoing. It can be understood as a mixed process of top-down institution building (political and economic) as well as an evolution of previous socialistic institutions such as informal rules or shared mental models. EU accession is the process of legal harmonization with the existing EU regulations. As this is a relatively recent process, its impacts cannot be reasonably assessed yet. The longer process of transformation is analysed here to outline the background of MLG of natural resources in the CEE countries.

Transformation cannot be viewed solely as the replacement of the existing system with a new one, but should rather be considered a recombination of elements of the old and new system. The transition involves not the imposition of a blueprint on a 'blank' social and economic space, but a reworking of institutions of central planning (Williams and Balaz 2002). The main processes involved in transformation are democratization, decentralization and the emergence of markets. With respect to democratization and the emergence of markets, privatization is the most significant institutional change. It has been suggested that, in the CEE countries, political objectives were fundamental for undertaking privatization (Gatzweiler and Hagedorn 2002) rather than efficiency and competitiveness.

Privatization transformed previously collective or state property to private property without appropriate links to the new governance structures. Shared mental models of socialism were not capable to function, adapt or evolve into new institutions. The governments in several CEE countries failed to manage natural resources effectively and created de jure state property but de facto open access which resulted in free-riding, over-exploitation and resource depletion (Ostrom 1990). Private owners do not have incentives to sustainable behaviours and other factors also hamper the performance of institutional solutions and challenge robust governance of natural resources (Kluvankova and Chobotova 2006). However, the situation varies from country to country. In Poland, small private farms existed prior to 1989 and new environmental governance could be built on the previously existing structures and skills in market transactions. In the Czech Republic, national parks were largely established after 1990 and protected areas were excluded from privatization. In the Czech Republic, the process of transformation largely built on previous socialist institutions and mental models.

In summary, although some elements of MLG existed both in the Polish and Czech National Parks' management prior to the EU integration, they have not been fully established yet. In particular, privatization and the increasing importance of markets for MLG were often not accompanied by adequate monitoring and sanctioning arrangements. In addition, in both countries the influence of environmental NGOs in decision-making is very low. The two countries have also some differences. In Poland, governance is rather hierarchical and jurisdictions are of a general purpose. In the Czech Republic, jurisdictions are more task-specific and decision making includes a higher number of actors.

In both countries, decentralization and the increasing role of non-state actors result in cross-scale coordination and information problems. It can be concluded that the mismatch between the old hierarchical institutions developed under socialism and the new, market-oriented bottom-up decentralized institutions still persists. However, integration empowered self-government at the

² This section is taken from Banaszak et al. 2008

lower levels. Although so far local actors and arrangements are not too visible in decision-making, it can be expected that they will become more visible in the future as they acquire more information and experience in the new governance processes.

3.4 *Implications for GoverNat research*

Findings of the consultations and the CEE report suggest a few broad methodological lessons for the GoverNat research programme. First, there is a need to increase attention to the cultural and historical embedding of multi-level environmental governance in the common GoverNat framework. This issue is particularly highlighted by the CEE report. Formerly socialist countries have had to adjust to more market-oriented approaches to governance, as well as to bottom-up processes. Yet these new approaches and processes acquire their meaning and effectiveness in the unique historical and cultural contexts of CEE countries. However, consultations also suggested that culture influences choices regarding MLG in other member states as well.

Government organisations and their power relations are important issues both in the consultations as well as in the CEE report. This highlights that an understanding of the political scene is essential for the future GoverNat research on MLG. Understanding participation in/and MLG requires analysis of the dynamism in the relationships between actors, especially between the state actors and powerful stakeholders. Consultations suggest that much of the negotiation and power play takes place at the more diffuse and less accessible levels of regional and national politics. Therefore, GoverNat should specifically aim at studying these levels, and interactions between them and other levels, and not limit itself to local level concrete projects. The easiest entry points for case studies appear to be government agencies. On the other hand, while their actions are important for MLG, there is a danger that the points of views of NGOs, private companies, other non-governmental stakeholders and the general public do not receive sufficient attention. Therefore, GoverNat research should make concerted effort at maintaining a broad focus encompassing the viewpoints of different actors involved in MLG.

Lastly, but not least importantly, different participants clearly have different understandings and expectations regarding participatory processes. Their understandings and expectations relate to their own views on the desirability for implementing public participation and to their views on the process of policy implementation. Understanding these conflicting views on participation in a specific setting is a prerequisite for the study of success and failure of the participatory procedures and techniques that are employed, because it helps to explain practical problems as well as power relations. The multiple views that exist should be taken account of in the case study work.

