



Conceptualising Interaction between International and EU Environmental Institutions

Project Deliverable No. D 1 of the Project

**'Institutional Interaction – How to Prevent Conflicts and Enhance Synergies
Between International and European Environmental Institutions'**

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Introduction

Policy-makers and the scientific community increasingly recognise interaction between international institutions as an important subject. Politically, research is driven by evidence of the potential for conflict as reflected in a growing number of empirical case studies about potentially problematic institutional interaction, in particular between international regimes related to the environment (for example, Zhang 1998; Chambers 1998; Stokke 1999; Oberthür 1999; Rosendal 2000). The scientific community has identified a risk of “treaty congestion” (Brown Weiss 1993: 679) and a growing “regime density” (Young 1996). Furthermore, the consequences that regimes may have for each others’ development and performance have been repeatedly identified as a key issue for future research (Young et al. 1999; Breitmeier 2000).

The study of interaction between international and EU environmental institutions matters because conflicts may ultimately impede the effectiveness of the institution subject to influence – and, conversely, synergy may enhance this effectiveness. If the Kyoto Protocol to the UN Framework Convention on Climate Change (FCCC) provides incentives for investment in fast-growing forests in mono-cultural plantations, for example, this will be at odds with biological diversity objectives and policies under the 1992 Convention on Biological Diversity and may lead to reduced effectiveness of the latter institution (Chambers 1998; Rosendal 2000). In contrast, the establishment of a number of regional regimes on the transboundary movement of hazardous wastes has resulted in the global regime of the Basle Convention being strengthened, thus providing a clear example of synergy (Meinke 1997).

The analysis of institutional interaction poses a particular challenge to scholars of international relations (IR) and researchers of EU policy. So far, the two communities tended to explore interaction phenomena between international and EU environmental institutions independently of each other. Moreover, research has focused on single instruments rather than adopting a comparative perspective. Probably even more important, the analysis of institutional interaction has so far not built on a reliable conceptual foundation (for conceptual contributions see Herr/Chia 1995; Young 1996; King 1997; Young et al. 1999; Stokke 2000). Our project is intended to contribute to overcoming these deficiencies. It brings together IR and EU research communities. Focusing on interaction in which international and European institutions are involved, it adopts a comparative perspective. Following a common concept and methodology, it is directed at contributing to the enhancement of the scientific knowledge about institutional interaction and to advancing the understanding of suitable policy responses.

This paper attempts to establish the conceptual basis for this effort and lays out the structure of our work. Section 1 is devoted to background, structure and objectives of the project. Section 2 discusses the meaning of the terms “institution” and “interaction”. It delineates what a case of institutional interaction is and outlines how the interaction between international and EU institutions relates to the study of domestic implementation. Section 3 introduces a set of distinctions of core properties that provide a basis for analysing and categorising interaction phenomena in a systematic and comprehensive way. Section 4 elaborates the methodological problems of the empirical analysis. The paper concludes by giving a brief outlook on the interim and final products we are aiming at in our research (section 5).

1. ***Objectives and Structure of the Project***

The growing number of environmentally-relevant international regimes has generated an increasing potential for interaction. In the field of international environmental protection, more than 200 major treaties now exist. While on average one treaty was adopted per year until the 1970s, this number has grown to five since the 1980s (Beisheim et al. 1999, see also Sand 1992). As has become increasingly evident during recent years, institutional interaction may embody both problems and opportunities for the development and success of international environmental policy-making. It will cause conflict between different institutions, if regulatory approaches are incompatible. One of the best-known examples concerns the relationship between the World Trade Organization (GATT/WTO) that promotes free international trade and several international environmental regimes which establish trade restrictions like the Basle Convention on the Transboundary Movement of Hazardous Wastes (see Petersmann 1993, Lang 1993, Moltke 1997). However, institutional interaction may also create synergy. For example, the non-compliance procedure under the Montreal Protocol for the protection of the ozone layer has served as a blueprint and precedent for developing similar procedures in other environmental agreements (Oberthür 1999).

The phenomenon of interaction, and its relevance, is rooted in the fact that within the international system governance takes place within numerous international institutions that are separately established and comprise their own decision-making apparatuses. International institutions can be defined as “persistent and connected sets of rules and practices that prescribe behavioural roles, constrain activity, and shape expectations” (Levy et al. 1993: 4-5). Usually they include a separate communication and decision-making process about their norms and rules (Gehring 2000). Interaction frequently occurs because institutional decision processes focus on a functionally limited issue-area (that can still be quite broad) and tend to disregard side-effects beyond the domain of a given international regime.

Within the European Union, the situation seems to be significantly different. The Union comprises a comprehensive institutional framework and the well-known organs (Commission, Council, Parliament) that prepare and adopt decisions. However, a closer look at European environmental policy reveals a situation in which interaction phenomena quite similar to those at the international level might occur. EU environmental policy currently rests on more than 200 legal instruments (see Krämer 1999; see also Haigh 1992/1998).¹ Usually these instruments constitute separate packages that balance the interests of the member states and other actors involved, they constitute only rarely parts of larger package deals that are developed over time in combination. Accordingly, they come about in specific communication processes, and the representatives of member states and the European Commission decide on their development separately from other instruments. Separate communication processes become most obvious if decisions are prepared or taken in the framework of so-called 'Comitol-

¹ Different numbers are given with respect to international environmental agreements as well as EU environmental legal instruments due to differing counting methods. E.g. protocols to conventions or EU Directives amending existing EU Directives may or may not be counted, as may soft instruments of international law or simple decisions or guidelines in the EU context. In addition, the applied definition of “environmental” may differ.

ogy Committees' related to a particular instrument (Gehring 1998). Hence, international regimes and EU legal instruments share core characteristics, namely their limited focus on a functionally defined issue-area and their separate communication processes. It would be surprising if separately established EU environmental instruments did not influence in any way each other's performance or development². The project is based on the hypothesis that interaction occurs both between international institutions and between EU environmental instruments, and between international institutions and EU environmental instruments.

According to the Description of Work (DoW) annexed to the project contract, we will explore six environmental or environmentally relevant international regimes and six EU environmental Directives (or processes aiming at the adoption of a Directive) as to their interaction with other international and EU institutions. The idea is to investigate how particular international regimes and pieces of EU legislation are 'nested' within the universe of environmentally relevant international institutions and EU legislation. Despite their differences, we take international regimes and EU Directives as similar regulatory systems that are analysed by applying the same concept. This approach allows to draw on the expertise of international relations scholars and analysts of EU policy making and promises to merge two rather different research traditions within a single coherent project.

The project design is comparative. Beyond merging IR and EU research traditions, it will examine interaction involving twelve international and EU environmental institutions, and it will handle numerous separate cases of interaction. In order to ensure comparability of the results, and also to facilitate ordering empirical complexity, research will be based on a theoretically sound and commonly applied conceptual framework that allows a systematic analysis across a number of cases (elaborated in this paper). In a world characterised by many complex interaction phenomena, the concept will therefore serve to identify *cases of interaction* in which a single source institution exerts clearly directed influence on a single target institution, and it will enable distinction and classification of such cases by introducing suitable criteria (section 3). The major purpose of the present paper is to provide such a common conceptual basis for our project.

Based on this concept, empirical work will proceed in two phases. As a first step, we will elaborate separate inventories for all twelve international regimes and EC Directives that include as fully as possible all cases of interaction in which the respective institutions are involved, either as the source or as the target of inter-institutional influence. This step allows for an analysis of dominant *patterns* of interaction and their frequency. In the second phase, a limited number of interesting cases of interaction, selected by the project team collectively, will be analysed in more detail in order to trace causal pathways and identify promising response action.