4 Common framework revisited

As part of the work package 1, three framework papers (Task 1.1) were also prepared by the senior researchers in GoverNat to identify revisions and elaborations to the framework: The framework papers included the following:

1. *European governance of natural resources: institutions, scales and biodiversity*, by Andrew Gouldson, Tatiana Kluvankova-Oravska and Jouni Paavola;
2. *Outcome-oriented vs. procedural governance assessment in European governance of natural resources*, by Felix Rauschmayer, Augustin Berghöfer, Ines Omann and Dimitrios Zikos;
3. *Concepts and assessment of participatory processes for improving environmental governance*, by Ortwin Renn.

In the light of these framework papers, as well as the findings of the consultations and the CEE report presented above, it is possible to reflect on the GoverNat framework as it was originally presented in the DoW.

The original GoverNat framework outlined in DoW consisted of two parts: those of analysis and evaluation, each integrating a theoretical and empirical step. The framework combines concepts from economics, sociology, political and legal sciences and the humanities, building on knowledge of the ecological context describing natural resources management. As the first step, concrete multi-level activities in water and biodiversity governance can be systematically characterised using the analysis part of the framework. In the second step, the outcomes of the activities can be evaluated against criteria representing the main challenges of multilevel environmental governance.

This two-step procedure facilitates a systematic and comparative structuring and comparison of a wide range of different activities in MLG. This basic framework structure will be retained for use in the subsequent work packages. Minor rewordings etc. in the terminology are generally not discussed. However, the change from ‘evaluation’ to ‘assessment’ in the second part of the framework will be explained below. A few other minor modifications concerning the conceptual understanding of MLG in the analysis step, as well as a few additional questions in the assessment part, are also needed. The slightly revised framework is presented in Figure 3. The reasons for the needed revisions are explained below for the analysis and assessment parts of the framework, respectively.

4.1 Analysis of MLG of natural resources

From the findings of the consultations and the CEE report it appears that the existing GoverNat framework gives insufficient attention to culture as the context in which MLG takes place. When revisiting the scientific origin of the analysis part of the framework, structural functionalism, it is clear that there are also theoretical reasons to modify the framework to better account for cultural factors. Structural functionalism conceptualises modern society as a system with four subsystems, each of which fulfils a function of the whole system (Figure 2):

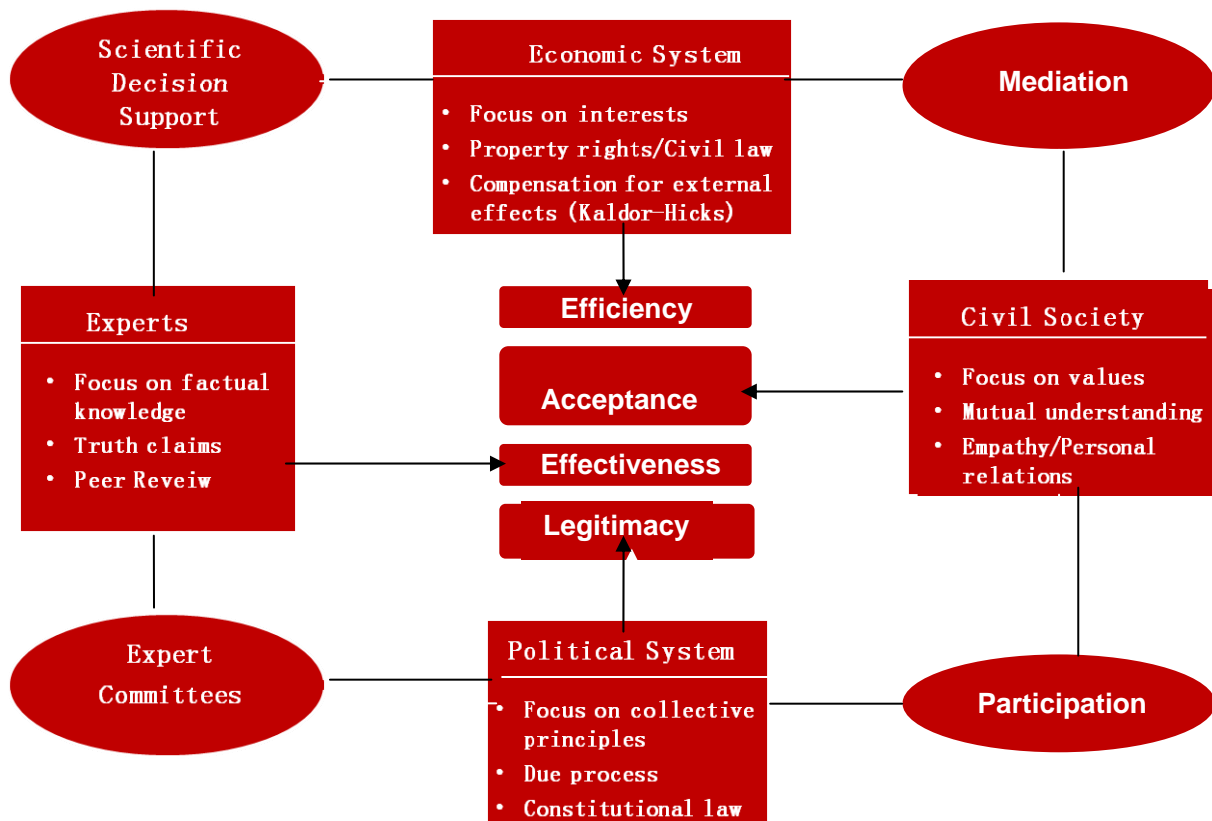
- political system maintains order through the setting and enforcement of rules;
- civil society generates the values that underlie choices;
- economic system produces and distributes needed goods and services
- cultural system gives meaning to human experiences. Its subsystem, the knowledge system, is particularly relevant for MLG of natural resources (see Figure 2).

The cultural system is the missing system which needs to be added to the Table 1 of the GoverNat framework. It is not the function of this framework to suggest causal relationships e.g. between resource attributes and legitimacy, even though these cannot be excluded *a priori*. To elaborate causal relationships, theories need to be selected which study specific elements of the framework. Within GoverNat some of these detailed studies are performed by the fellows in their individual research projects. The framework links these research projects together into a one comprehensive picture.

The GoverNat framework also alerts the fellows to the repercussions of actions in one system on the other systems, and helps to choose appropriate theories for the question under investigation. For GoverNat this is the assessment of participation in MLG. The framework indicates that the observed pattern of behaviour in participatory processes may be economic, cultural, societal or political in nature. A specific *cultural* theory is needed to explain strong alliance to a set of values that from the outside seem outdated or inappropriate, e.g. the theory of prolonged value

commitments or Cultural Theory. For other behavioural observations one can choose *economic* theories (e.g. rational choice) or *social* theories (e.g. theory of cognitive dissonance). These theories are presented here just as examples only – the range of relevant theories is much greater. The overall frame can help to locate the cause-effect relationship within or between the boxes and suggest an appropriate explanatory theory to test.

Figure 2: **The four basic (sub)systems including means of dealing with conflicts and assessment criteria (from Renn 2008)**



Structural Functionalism does not identify a distinct ‘natural system’. The natural system or environment is represented through perceptions and actions by humans in each of the four systems (Table 1). In a participatory setting it is important to acknowledge that there are different perspectives based on interest, values and purpose (scientific truth claims may be one of them). Collaborative policy analysis begins by acknowledging that multiple ways of knowing exist and need to be incorporated into policy making.

Putting a separate natural system into the conceptualisation would assume that nature is objectively knowable. This is in contradiction with the basic idea of the existence of different views or different ways of knowing which is captured by the Structural Functionalism framework. By implication, it would assume that scientific knowledge has a superior status in participatory processes compared with the ways people value their environment or the economic benefit that can be gained from nature. In any participatory process, all four systems are interacting, and it is therefore important to recognise each of them.

Table 1: **Representation of nature in the four functional systems**

<i>System</i>	<i>representation through ...</i>
Expert System	expertise about nature or other phenomena
Civil Society	values attached to and feelings about nature
Economic System	economic value of nature (monetary or non-monetary)
Political System	policies and laws on nature