² Obviously, this is not to say that the different framework conditions of governance at the international and EU levels were meaningless. In particular, the EU provides a comparatively sophisticated overarching institutional framework for the development and implementation of its legislative instruments, of which the EU Treaty and the EC Treaty, the European Court of Justice, the European Commission and the European Parliament form part (on the institutional framework of EU policy-making Hix 1999; McCormick 1999; Nugent 1999).

A major purpose of the project is to derive policy recommendations. According to the DoW, policy recommendations may be elaborated as part of each case study with respect to the specific interaction phenomena investigated therein. In the concluding work package, we will elaborate more general policy recommendations. The comparative design and the commonly applied concept will assist this task. It enables us also to identify and classify relevant interaction independently of the current agenda of policy-makers and stakeholders (while being receptive of their needs). We may thus be able to point to cases of interaction or potential interaction that have not reached the political agenda yet (raising awareness for both potential synergies and conflicts). The project will also generate information about successful policy responses and the conditions for their success. On this basis, it should be possible to identify which policy response may best be transferred to a particular other case. Moreover, comparison of case studies enables us to assess which kind of policy response has been appropriate for what type/pattern of institutional interaction and may also be applied with some chance of success in cases of a similar kind in general. On this basis, we may even be able to determine the general features a policy response to varying interaction problems should have in order to be effective. Thereby, we could create a tool for the general evaluation and assessment of policy options for addressing institutional interaction.

It should be recalled that the objectives and the structure of the project as presented in this section reflect the DoW that has become part of the contract with the European Commission. We will therefore have to be cautious when modifying this structure. To be sure, we may adapt conceptual components of the project, if necessary due to unforeseen developments, if the consistency of the project is retained and if justifiable in light of the project tasks. However, in general we are contractually committed to conducting the project as outlined in the DoW. It is therefore also recommended to use the DoW as a general reference document!

2. Conceptualising Institutional Interaction

In this section, we try to clarify what the analysis of institutional interaction is about. It is essential that we develop a common understanding of what we are investigating in this project. Four aspects appear to be of particular relevance: (1) the notion of (environmental/environmentally relevant) institutions, (2) the concept of interaction, (3) what constitutes a *case* of interaction, and (4) the relationship between institutional interaction and implementation.

2.1 The Notion of Institutions

This sub-section addresses, first, the notion of institutions and explains what kind of units we are going to analyse as being involved in interaction. Second, it discusses what we consider to be an *environmental* institution for the purposes of our analysis.

The use of the notion 'institution' in the DoW may be a source of uneasiness. The reason is that our project involves two research communities that for a long time did not only operate largely in isolation from each other, but that developed different perspectives and their own vocabularies. The use of the term 'institution' within our project raises a definitional and a substantive problem.

Within our project proposal, and accordingly within the DoW, the use of the term institution is based on the understanding that has been developed in the institutionalist tradition of international relations (Young 1994; Keohane 1989). Without going into the intricacies of the academic discussion, international institutions can be understood as sets of rules and norms and any related processes of communication. Both international organisations and international regimes constitute institutions. Issue-area specific international regimes are regularly based on one or several international treaties and usually encompass a particular communication process related to that treaty (see Levy et al. 1995; Gehring 1994).³ International organisations are usually defined by reference to their secretariats and their ability to enter into legal contracts (for example, Young 1994: 163-183; Keohane 1989: 3-4; Ott 1998: 45-46). Sometimes, international organisations fulfil functions within and thus become part of regimes, sometimes the development of international regimes results in the creation of an international organisation (e.g., the WTO). While much more could be said about the relationship and distinction between regimes and organisations, it is sufficient for our purpose to note that both international regimes and formal international organisations (such as the Food and Agriculture Organisation of the UN, FAO, or the WTO) qualify as institutions in the understanding of IR scholars and fall in the remit of the research on 'institutional interaction'.

In contrast, within the EU context institutions usually denote organisational actors like the European Commission, the European Court of Justice, the European Parliament that participate in the process of producing rules and norms. These actors are certainly relevant for our project, but they do not constitute corollaries to international regimes at the EU level. Rather, we are looking for interaction between separately established systems of norms, rules and related decision-making processes. We find these entities in the realm of EU environmental *legislation*. That is why we are investigating interaction involving, beside six international regimes, six EU environmental Directives. That is part of our substantive commitment toward the Commission as enshrined in the DoW. However, in contrast to most international regimes and all international organisations, EU Directives and Regulations are not entirely independent as to their decision-making processes. They do usually incorporate so-called 'Comitology committees' attended by representatives of the member states and the Commission that deal with issues of implementation and secondary decision-making. However, the instruments themselves are the outcome of the regular EU law-making processes involving in particular the Commission, the Council of Ministers and the European Parliament. To the extent that analysis of institutional decision-making is required, we will have to pay attention to these multi-purpose law-making procedures.

One may raise the question whether it is appropriate to call both international regimes and EU directives 'institutions'. This question is a purely definitional one. The *notion* of 'institution' may be replaced without changing any substantive part of our project, if we find a better one. However, the academic disciplines of law and comparative politics, in which most EU re-

³ Delimiting a particular international regime for the purposes of our project may be difficult in practice. In some cases, several decision processes exist, while the resulting instruments cover the same issue-area. If we had decided to treat them as sub-processes of one institution, as is done in other studies, we could not have inquired into interaction between these processes and their outcomes. Therefore, we treat, for example, the North Sea Conferences and the OSPAR Convention as two separate regimes.

search is rooted, hardly limit the use of the term 'institution' to institutional actors. Systems of rules and norms like the constitution certainly also fit. In sociology, the broad use of the term includes sets of rules and practices in a broad sense – reaching from a university to the matrimony. Hence, it would not be wrong to include EU Directives under this term, although it is somewhat unfamiliar in EU parlance.

In the remainder of this paper, we will refer to institutions as including international regimes and EU policy-making instruments, in particular Directives and Regulations (and the associated decision-making processes). However, effective communication vis-à-vis these communities will be a constant task of this project. One potentially helpful means of ensuring a good understanding might be to employ alternative terms that might be less ambiguous where appropriate. For example, when dealing with EC Directives and Regulations one could speak of “legislative instruments”, while intergovernmental treaties might be referred to as international agreements or regimes (that are usually also based in customary rules), as appropriate.

Beside the definitional one, there is a substantive problem involved. The project started from an international relations perspective that was transferred to the European Union context. There are significant differences between policy-making in the international and the EU context that include the strong role of the Commission as compared to secretariats of international regimes, and the lacking ratification requirement for EU legislation. As a consequence, it is easier to adopt an EU Directive than to establish an international regime, and Directives on average cover a more limited issue-area as compared to international regimes. Due to its comprehensive institutional framework, EU policy-making relies more often than policy-making at the international level on broader programmes and policy processes. Hence, when examining interaction between EU institutions, or interaction between international and EU institutions, we may think of other relevant units than legislative instruments. However, we should be careful when deciding on whether and to what extent to include these in our analysis. As we chose to examine interaction in which, beside six international regimes, six particular EU environmental Directives are involved, we should first of all look for interactions with other instruments of the same kind, i.e. Directives and Regulations (and the associated decision-making processes).