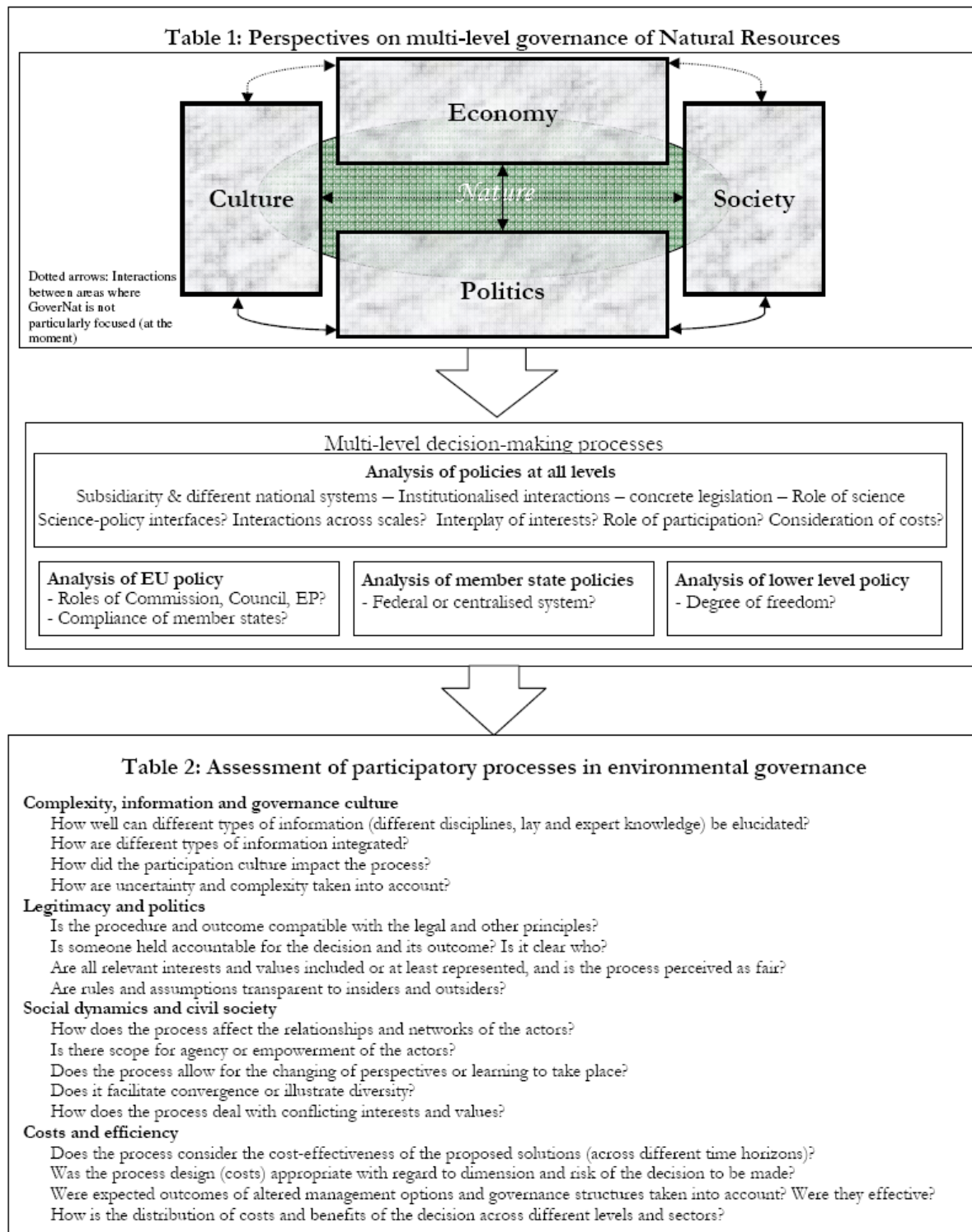
While the natural system is not represented at the same level as the four societal subsystems in the revised GoverNat framework, it has been added as an oval shape in the background to indicate that the MLG of natural resources is the main concern and one of the common connectors of the project.

4.2 Assessment of MLG of natural resources

In the GoverNat framework, evaluation or assessment, as it is proposed to be called from now on, relates to the processes through which MLG is established. In the GoverNat framework (Figure 3 & Table 2), these processes are evaluated according to four general criteria which originate in Structural Functionalism. In Structural Functionalism, each system has its own focus, rules and a way of operating. Each system uses a different criterion for assessment: efficiency, acceptance, effectiveness and legitimacy, respectively (Figure 2). These four assessment criteria have been elaborated into assessment questions relevant to the GoverNat context in Table 2 of the GoverNat framework. Efficiency is evaluated in the subheading ‘costs and efficiency’, acceptance in ‘social dynamics and civil society’, effectiveness in ‘complexity, information and governance culture’ and legitimacy in ‘legitimacy and politics’.

MLG processes are a form of linking two or more systems in order to solve societal problems. The study and assessment of MLG processes should therefore take all four subsystems into account, because they are always present in some mixture. For example, the European Commission in its description of good governance uses and combines similar criteria called ‘universal principles’: ‘*openness, participation, accountability, effectiveness and coherence*. Each principle is important for establishing more democratic governance [...]. They apply to all levels of government – global, European, national, regional and local’ (European Commission 2001).

Figure 3: GoverNat revised framework



While this indicates that the criteria for the assessment of a MLG process can be easily established using the concepts of Structural Functionalism, the determination of the detailed questions with which to evaluate these criteria is less straightforward. Any type of decision making – be it participatory or conventional – needs to address two major aspects: what and whom to include on the one hand (inclusion) and what and how to select (closure) on the other hand. Classic decision analysis has been offering formal methods for generating options to perform these two basic tasks and to evaluate these options on a set of predefined criteria (von

Winterfeldt and Edwards 1986). However, with the advent of MLG in general and new participatory methods in particular, the issues of inclusion and selection have become more complex and sophisticated compared to the conventional strategies of decision analysis.

What is evaluated as good or bad governance is crucially affected by the selected assessment criteria. They should take into account at the same time the specific institutional context and the specific problem constellation (Knill 2004). Also, good governance is very much dependent on values and cultural norms of the society, its political history, its desired social and economic outcomes (Abrams et al. 2003). Therefore, in a specific case, it remains difficult to determine the quality of governance.

The foregoing discussion has major implications for the assessment of a MLG process. The implications concern two choices that need to be made when evaluating a MLG process: whether to value good inclusion over good closure or vice versa, and whether to apply general criteria or adjust the assessment according to local circumstances. These choices are examined and discussed below, and the GoverNat position is explained subsequently.

4.2.1 Outcome-oriented vs. procedural assessment

With respect to the first dilemma, the literature on participation opens a wide range of answers to the two major challenges of inclusion and closure. Some participation models restrict the boundaries of inclusion for being more efficient in reaching closure; they focus on outcome-oriented assessment of the process. Other place most emphasis on inclusion and hope that some kind of closure will follow once all viewpoints have been represented; they focus on procedural assessment. It is clear however, that choices will have to be made regarding priorities. Achieving all five goals set by the European Commission ‘openness, participation, accountability, effectiveness and coherence’ at once and equally well is an illusion in practice. Some of these criteria such as accountability can be understood in each of these two perspectives: who is accountable for the process? Does the output of the process state clearly who is accountable for the implementation? Is the accountability effective?

In GoverNat, most evaluative questions in the framework (Table 2) have been formulated using the process oriented approach. Good processes supposedly contribute to good governance in different ways. One argument is that a good process is instrumental for a good implementation of the output: legitimate processes have better chances to have their results accepted. Others argue that good processes improve the substantial quality of the output, through more and better information management and learning effects within the process. The third argument, reinforced by the Aarhus Convention, focuses on the normative aim of certain characteristics of governance processes, such as openness, participation, and so on. All three arguments are present in the literature on environmental governance and participatory processes (e.g. Stirling 2006).

The term ‘outcome’ is employed to distinguish from ‘process’ and it comprises all tangible results of the process. The outcome of a governance process can be analysed with regard to its direct outputs and to the assumed consequences of such outputs, in terms of changes in the system-to-be-governed. Outputs refer to the measures taken, e.g. the development of a management plan, the adoption of a set of regulations or the hiring of more staff, and the like. Consequences describe how the environmental state has changed due to the measures, or what direct impacts on society these changes have shown.

Outcome-oriented analysis is a widely accepted approximation for assessing environmental policies and governance processes. This form of assessment is often applied within the DPSIR

analytical framework (Maxim et al., forthcoming; Smeets and Weterings 1999; Gabrielsen and Bosch 2003). The DPSIR framework is used by organisations dealing with sustainability issues such as the European Environmental Agency, by EUROSTAT and also by researchers working in this field. It is attractive because it focuses on supposed causal relationships in a clear way herewith appealing to policy actors (Smeets and Weterings 1999; Giupponi 2005). Secondly, the framework allows distinguishing between different policy options by locating them (and their respective indicators) along the virtual cycle of driver – pressure – state – impact – response.

Despite the widespread use of this approach, two main challenges for the outcome-oriented assessment of governance processes can be identified. The first challenge refers to causal linkages which need to be assumed, while the second challenge refers to the ex-post character of outcome evaluation. The first challenge results from uncertainty. Often, we cannot count on a clear explanatory link between the adopted measure and the new state in the system-to-be-governed (Conley and Moote 2003). To give a hypothetical example, it frequently escapes our understanding whether a growing forest cover within a protected area is the result of (i) a sound management plan which is closely adhered to, (ii) a poor management plan which is luckily not given a lot of consideration, (iii) a reduction in external land use pressures, or (iv) some twist in the population dynamics of the bark beetle.