Once these are covered, case study authors may include interactions with additional EU policy processes that come close to what we call an institution within this project. However, an unlimited opening of the inquiry for other institutionalised forms of EU policy-making carries two dangers. First, it runs the risk of reducing the coherence of the project and of watering down the conclusions that may be drawn from its findings. Second, it increases the workload of the case study authors in the first phase of the study, i.e. the preparation of the inventories (note that only a very limited number of cases of interaction can be analysed in detail in the second phase). Thus, inclusion of other relevant EU processes beyond Directives and Regulations should be handled with care by case study authors (within their own responsibility) to ensure that any such entities/processes indeed constitute source/target institutions as opposed to mediating/intervening factors (that may be part of the causal chain leading from source to target institution) and are clearly relevant to the ‘core’ institution (see also section 4.1 on the selection of relevant cases). Eventually, such cases of interaction will be subject to discussion at the second project workshop.

Somehow related to this question is whether only interactions with *environmental* institutions in the strict sense of the word should be investigated. Already in our selection of international institutions, we implicitly included “environmentally relevant” ones since the world trading regime is the core of one of the case studies. There is little reason why we should not provide for the same flexibility with respect to the institutions with which our 12 core institutions interact. Again, we should be careful not to broaden our field of research too much – if only to avoid the risk of overloading the case studies. There will always be some obvious cases (as the WTO is with respect to a number of international environmental agreements). Beyond those, it will have to be decided by the respective case study authors on a case-by-case basis in preparing the inventories whether to include a case of interaction with a particular institution (while the case selection for the in-depth analyses to be conducted in the second phase of the case studies will be done collectively at workshop 2).

2.2 The Concept of Interaction

A diversity of terms can be found in the literature to denote the phenomena subsumed here under institutional interaction, including interplay, linkage, inter-linkage, overlap, and inter-connection (see, e.g., Herr/Chia 1995; King 1997; Young 1996; Chambers 1998; Stokke 2000; Young et al. 1999). There is no particular obsession about using the term *interaction* in our context, but it appears to be used increasingly in the literature for the phenomena we are interested in. What matters is a clear understanding of the kind of phenomena we are investigating.

Institutional interaction exists where two or more institutions affect each others’ development and performance (including its environmental effectiveness) (see Breitmeier 2000; Gehring/Oberthür 2001). Two institutions must be involved in any instance of institutional interaction. One of these institutions (“source institution”) exerts influence on the other one (“target institution”). For any interaction to be complete, there has to be some reaction involving, or affecting the performance of, the target institution. This reaction may be difficult to detect, for example, if it merely consists of decentralised behavioural adaptation of actors at the sub-national level within the scope of the target regime. If there is no response to the “stimulus” at all, the proof of an influence is missing and we may be faced with a mere co-existence of two institutions rather than an incident of interaction between them. If a response occurs at the level of the target institution itself, this may exert influence on the original source institution. In this case, the institutions involved change roles in the course of an interaction process that may extend over several phases.

The identification of institutional interaction therefore requires the identification and investigation of the underlying cause-effect relationships between the institutions involved. In particular, we need to identify (a) the source institution and more specifically the relevant rules/decision(s) from which influence originates, (b) the target institution and more specifically the relevant parts that are subject to the influence of the source institution, and (c) the causal pathway leading from the source to the target institution and accounting for the identified effect (and the respective response action). Thus, we have to ask: Which institutions are affecting each other? Which is the source and which is the target of influence? And how can the observed effect be demonstrated/explained? Please not that by “target institution” we refer

to the body of rules and the concomitant communication process as well as the issue area governed thereby. As mentioned above, the influence on the target institution does therefore not necessarily involve action at the level of the international/EU institution but may only be felt at the sub-national level (where relevant behavioural adaptation may occur).

Interaction between institutions may take place in three different forms. First, we are inquiring into *horizontal* interaction between international institutions. Second, we are investigating horizontal interaction between EU environmental institutions. As the EU provides a relatively sophisticated overarching institutional framework for the development and implementation of its legislative instruments (EU Treaty and the EC Treaty, the European Court of Justice, the European Commission, the European Parliament), while international institutions are largely separate from each other, we may expect horizontal interaction at these two levels to take different forms. Third, we are inquiring in *vertical* interaction between international institutions on the one side and EU environmental institutions on the other side.⁴ All case study authors will have to deal with one of the two types of horizontal interaction and with vertical interaction. Team members exploring interaction involving one of the six international regimes will concentrate on the first and the third type. Team members examining interaction in which one of the six EU environmental Directives is involved will focus on the second and the third type.

2.3 Dealing with Complexity: Identifying “Cases” of Interaction

Our concept of interaction presupposes that we can identify a source institution, from which influence originates, a target institution that is affected by this influence and a causal pathway that explains how influence comes about. Unfortunately, real world situations are frequently far too complex to allow a clear identification of these three components. Interaction may run back and forth from one institution to another, or it may involve more than two institutions. In order to go beyond mere description of empirical complexity, the concept of the project envisages to disaggregate complex situations into an appropriate number of readily analysable *cases of interaction* (see Gehring/Oberthür 2001).

If the complexity of an interaction is low, disaggregation will not be necessary because the situation fulfils the conditions of a case. Disaggregation will, however, be required in three types of situation. First, two clearly identifiable institutions may interact in more than one way at the same time. For example, the Montreal Protocol for the protection of the ozone layer indirectly promotes the use of certain greenhouse gases (hydrofluorocarbons, HFCs) that are regulated under the Kyoto Protocol to the UN Framework Convention on Climate Change. At the same time, the phase-out of chlorofluorocarbons (CFCs) mandated by the Montreal Protocol reinforces the objective of the international climate regime since CFCs are also potent greenhouse gases. Moreover, the ozone regime's implementation procedure provided a

⁴ Young et al. 1999 also propose to distinguish between horizontal and vertical “interlinkages”, which they base on the distinction between different levels of social organisation. Our distinction appears to be compatible with this concept to the extent that EU and international institutions operate at different levels of social organisation. It can be argued, however, that both are roughly similar in this respect as they are inter-national.

blueprint for implementation control within the climate change regime. Although the situation involves only two institutions and influence runs exclusively from the ozone regime to the climate change regime, the three instances of interaction have different properties and are driven by different causal pathways. Each of them therefore needs to be analysed as a separate case of interaction.

Second, an interaction situation may involve more than two institutions. For example, EU freshwater policy is made up of a number of different directives. Some, like in the drinking water directive, contain quality standards while others set emission standards and yet others, like the nitrate and the waste water treatment directive, focus on limited but important pollution problems. If we are to investigate influence, as we do in the present project, we have to disaggregate complex situations like this one into pairs of bilaterally interacting institutions and to analyse each cause-effect relationship between them separately. We have to investigate whether, and how, the development and performance of the drinking water directive was affected by the nitrate directive, and separately whether, and how, it was affected by the waste water treatment directive.

Third, over time, two or more institutions may co-evolve. Ideally, influence may run from one institution to another, and later on from the target institution back to the original source. The drinking water directive may have influenced the establishment of the nitrate directive, and implementation of the nitrate directive may have helped approach standards envisaged by the drinking water directive. Co-evolution, or feedback, processes of this sort should be disaggregated into suitable phases that allow to identify a clear direction of influence and a single causal pathway (which change from one phase to the next).⁵

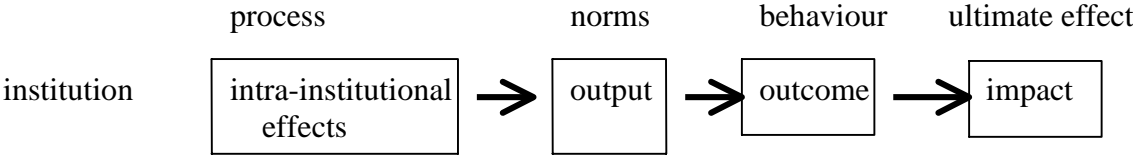
To sum up, complex interaction situations must be disaggregated into a suitable number of cases/phases. A case (or phase) of institutional interaction involves only two institutions and one clearly identifiable causal pathway.