The second main challenge for outcome assessment is the ex-post character of this approach. Long term impacts can only be seen after many years. Waiting that long to evaluate a governance process might produce learning effects only too late. For example, the implementation of protected areas (as in the Natura 2000 network) takes place in the context of continuous biodiversity loss which requires rapid action in terms of adaptive management. This management is based on timely, albeit preliminary information. In the context of GoverNat this latter challenge of course also means a pragmatic constraint in the sense that it will not be possible to evaluate the outcomes of directives that have only relatively recently been adopted. The outcome-related question in the framework is therefore bound to the process itself, in that the assessment framework asks whether potential outcomes of the process have been considered sufficiently. The question in the original framework directly referring to outcomes (heading ‘complexity and information’: what are the environmental outcomes of altered management options and governance structures’) has been reformulated in the revised framework to make the evaluation independent from the time lap between the process and eventual outcomes. It now is formulated as follows: ‘Were expected outcomes of altered management options and governance structures taken into account? Were they effective?’.

4.2.2 General vs. local criteria for assessment

With respect to the second dilemma identified above, that of general vs. local assessment criteria, there are two main sources for the assessment criteria of a good participatory decision process (Abelson and Gauvin 2006):

1. philosophical discussions on discourse ethics (Habermas 1991; Webler 1995), deliberative democracy (Cooke 2000), and pluralist approaches (Bader and Engelen 2003). These approaches claim moral validity of the theoretically deduced criteria throughout all cases; and
2. views of participants (Webler and Tuler 2006; Webler et al. 2001), challenging a universally valid view through empirical observations that participants have very different ideas of what constitutes a good process.

The advent of MLG has made the assessment of decision making processes less clear-cut. Ideally, a process is evaluated according to its purpose, whether this was process or outcome-

oriented. However, this purpose may be different for different participants. Ultimately this means that a process can only be evaluated by taking a particular perspective or concept (the second point above). Universal criteria for evaluating participation are then not feasible: evaluative criteria need to be shaped and selected in accordance with the underlying concept in use. The diversity of concepts and background philosophies is one of the reasons why participatory processes are so difficult to evaluate in terms of overarching evaluative criteria (Tuler and Webler 1995; Rowe and Frewer 2000; Rowe et al. 2004). Although some of these models can be combined and integrated, there are at least differences in priorities.

However, there can also be a meta-level of assessment (the first point above). There are two ways to do this. One is to look for assessment criteria that all actors agree on. In this way the subjective view of all obtains objective status, at least in the process evaluated. The other solution is to explicitly state normative assumptions, such as ‘a fair process should include all those who are affected by a decision’. This is what the GoverNat framework does: it asks questions from a specific normative standpoint, which is inspired by literature on deliberative democracy. Deliberative citizen participation is mainly influenced by Habermasian discourse theory (Habermas 1984, 1987; Apel 1992; Benhabib 1992; Brulle 1992; Webler 1995; Cohen 1997; Renn and Webler 1998).

Discourse theory and discourse ethics advocate more inclusiveness for legitimate and sustainable political decision-making. Modern societies are characterized by a plurality of values and world views. According to Habermas (1996), conventional politics and political decision-making cannot deal with this heterogeneity adequately because modern societies lack moral cohesion that could guide political decision-making. Habermasian discourse ethics offers a solution to this dilemma. In discourse ethics, only those political and judicial decisions may claim to be legitimate that may find the consent of all affected parties in discursive opinion formation and decision making processes (Habermas 1992; Corrigan and Joyce 1997). Accordingly, legitimate political opinion formation is conceptualized as a process of the competition of arguments. As a result, the procedure of decision-making decides on its legitimacy. This view on assessment of decision making processes theory is therefore also process-oriented as well as choosing the normative position of legitimacy through deliberation.

4.2.3 Assessment in practice

The goal of the ‘functionalist’ participation (Renn 2008) is to improve political decision making in general and public policies in particular. Functionalist decision making is oriented towards the achievement of pre-defined goals. This is pursued through synthesizing knowledge and values. This goal can be instrumental in the sense that the best available solution is crafted and selected or strategic in order to smooth the process of implementation by giving all relevant stakeholders the opportunity to be part of the process and ease their potential opposition. In terms of the basic functions of society as outlined above, the model is designed to improve and enhance the effectiveness of decision making and implementation. It assumes that representation and inclusion of diversity will result in improved environmental policy making with respect to the quality of the decisions made and/or ease their implementation. These two factors are also the assessment criteria in a functionalist approach. It can be concluded from the consultations that a functionalist principle is in practice dominant in the perspectives of the instigators of MLG processes: the focus of the assessment is concentrated on the outcomes, and especially on those measurable criteria (limits, technical and administrative issues etc).