2.4 Institutional Interaction, Effectiveness and Implementation

Like the study of the implementation of international and European instruments, research on institutional interaction forms part of the general issue of institutional effectiveness (see Breitmeier 2000; Gehring/Oberthür 2001). Ultimately, all effectiveness research is interested in whether, how and to what extent institutions affect the state of the environment or other targets of governance. The research focus on institutional interaction emerged from the observation that the effects of an international or an EU institution are frequently not limited to its own domain, but extend to the domains of other international and European institutions. Therefore, both the independent and the dependent variables are related to institutions. This does not mean, however, that domestic implementation is meaningless for our project because policy responses may occur at the national level and the causal pathway leading from the source to the target institution may well include reactions of domestic actors.

⁵ Strictly speaking we are therefore faced with two separate cases of interaction rather than a single one. For practical reasons, it may be advisable to analyse co-evolution processes as one process/case since a number of properties are likely to remain constant from one phase to the next..

Figure 1: Research Design of Simple Effectiveness



The investigation of the 'simple effectiveness' of an international institution within its own domain has increasingly relied on the distinction between levels of effectiveness that form the relevant dependent variables, namely output, outcome and impact (Underdal 2001, Figure 1). No international and European institution may directly affect the state of the environment or another ultimate target of governance. It merely produces norms prescribing or proscribing behaviour (or collectively agreed knowledge) as its immediate *output*. In order to become effective, the output of an institution must result in an observable influence on the relevant behaviour of states (e.g. when implementing relevant norms) and/or of sub-state actors (e.g. relevant industries or private households), i.e. it must generate some form of behavioural *outcome*. Finally, behavioural outcome may or may not result in an *impact* on the (relevant part of the) environment (or other ultimate target of governance). The three levels of effectiveness output, outcome and impact are hierarchically ordered, i.e. output requires outcome and impact requires output and outcome. Nevertheless, each of the three levels constitutes itself a suitable dependent variables of effectiveness research. Accordingly, a rich body of research addresses issues related to output and/or outcome.

Our project is closely related to the research on 'simple effectiveness'. We are also interested in effects that have at least the potential of reaching the impact level. We do not address cases of interaction that do not (even hypothetically) affect the performance of the target institution. From this conceptual point of view, the performance and effectiveness of the target institution constitutes our 'ultimate dependent variable'. However, given the overriding methodological challenges of assessing the impact of an institution on the environment even within its own domain (Underdal 2001), and assuming that relevant chains of causation will typically be longer and effects more remote in cases of side-effects, we will not attempt to *measure* exactly the effects on the impact of the target institution. Our project will therefore predominantly focus on the levels of output and outcome.

While research on institutional interaction is closely related to the key categories of the study of simple effectiveness, the categories are arranged in a distinct manner. Research on institutional interaction always addresses the relationship between two institutions, and we focus on the influence exerted by the source institution *on the target institution and its performance*. While research on simple effectiveness examines the chain of effects from output to outcome and impact related to a single institution (see bold arrows in Figure 1), we are now interested in the chain of effects leading from any suitable level of effect within the source institution to any suitable level of effect in the target institution (see bold arrows in Figure 2).

Figure 2: Research Design of Institutional Interaction

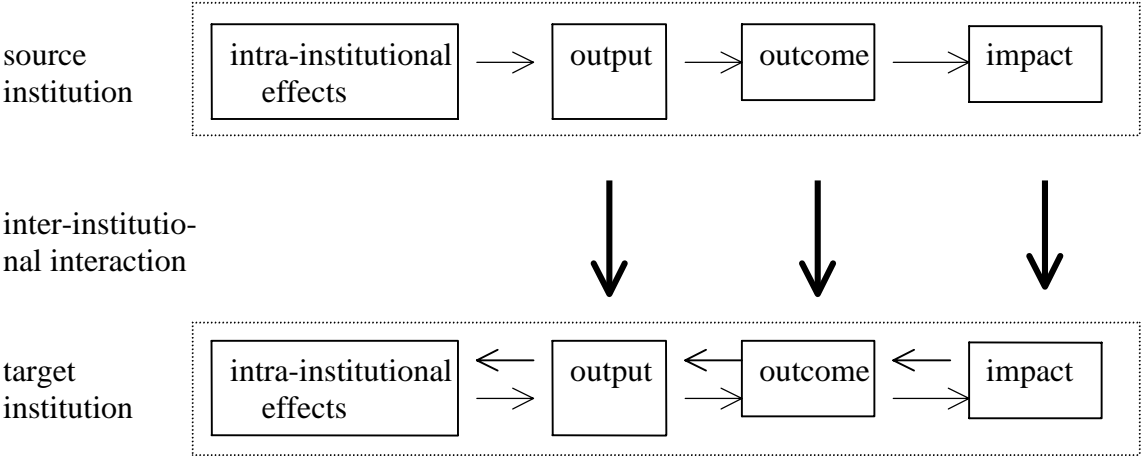


Figure 2 helps clarify where to look for causal pathways and how to conceptualise institutional interaction. Two international or EU institutions involved in a case of interaction may be linked at any one of three levels: output, outcome, or impact (bold arrows in Figure 2). The output of the source institution may thus directly affect the *output* of the target institution. In this case, a change of norms (or lack thereof) within the target regime may be attributed directly to a change/creation of norms within the source regime. While the *interaction* does neither involve the outcome and impact levels, the affected/modified output of the target institution will at least have the potential of affecting the behaviour of relevant state and non-state actors (outcome) and eventually the impact within the domain of the target institution. An example of interaction at the level of output is the non-compliance procedure under the Montreal Protocol that influenced the adoption of similar instruments within other institutions.

Where a case of interaction is located at the *outcome* level, the behaviour of states and sub-state actors governed by the source regime influences the behaviour of states and sub-state actors relevant to the performance of the target institution. For example, regulation adopted within the ozone regime indirectly led industry to rely on ozone-friendly HFCs, that are also powerful greenhouse gases. This behavioural change has therefore been immediately relevant to the performance of the climate change regime. Note that in this case one and the same behavioural change was relevant to the performance of both institutions; in other cases, the – chain of effects may be more indirect involving different actors and types of behaviour.⁶

Finally, two institutions may be related at the *impact* level. In this case, it is the environmental impact of the source institution that influences the performance (impact level) of the target institution. Consider the following hypothetical example: The successful protection of a particular fish stock such as cod results in a growing population of cod. As cod eats herring, protection of cod may unintentionally decrease the population of herring, which may itself be

⁶ The interaction at the outcome level may lead to subsequent changes of the output of the target institution, but this is a secondary effect of the behavioural change (a policy response in the terms of section 3 of this paper).

protected under a second institution. In this case, the two institutions involved are not linked at the level of output (the norms protecting cod do not influence the norm protecting herring), nor at the level of outcome (decreased fishing of cod does not directly influence the fishing activities related to herring). They are related at the impact level by the effects of the source institution on the state of the environment (population of cod affects population of herring)⁷

In conclusion, while we are interested in interaction *between institutions*, we will not exclusively, and not even predominantly, examine effects at the systemic (international or EU) level. Domestic implementation enters the analysis where and when it (outcome) is the root of such interaction and/or policy responses to interaction occur at the national or sub-national level (influence on outcome as secondary effect). Note that, while domestic implementation is *in itself* not of interest for our project, implementation of relevant international regimes by the European Union is. This is the immediate consequence of our two level approach that focuses simultaneously at the international and the EU level, and of the inclusion of vertical interaction in the project. In such vertical interaction, the output at the international level usually results in output at EU level in the form of implementing legislation, which (as is obvious from Figure 2) links the respective international and EU instruments.

3. Dimensions of Institutional Interaction

It is clear from the growing literature on the subject that phenomena of institutional interaction differ empirically in form and substance. It is evident, for example, that the conflict between the WTO and several environmental regimes with trade restrictions differs significantly from interaction between the EU Directives on drinking water and nitrates. In order to grasp these differences systematically, research must be based on reliable and conceptually sound categories. Likewise, effective policy responses will have to be tailored to the particular circumstances of a case of interaction. Much like the distinction between limousines and trucks helps identify key sub-types of the aggregate category of cars, we have to identify key properties of cases of interaction and relevant distinctions that draw attention to important differences between cases. These distinctions should be chosen so as to allow classification of interaction cases in a way that proves useful when thinking about suitable policy responses.

There are only few contributions in the literature that have attempted to derive such conceptual distinctions (for example, Young 1996; King 1997; Young et al. 1999; Stokke 2000). Some of these contributions have highlighted specific aspects of institutional interaction, such as the possible political responses (King 1997). The categories proposed frequently appear to have been selected on an ad hoc-basis without much conceptual foundation. An important contribution has been put forward by Young et al. (1999: 50). They identify on the one hand 'functional' linkages which they consider as 'facts of life' "in the sense that the operation of one institution directly influences the effectiveness of another through some substantive con-

⁷ The effects at the impact level (decreased population of cod) may subsequently lead to effects at the level of outcome (less fishing of cod) and/or the level of output of the target institution (more effective norms), but these effects are secondary to the changes located at the impact level (see on policy responses section 3).

nection among the activities involved" (ibid.). An example is CFCs that have at the same time ozone depleting and climate change properties, which links the ozone and climate regimes (see above). On the other hand, Young et al. (1999: 50) identify 'political' linkages that "arise when actors decide to consider two or more arrangements as parts of a larger institutional complex".

In a series of studies on international resource management, Stokke (1999, 2000, 2001) has proposed a taxonomy of interaction based on four causal pathways through which institutional interaction may influence the effectiveness of the regimes involved:⁸ (1) Diffusive interaction implies that the substantive or operational rules of one regime serve as models for those negotiating another regime; consider for instance the rapid spread of general normative principles such as sustainability, precaution, and ecosystem management. (2) Normative interaction means that the substantive or operational norms of one regime either contradict or validate those of another regime, for instance across the trade-environment divide. (3) For its part, operational interplay refers to deliberate co-ordination of activities under separate regimes in order to avoid normative conflict or wasteful duplication of programmatic efforts. (4) Political interplay, finally, implies that actors mobilize capabilities defined under one regime to realize goals pursued under another. Stokke's categories of interaction link up to existing bodies of theory, specifically the literatures on organisational learning (diffusion), legitimacy (normative interaction), inter-organisational studies (operational interaction), and issue linkage (political interaction). The concept remains to be further applied systematically beyond the area of international fisheries management (Stokke 2001) and refined.

All in all, it appears that the existing approaches highlight some important aspects of phenomena of institutional interaction without, however, providing a means for a systematic and comprehensive classification of cases of interaction. In this section, we therefore introduce a number of distinctions selected so as to capture important aspects of the causal relationship between the institutions involved. They refer to important properties of (1) situation-specific aspects (causes and effects), (2) the nature of influence, and (3) the policy responses following from a case of interaction (see also Gehring/Oberthür 2001). These distinctions have been chosen according to three criteria: All of them reveal information that is important for assessing the effectiveness of existing political responses to problems of institutional interaction. They have been selected with a view to capturing factors that are critical for the causal pathways driving institutional interaction. And they refer to categories well-established in standard institutional analysis so as to allow to advance the state of the art of research on institutional interaction. Unless indicated otherwise below, the categories introduced are believed to be relevant to horizontal interaction at EU and international level and vertical interaction between institutions at both levels alike.

Evidently, one could think of other distinctions and aspects of cases of interaction. However, research conducted on the basis of the categories introduced in the following promises to lead to highly policy-relevant outcomes and to advance research on institutional interaction in a systematic manner.

⁸ On causal pathways in the study of regime effectiveness, see in particular Young (ed.) 1999.

3.1 Causes

It is well-established in both regime theory and policy analysis that the cause of an event matters for its explanation and understanding as well as for the design of effective institutional responses. The cause is an important part of what is occasionally referred to as problem structure (Miles et al. 2001; Hasenclever et al. 1997; Wettestad/Andresen 1991).

Functional interdependence of two or more international institutions and the related issue-areas governed has been established as an important driver for institutional interaction (Young et al. 1999: 50). In some cases, we may find that the issue-areas governed are so different that their functional relationship causes the interaction. For example, the EU nitrate directive supports implementation of the drinking water directive by improving an important parameter of drinking water quality. In this case, interaction is driven by a functional logic. However, in other cases the substance addressed is almost identical and therefore presumably of little explanatory value, while we find memberships so clearly distinct from each other that we may expect this variation to influence the causal pathways at work. For example, the rapid development of the global Basle regime on the transboundary movement of hazardous wastes may arguably be attributed to the establishment of several regional arrangements operating within the same issue-area because the number of outlets for legal waste exports to the South was significantly reduced and the constellation of interests within the global regime thereby affected (Meinke 2000). In this case, institutional interaction is clearly attributed to the interplay between the groups of actors involved (i.e. the difference in membership), rather than the (minor) differences of the substantive issue-areas. As a result of the differing memberships, two or more institutions in one issue area may be characterised by very different constellations of interest driving institutional interaction. *Hence, cases may ideally be driven either by a functional logic or by a membership-related logic* (Gehring/Oberthür 2001).

We may expect that horizontal interaction between international institutions as well as vertical interaction between EU and international institutions may follow either of the two causal logics. In contrast, horizontal interaction between EU institutions will probably be limited to functional interdependence since their memberships usually do not vary. Once interested member states resort to the “enhanced co-operation” mechanism according to Article 11 of the EC Treaty (Bär et al. 2000), the logic of membership will enter EU policy-making. Since this has not happened to date, it is unlikely to be of much relevance in the context of our project.

3.2 Effects

Unless we have an appropriate distinction of the effects generated by a case of institutional interaction, we may only observe whether or not a source institution indeed affects the target institution, but not in which way. Obviously, the kind of effect created by institutional interaction will be of utmost importance to the issue of what policy response might be suitable.

Effects vary to a considerable extent. For example, the EU Directive on Integrated Pollution Prevention and Control (IPPC) supports the achievement of objectives of other environmental EU Directives, for example those on waste and water management. In contrast, the objective of WTO/GATT to promote a freer world trade and reduce trade obstacles is in conflict with

several environmental regimes that restrict trade in certain goods. Such concrete effects are generally the direct result of regulations rather than differences in policy objectives (that can be said to be clearly incompatible only in exceptional cases).

At the most basic level, effects may either reinforce or contradict the 'policy direction' (Gehring 1994: 433-449) of the target institution. The policy direction indicates the direction of collectively desired change or the objective of maintaining a desired status quo against some collectively undesired change. It has generally also been the major yardstick in the established research on regime effectiveness (see, e.g., Haas et al. 1993, Bernauer 1995, Wettestad 1995; 1999; Young 1992; 1999; Oberthür 1997; Victor et al. 1998; Stokke/Vidas 1996). *Accordingly, from the point of view of the collectivities of actors involved (although some members may disagree individually), interaction may either produce synergy effects or it may cause disruption.*

It is clear that different effects create different kinds of demands for policy responses. In the case of synergy effects, for example, there may be little pressure to take action at all – although appropriate policies may maximise collective benefits. In contrast, disruption creates conflict and will therefore produce demand for more beneficial solutions.