It follows that one challenge for GoverNat will be to solve this tension between the goals of the instigators of MLG processes and the assessment criteria set by the framework, which are based upon different principles.

5 Emerging research programme

The revised GoverNat research framework will be mobilised particularly in case studies of MLG of water and biodiversity governance where scale effects and interplay are of special importance. For instance, social and legal legitimacy of a decision (Table 2 in Figure 3) depends on the actors' scope for decision making contingent on their position on the political scale. The GoverNat partners also examine how spatial, temporal and issue-related openness of multi-level governance solutions is related to social dynamics. Finally, analysing the relative costs of governance solutions is of significant importance as water and biodiversity administrations are systematically underfunded. For example, for the GoverNat praxis host SRNAP, managing a Slovakian national park, the government funding does not cover even 10% of the actions and objectives in the management plan.

GoverNat case studies will be used to perform the tasks mentioned in Work Packages 2 to 5. They will also be the basis for more detailed research performed by the fellows. Their individual research projects deal with the interactions between the four subsystems of society as conceptualised by Structural Functionalism. Structural Functionalism is too broad to derive precise causal hypotheses. While the GoverNat framework may suggest to some that there are causal if not deterministic and/or universal relationships between Table 1 and Table 2, this is not the intention, as has been explained in section 4.2.

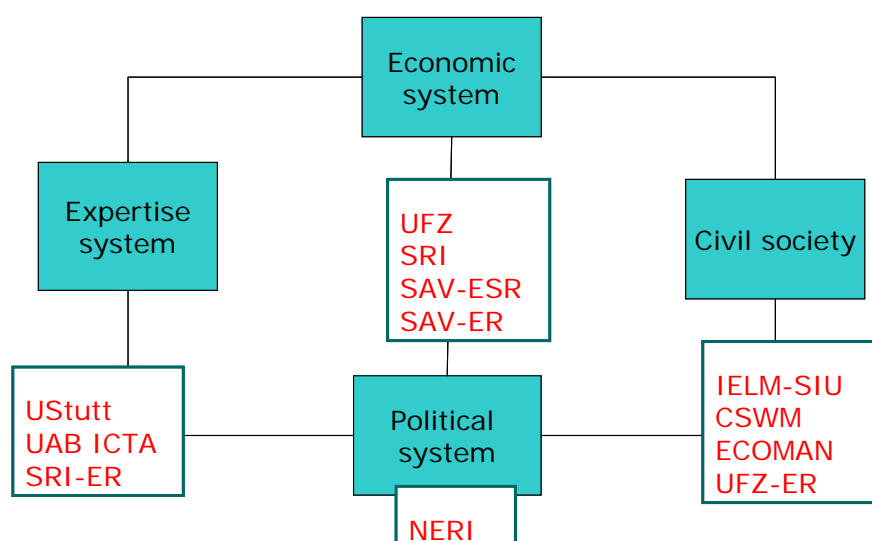
In their detailed research, the fellows will focus primarily on one interaction while not omitting to pay attention to the whole system. The individual interests can be roughly mapped onto Structural Functionalism's conceptual framework (Figure 4). As a package of research projects, the fellows' choices reflect the importance of the political system in MGL of natural resources. All fellows study the interaction with or within the political subsystem. Their research topics are outlined in Table 2 and Table 3 below.

Table 2: **Main research topics of the doctoral Marie Curie fellows**

UFZ Leipzig	Germany	Does distribution matter? Distributional aspects of watershed protection in Europe.
ECOMAN Lisbon	Portugal	The role of regional social networks in multi-level water governance.
NERI Roskilde	Denmark	The Europeanization of national water politics. Institutional change and public participation in four EU member states.
SRI Leeds	UK	The problem of fit and the costs of multilevel governance of biodiversity in Europe.
UAB-ICTA Barcelona	Spain	How do interfaces between European biodiversity research and stakeholders contribute to halting biodiversity loss?
CSWM Lancaster	UK	The democratic legitimacy of water governance processes.
UStutt Stuttgart	Germany	Boundaries of knowledge in biodiversity governance. Volunteer naturalists in focus.
SAV Bratislava	Slovak Rep.	Institutional changes in biodiversity governance in countries of Central Eastern Europe (CEE).
IELM-SIU Gödöllő	Hungary	Biodiversity governance in Hungarian national parks.

Table 3: **Main research topics of the experienced Marie Curie fellows**

UFZ Leipzig	Germany	Translating theory into practice in a multi-level European context.
SRI Leeds	UK	Policy needs for participation in multi-level governance for biodiversity and water in Europe.
SAV Bratislava	Slovak Rep.	The impact of different environmental governance structures on innovation and learning.