3.3 Policy fields

Interaction may take place within the broader policy field of 'the environment'. One of the interacting institutions may also be part of a different policy field, like transport or agriculture. We might assume that policy-makers operating within the field of the environment are likely to pay more attention to side-effects on other environmental institutions, whereas policy-makers operating in other policy fields will care less. In this case, the policy direction of two institutions operating in the same policy field (e.g. the environment) will be more likely to possess similar or compatible policy directions. We may thus hypothesise that interaction between institutions from the same policy field is more likely to be synergistic, whereas institutions from different policy fields are more likely to generate disruptive interaction. Interaction between different policy fields may also differ systematically from interaction within the same policy field in other dimensions (policy responses, intentionality, etc.).

Since our project focuses on institutional interaction involving environmental institutions, at least one environmental institution will be involved in all cases investigated. The question thus boils down to whether both the source and the target institution belong to the environmental policy sphere or only one of them. Thus, in the case of the WTO interacting with certain environmental regimes, interaction crosses the borders of the policy fields 'environment' and 'international trade'. As far as the IPPC Directive supports the objectives of other environmental EU Directives, the interaction remains purely in the environmental field. The main distinction is thus between an interaction between two environmental institutions and one environmental institution and one non-environmental institution.

We may expect that the patterns of horizontal interaction between environmental and non-environmental institutions may differ between the EU and the international level, since a set of common principles, that does not exist internationally, is laid down in the EC Treaty and thus guides all EU legislation. Furthermore, it may be worthwhile distinguishing not only

non-environmental institutions but also to specify the policy field of any such institution, such as trade, economy, transport, etc. Similarly, one may wish to cluster environmental institutions (e.g. conservation and nature protection, atmosphere/air pollution, waste, etc.), as these sub-groups may also differ as to the features of their interaction.

3.4 Intentionality

It matters whether actors within the source institution trigger a particular instance of institutional interaction intentionally or not. Intentionality is a well-established category of social science research, and it is particularly important for analysing existing policy responses and evaluating other policy options (see below).

Institutional interaction may be brought about *in order* to influence the target institution. For example, the African countries established the regional Bamako convention on hazardous wastes *in order to* influence the global Basle convention governing the same issue-area. Interaction may also come about as an unintended side-effect. For example, the various environmental regimes with trade restrictions were not intended to interfere with GATT/WTO, but to reinforce environmental policy-making. On a different note, it is difficult to imagine a diffusion of principles and norms from one institution to another – what Stokke calls “diffusive” interaction (see above) – as intentional on the side of the source institution. As this example illustrates, intentionality may also be a relevant category as regards the target institution: While a diffusion of principles and norms regularly involves intentional consent by the target institution this does not hold for other cases of interaction.

Intentionality must be kept separate from anticipation. Unintended institutional interaction may or may not have been anticipated. If anticipated, unintended interaction was not avoided because the costs of doing so were considered higher than the benefits. If unanticipated, effects come about as a surprise, although they might have been possible to anticipate at closer inspection (Martin/Simmons 1998). The distinction between intended and unintended external effects will produce important information in particular because we may expect that the nature of response action varies accordingly. We may assume, for example, that unintended interaction will more easily become subject to inter-institutional co-ordination than intended action, because actors will be prepared to search for a common solution. On the other hand, it may be easier to identify reliable solutions for intended cases of interaction, because they depend exclusively on human action.

With respect to horizontal and vertical interaction, one working hypothesis might be that intentional disruptive horizontal interaction between EU institutions should be rather rare, since the comparatively sophisticated institutional framework of the EU should help to reconcile different policy objectives. The case studies might provide evidence for or against such an hypothesis.

3.5 Ability to influence the other institution

The second distinction related to source institution action refers to the ability of source institution actors to affect the target institution unilaterally. If the ability of source institution actors to unilaterally influence the target institution is high, the source institution will affect the

performance or development of the target institution without consent, or even action, of the actors of the target institution. For example, by imposing trade restrictions on non-members, the members of the ozone regime may unilaterally influence the performance the GATT/WTO.

In other cases, the actors of the source regime are not able to influence the target institution unilaterally. Then, effective interaction inevitably depends on consent and action by the members of the target institution. For example, the Montreal Protocol requires close control of trade in ozone-depleting substances and products containing them that is executed predominantly by customs officials. Members of the ozone regime desired to modify the Harmonized System of customs codes of the World Customs Organization (WCO) according to their needs. However, they could not impose modifications. As a result, they had to initiate inter-regime talks (Oberthür 1999).⁹ Hence, we derive an important conceptual distinction between cases that rely on the ability of members of the source institution to influence the target institution unilaterally and cases that depend on consent of the members of the target institution.

The ability of the two (or more) interacting institutions to influence each other is also highly relevant for assessing the potential for effective policy responses. A potentially disruptive effect of an institution on another one will not create particular worries if the source institution is not able to influence the target institution unilaterally. In case of synergy effects, one may, under the same circumstances, search for ways of setting up some kind of co-ordination, which will not be required if the ability to unilaterally influence the target institution exists. If actors within one institution can cause disruptive effects unilaterally, this may be responded to effectively in the framework of either of the institutions. In this case, intentionality of the influence will obviously have an impact on the question in which institutional context effective response action might best be pursued. If it was intentional, the source institution might not provide the most promising arena but action by the target institution may have better chances of success.

3.6 Responses: tacit adaptation, collective decision-making, inter-institutional co-ordination

The following two distinctions relate to response action. Differences in response action have so far attracted remarkably little attention within the literature on institutional interaction. Our first distinction refers to the level at which adaptation/the political response takes place. Relevant actors (usually member states of the relevant target institution) may adapt to the influence exerted by the source institution unilaterally and thus outside any of the institutions involved. Such 'tacit adaptation' may be said to be the least ambitious, and therefore probably most widespread, form of adaptation. In contrast, members of the institution or institutions involved may also respond collectively by modifying the institution/institutions, for example

⁹ Note that the influence relationship is asymmetrical since the WCO is able to influence the Montreal Protocol unilaterally by taking relevant action (that cannot be prevented by the ozone regime). It may be useful to analyse the ability of both institutions involved in a case of interaction to influence each other (as opposed to the ability of the source institution only) in order to detect such asymmetries (or symmetries) which can have important ramifications for the effectiveness of certain policy options. This will be particularly relevant for cases that develop in several phases (see section 2.3 above).

by amending its/their norms and rules. While unilateral, extra-institutional adaptation involves uncoordinated individual decisions (or non-decisions), modifying the institution(s) involves collective action that is channelled through the relevant institutionalised communication process. It is obvious that the categories of extra-institutional adaptation and collective decision-making differ fundamentally since they operate at different levels (Gehring/Oberthür 2001). Tacit adaptation requires an analyst to examine domestic implementation, while collective decision-making demands to investigate institutionalised communication processes.

Collective decision-making regarding the institutional interaction can in principle occur in either of the institutions separately (intra-institutional adaptation), or by establishing an additional communication process that overarches the two (or more) institutions (inter-institutional co-ordination). The latter may, for example, take the form of an exchange between the relevant secretariats, negotiations between the two groups of actors or even court decision-making. In this case, we have what Young et al. (1999: 50) call a "political linkage" that arises "when actors decide to consider two or more arrangements as parts of a larger institutional complex". Schram Stokke refers to this type of inter-institutional exchange as "operational interplay" (Stokke 2000). The distinction between intra-institutional adaptation and inter-institutional co-ordination also covers the continuum of response action introduced by Leslie King ranging from "take-over" over "persuasion" and "communication" to "joint action" and "merger" of the institutions involved (King 1997: 18).

Inter-institutional co-ordination is relatively demanding because it – unlike other political responses – requires establishing some kind of inter-institutional process/communication involving transaction costs. While these costs may not necessarily be enormous, we may nevertheless expect this to be a barrier to the emergence of inter-institutional co-ordination which may thus occur relatively rarely. Since an institutional framework for reducing the related transaction costs is already existing in the case of the EU, we should not be surprised if we found that inter-institutional co-ordination occurred more frequently with respect to horizontal interaction between EU institutions than in cases that involve international institutions (in cases of both vertical and horizontal interaction).

In conclusion, concerning the form of policy responses we can distinguish between (1) tacit adaptation and (2) collective decision-making. Collective decision-making itself may or may not involve (3) inter-institutional co-ordination. These categories can thus guide the analysis of empirical cases. Furthermore, since the characteristics of policy responses may be of prime interest as regards the assessment of success or failure and deriving policy-relevant conclusions, it may be worthwhile pointing to any special features of policy responses that have occurred (e.g. communication/exchange of information/common assessments versus changes of substantive rules, including the introduction of collision rules/procedures).

3.7 Responses: success or failure

We want to learn lessons about how to minimise conflicts and maximise synergies between international and EU environmental institutions. Therefore, we must assess whether (and to what extent) the political responses applied in any one case have been a (relative) success or failure. Only on this basis we can try to either avoid the mistakes made (failure) or copy the successful approaches (success).

Assessing the relative success or failure of policies is a notoriously difficult task. The assessment fully depends on the criteria applied. At a minimum, we have to explore whether the respective policy has had any effect at all and whether this effect contributes to diminishing the existing conflict or to enhancing the existing synergy (relative success) or not (relative failure). For a more sophisticated judgement, one may engage in an assessment of how much of the gap between the hypothetical situation without any policy response (what would have occurred without the policy response?) and a hypothetical optimal situation has been closed by the policy response and ask whether other available policy responses could have delivered more positive results (and to what extent).¹⁰

This assessment of the relative success or failure of political responses to issues of institutional interaction provides the basis for learning general lessons and making recommendations that may be applied by policy-makers. Mistakes made in one case may be avoided in similar cases, responses that have proven successful under certain circumstances can be transferred to similar situations. Obviously, great attention has to be paid to the circumstances and important framework conditions of each case so as to ensure that lessons learned in one setting can be transferred to another case.

In any case, there may be policy options available that can be expected (or are known) to lead to a (further) improvement of the situation. The assessment of such policy options has to be based on certain criteria and known cause-effect relationships. For example, henna is known to give a reddish colour to certain materials. More henna may thus be expected to result in a even more reddish colour (up to a certain point). Likewise, certain features of policy responses that are known to have a certain effect under particular circumstances can possibly be enhanced in some way or another. Therefore, the analysis of success/failure of policy responses paired with the investigation of further characteristics (see 3.6 above) can provide the basis for identifying which features of policy responses fit a particular case.

4. *Analysing Institutional Interaction Empirically: Methodological Considerations*

The empirical exploration of interaction between international and EU environmental institutions takes place in two steps. First, the twelve international and EU institutions will be examined as to their interaction with other environmental or environmentally relevant institutions at the European or international level in order to elaborate an inventory of cases of interaction that is as comprehensive as possible. Second, a limited number of cases of institutional interaction to be selected later on will be investigated in depth as to their underlying causal mechanism and (possible or actual) response action. Both steps of the project pose methodological difficulties that are addressed in this section.

¹⁰ Criteria for the evaluation of the effectiveness of institutions have been established in the context of research on the effectiveness of international institutions; see, for example, Underdal 1992; Haas et al. 1993; Young 1992; 1999; Wettestad 1995; Oberthür 1997; Victor et al. 1998. See also the evaluation of the “success” of environmental policies in Jänicke/Weidner 1995.

4.1 An Inventory of Cases of Institutional Interaction

In the comparatively brief first step, project members will elaborate inventories of cases of interaction for each of the twelve international and EU environmental institutions explored in the present project. Inventories will serve two purposes. First, they provide information on the ways in which the twelve environmental institutions investigated are woven into a network of other international or European environmental and environmentally relevant institutions. Therefore, they will have to be as comprehensive as possible. Second, inventories will reveal information on the 'profiles' of a comparatively high number of cases of interaction. In order to produce useful information and allow a comparison across cases, the distinctions introduced in section 3 should be used in a rather strict way in this part of the project by using them as a checklist. The description of each case shall briefly address the distinctions, while additional information should be limited to a bare minimum so that each case description takes one page maximum. The resulting case "profiles" provide the informational basis for the selection of a limited number of cases of interaction that are to be analysed in more detail in the second part of the case studies. (Selection will be made by the whole project team based upon the recommendation of the case study authors and taking into account a number of criteria, including to ensure that we arrive at a representative sample of cases overall in the project.)

The comparatively high number of cases of interaction and a strict application of the categories developed in section 3 will enable us to identify dominant *patterns* of institutional interaction (and their prevalence under different conditions). Beyond the analysis of *individual* cases of interaction, we may, for example, investigate whether cases driven by a functional logic lead more often than cases driven by a logic of membership to inter-institutional co-ordination and whether intentionality systematically influences this variation. Also, interaction between environmental and non-environmental institutions may more frequently result in conflict than interaction between two environmental institutions. Patterns of interaction thereby derived inductively may then be used to hypothesise about causal connections between the different dimensions of institutional interaction and may eventually allow to elaborate more complex *causal mechanisms* and a kit of standard forms of interaction (see Gehring/Oberthür 2001). This aggregate analysis is in addition to what we promised to the Commission, but should considerably enrich the overall value of the project outcome.

The elaboration of inventories poses a number of methodological problems of which three shall be briefly addressed in the remainder of this sub-section. First, case study authors will immediately realize that each distinction developed in section 3 juxtaposes two mutually exclusive ideal types, while real world cases may be of a hybrid nature. For example, interaction between the river Rhine regime and the regime for the protection of the North Sea might be driven either by a functional logic or due to the differences in membership, or it may be caused by both factors at the same time (see section 3.1). We are faced with two institutions governing different issue-areas that are functionally linked by the fact that pollution of the river Rhine is a major source of pollution of the North Sea. Memberships differ also significantly and provide room for a logic of membership. Similarly, response action may take the form of extra-institutional adaptation and inter-institutional co-ordination at the same time. What appeared to be a bi-polar distinction in theory may thus have to be treated as a contin-

uum in practice. Case study authors should be aware of the difficulty of hybrid cases and act accordingly. For example, authors may indicate that an institution has the ability to influence a target institution, but that this influence is rather low. Most of the other distinctions (success-failure, disruption-synergy, functional-membership) can be treated in a similar way. In respect of response action (tacit adaptation, collective decision-making, inter-institutional coordination), it suffices to indicate which type of action was taken. There is more room to deal with the particular mixture of properties of interesting cases in the second part of the project.

A second methodological problem relates to the complexity of interaction phenomena. A single international or European environmental institution may interact with numerous other institutions. Moreover, chains of causation may be long so that the influence of the source institution on the target institution becomes remote. Consider that the non-compliance procedure of the ozone regime did not only inspire the designers of the climate change regime, but that it constituted a response to implementation difficulties experienced within other regimes, e.g. CITES. Does the climate change regime thus interact with CITES? This problem is well-known in the realm of regime effectiveness research (known as the problem of Cleopatra's nose). It is an immediate consequence of the fact that the real world is much more complex than what we can handle in any possible project, however perfectly designed. In elaborating the inventories, we should follow three rough guidelines to deal with this problem: First, we should only consider cases in which influence runs directly from the source institution to the target institution, not constellations in which it passes through an intermediate institution as in the case of CITES and the climate change regime. Second, we should prioritise obvious cases of interaction with short causal chains over less obvious ones with longer causal chains. Third, we will first address cases of interaction of the twelve institutions identified in the DoW with international regimes and/or European Directives and Regulations and only then address interaction with other types of institutions, which should display particularly clear and short causal chains. This will be relevant in particular within the context of the European Union.