Figure 4: **GoverNat fellows' individual research projects mapped onto the Structural Functionalism framework used in GoverNat**

6 Training and other implications

In the light of Structural Functionalism that is a key to understanding the GoverNat framework with which the fellows will be working, training to attain a basic understanding of this theory was organised during the summer school in Lisbon in January 2008. The fellows also identified a need to have an overview of the available theories in key social science disciplines to explain the functioning of the separate social subsystems recognised by Structural Functionalism, as well the interactions between the systems. This training was organised by the fellows and took place in Århus, 5-10 April 2008. At the training some time was also spent on the topic of 'doing interdisciplinary research'.

A further addition to the training programme in light of the findings of this report is scheduled to take place towards the end of the GoverNat project, most likely in conjunction with the last workshop (month 31). This exchange will be focussing on interdisciplinary methods to combine the outputs of the fellows' individual research projects into a comprehensive understanding of multi-level governance of natural resources.

7 Conclusions

The work undertaken in the Work Package 1 suggests that GoverNat is well placed to produce the innovative interdisciplinary results it set out to deliver. Consultations, the CEE report and framework papers have suggested some relatively minor modifications to the original framework which improve the fine-tuning of the research effort and help to rationalize ex post some of aspects of the framework as it was originally conceived. In addition, they have suggested specific questions for research to be undertaken by the fellows.

Perhaps most importantly, the review and refinement work undertaken as part of the work package 1 has highlighted the important role of culture and history in multilevel environmental governance. These contextual factors were not given sufficient weight in the original formulation of the GoverNat framework in the DoW. The resulting revisions to the GoverNat research framework fully acknowledge the political, economic and cultural embeddedness of multi-level environmental governance solutions.

Secondly, work package 1 has identified the challenge in assessing participatory / governance arrangements using broad set of criteria when the key involved stakeholders and actors only attribute narrow set of performance expectations to it. The observation highlights the importance of inclusive material collection, analysis and other research practices so as to account for divergent interpretations and expectations regarding participation in multi-level environmental governance. This is particularly important because the actors representing public administration consider their interactions with other actors from public administration among the key challenges of multilevel environmental governance in Europe.

The emerging research programme based on the individual research plans of GoverNat Early Stage Researchers covers different aspects of the GoverNat research framework in a very satisfactory way, and maps well to the revised research framework. The identified need for a more meta-theoretical training in social sciences have already been largely met with an additional training programme organized by the fellows in April 2008 in Aarhus. Remaining training needs in interdisciplinary research methodologies to ensure transfer of lessons is scheduled to take place towards the end of the GoverNat project.

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Annex: Guideline for conducting WP1 consultations

The rationale of collating short written summaries of consultations is to collect a documentary material that enables us to make grounded judgements regarding the research priorities that we ought to set to ourselves and to our trainees, as set out in the DoW.

In the kick-off meeting it was concluded that the role of consultations is to make sure that we are aware of the current priorities and issues that stakeholders have with regard to governance of biodiversity and water in Europe. Meetings with representatives of stakeholders and discussions with them in events etc. are all valid instances of consultation. The point is to report these discussions so that we can build a record on them.

A one-page reporting form or guideline is presented below for recording the details of consultations and their key content. Consultation reports should be emailed to me (j.paavola@see.leeds.ac.uk) and copied to coordinators (coord.governat@ufz.de) whenever a consultation has been completed and the report drafted. I suggest the issues to be included are:

1. Consultation identifiers

- 1.1 Consulted stakeholder group and description of its role / position
- 1.2 Date, time and place
- 1.3 Involved people (stakeholder and GoverNat representatives)

2. Substantive issues

- 2.1 Consultee's positive and negative personal experiences from multi-level environmental governance. Describe in particular the multi-level nature of the problem and any interactions and conflicts between levels
- 2.2. Consultee's views on the role of participation in his or her field of activity: who has participated (e.g. what stakeholders, was the general public involved) and to which degree (e.g. consultation, actual planning)? How has participation been useful or harmful in his or her opinion? Please ask justifications and rationalisations for the views.
- 2.3 Consultee's views on the current priorities and challenges with regard to the governance of biodiversity and/or water?
- 2.4 Consultee's views on the future priorities and challenges with regard to the governance of biodiversity and/or water?
- 2.5 Consultee's involvement and awareness of related projects etc.
- 2.6 Consultee's suggestions for case study sites / topics / issues