A third methodological problem stems from the fact that a case is defined by the influence of the source institution on the target institution. Case study authors thus have to be aware of the causal link between both institutions when preparing the inventory. The problem is tricky because causal pathways may be difficult to identify without in-depth analysis which will only be done in the second part of the project for a smaller number of cases of interaction (see section 4.2.). It is difficult to think of reliable guidelines and rules of thumb. We should be aware that, as a result of the aforementioned difficulty, we may miss relevant cases of interaction. The success of the crucial first part of the project will therefore heavily depend on the knowledge and intuition of the institutions by the respective case study authors. Their task is supported by the distinctions developed in section 3 which provide at least some ideas on the variety of existing causal pathways and on how interaction between international and European institutions *may* take place.

4.2 Establishing Causality

The second part of the project is devoted to the in-depth investigation of a limited number of cases of interaction. Case studies will serve two main purposes. First, they shall generate

case-specific knowledge on *how* interaction between institutions takes place. Therefore, they will analyse, and describe in detail, the causal pathway and features of a case of interaction. Second, they shall produce information on policy responses, i.e. insights on how to deal with institutional interaction, that may provide an empirical foundation for policy recommendations. Therefore, case studies will analyse and describe in detail how the actors responded to interaction and what followed from these responses (and assess/discuss further policy options).

The core methodological problem of this part of the project is to identify in each case the existence of an actual chain of influence between the institutions involved. To establish causality, we need to identify the causal pathway that links the cause within the source institution with the effect in the target institution. This comprises three steps. First, we must ask how an important component of the source institution affects the decision situation of relevant actors. Second, we must establish that these effects motivate these actors to change their individual behaviour. And third, we must demonstrate that these behavioural changes (or their anticipation) produce the effect observed within the target institution (including its issue area) (see Esser 1993: 39-63). Hence, a causal pathway combines a logic of the situation with a theory of action and a logic of aggregation of actors' behaviour (see Coleman 1990: 1-23). For example, establishing interaction between the climate and biodiversity regimes regarding forest management would require (a) to show that the decision situation of relevant actors has changed because of certain developments in the climate regime, namely that actors now have an incentive to maximise carbon sequestration in forests over preservation of biological diversity; (b) to demonstrate that changes in individual behaviour of relevant actors may be attributed to the modified decision situation, namely that forests are planted or managed so as to maximise carbon sequestration (or that domestic implementation to that effect has been passed, or that such behavioural change can be anticipated with justification); and (c) to establish that, as a consequence, the biodiversity regime is affected by this change, either because its performance is undermined or because actors respond collectively by initiating international activities.

A particular problem is posed by instances in which behavioural effects have not become obvious yet and have possibly not even occurred yet. For example, the climate regime may not yet have influenced the forest management by relevant actors. It may thus not be possible to identify a clear influence on the performance of the biodiversity regime. Excluding cases which display a clear *potential* for interaction and in which such interaction can thus be anticipated risks missing a number of relevant cases of interaction. In these cases, we will therefore have to look for incentives that have the *potential* of affecting the behaviour of certain actors with *potential* consequences for the target institution. Replacing hard data on behavioural changes with theoretically founded speculation thus allows us to include an important class of cases of institutional interaction.

Since quantitative or statistical methods for causal analysis of interaction situations seem to be largely out of reach at present, cases of interaction will be treated as single events that are independent of each other. Establishing causality in cases of institutional interaction may resort to a number of well-known empirical methods. These methods include process tracing (see George/McKeown 1985), the construction of counterfactual scenarios (Tetlock/Belkin

1996, Bierstecker 1993, Fearon 1991), the exclusion of alternative explanations, and other types of thought experiments (Bernauer 1995). They are so widely applied in the well-advanced research on the simple effectiveness of international regimes that they need not be elaborated here.

Some dimensions of institutional interaction introduced in section 3, may draw on a different (generally less demanding) sub-set of methods. For example, the investigation of collective response action may rather rely on standards document analysis than the construction of counterfactual arguments. Demonstrating intentionality may prove a particularly challenging task in this context. It is important to note, however, that we are predominantly interested in the intention/non-intention of the *community* of members of the source institution, rather than of single partisan actors. Information may therefore also be gathered, for example, from relevant legal texts (treaties, directives etc.) and related documents which can be expected to give information about the collective intention of the relevant communities of actors.

The causal pathway underlying a case of interaction may generally involve different types of actor and behaviour. Effects observed within the target institution will frequently be attributable to changes in the behaviour of key states (or groups of states) because institutional rules and incentives are in international as well as European environmental institutions primarily directed at states. States are also the group of actors most influential in bringing about changes of the target institution. However, they are rarely the ultimate causers of pollution and environmental problems. Therefore, causal analysis must, depending on the particular case at hand, add to the analysis other groups of actors like non-governmental organisations, industry, as well as institutional actors such as secretariats. Relevant actors 'behave' generally in two distinct forms. They act outside the framework of the institution involved, for example shipping waste from one country to another or allowing their whalers to catch whales. They may also act through communication within the institution, for example modifying a negotiation position or instigating dispute settlement proceedings, if available. Consequently, research may have to focus on the domestic level or on the institutionalised international process.

5. *Interim Products and Final Book*

Deliverables promised under the DoW and organization of the final book:

1. A conceptual introductory chapter that outlines the concept and approach of the project/book, based on the present paper.
2. Inventories of cases of interaction in which the twelve institutions investigated are involved.

It will be impractical (and probably impossible) to publish the twelve inventories in detail in the book. Rather, the book might contain an evaluation of the inventories that would try to identify types of interaction and would investigate their prevalence under different conditions (international, EU level, vertical/horizontal interaction, etc.). Nevertheless, inventories are deliverables required under the DoW. Their publication, for example in the form of working papers of the participating institutes or journal articles, will be in the responsibil-

ity of the respective authors. The inventories are also expected to be published on the project's website.

3. In contrast, the in-depth case studies should become chapters of the final report as well as of the book. The book would then contain the 12 case studies envisaged in the project proposal, six taking international regimes as their starting point and six starting from EU directives. These chapters might have an approximate length of 20 pages.

Each chapter would contain a brief introduction of the core institution of the case study (ca. 2 pages). In addition, it should briefly summarise the results of the first stage of the case study, i.e. the inventory (including a description of main types of interactions). If we reserve some room for conclusions/recommendations (and references), this leaves only very limited room for the in-depth analysis of actual cases of interaction (ca. 12 pages). The number of cases of institutional interaction investigated under these circumstances will obviously depend on the nature of the cases. It needs to be taken into account that in each case we will like to deal with policy responses at some length. The average number of cases to be selected for each case study may be two. In some cases, it may be possible to increase this to three. In other cases, especially where an interaction has evolved over several phases and/or where interesting/complex political processes have developed in response to interaction (e.g. in the EU context), it may only be possible to assess a single case.

4. The book's final chapter would consist of conclusions to be drawn and policy recommendations or, possibly more appropriate, an evaluation of the effectiveness of different policy options under varying circumstances.

The substance of the concluding chapter may be largely identical with a policy paper focusing on the politically relevant lessons to be learned from the project, which is also part of the DoW.

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