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Protecting the North-East Atlantic: Enhancing synergies by institutional design*

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1. Introduction

The North Sea has been a core area under the collaboration on the protection of the North-East Atlantic marine environment since the early 1970s. Surrounded by densely populated areas, the North Sea is an area of intense human activity. Land-based (river input and direct discharge) and ocean-based discharges (dumping and incineration at sea) of hazardous substances and nutrients as well as atmospheric fall-out have been among the major sources of contaminants to the North Sea. Many of these problems have been dealt with more or less concurrently by three different types of international institutions: legal conventions on marine pollution; the ‘soft law’ International North Sea Conferences (INSC); and the European Union (EU).¹ These institutions are a significant part of Europe's marine environment management and the 25-year history of environmental collaboration in the North-East Atlantic can serve as a fascinating example of a transformation from inertia to action.

Much of the literature on regime interaction or linkages tends to emphasise problems of institutional congestion and density.² We would thus expect that a case such as this would represent a clear example of duplicated work and coordination problems leading to low effectiveness. Contrary to conventional wisdom, however, the three types of overlapping institutions covering the North Sea and the wider North-East Atlantic have proven mutually beneficial by fulfilling different functions all of which are needed to manage marine pollution effectively. Moreover, these functions would be difficult to manage within the same institution due to internal contradictory requirements. The result of institutional interaction in this issue area is evident in the significant overall reductions achieved in the emission of regulated organic substances, pesticides, heavy metals, nutrients, and dumping and incineration at sea (Skjærseth, 1999, 2000 and 2002a,b).

The quarter-century history of international cooperation among countries bordering the North Sea/North-East Atlantic is the story of evolution from a state of water and marine pollution ‘anarchy’ to domestic and international ‘governance’. In 1972, the Convention for the Prevention of Marine Pollution by Dumping from Ships and Aircraft (Oslo Convention) was established. Signed by all 13 West European maritime states, the Oslo Convention covers the entire North-East Atlantic up to the North Pole. In 1974, the Convention for the Prevention of Marine Pollution from Land-based Sources – the Paris Convention – was signed in Paris by roughly the same states as the Oslo Convention. The Oslo and Paris Conventions were supported by a joint

secretariat, executive commissions (Oslo and Paris Commissions) and several standing and ad hoc scientific/technical bodies.³

The Paris Convention allowed the European Community to join as a contracting member and water policy was the first sub-sector developed under EU environmental policy. The most significant directive concerned with water and marine pollution was the 1976 Directive on Pollution Caused by the Emission of Certain Dangerous Substances into the Aquatic Environment of the Community, the so-called Dangerous Substances Directive, which covers inland, coastal, and territorial waters. In addition, the 1979 Directive for the Protection of Shellfish Waters and the 1976 Directive for Bathing Waters were of some significance for marine pollution. However, the EU did not succeed in adopting a dumping directive, even though the first proposal had been submitted to the Council as early as in 1976. The environmental policy of the EU did not gain a firm legal basis until the Single European Act was adopted in 1986.

Spurred by dissatisfaction with existing international institutions, Germany took the initiative to arrange the first International North Sea Conference (INSC) in Bremen in 1984. This was originally conceived of as a one-off event, but these conferences evolved as a more permanent institution over time by the establishment of the standing Committee of North Sea Senior Officials (CONSSO).⁴ The Bremen Conference was followed by conferences in London 1987, The Hague 1990, Esbjerg (Denmark) 1995 and, most recently, Bergen (Norway) 2002. Conference participants have been the eight North Sea coastal states and the EU, which represent a sub-set of the original Oslo and Paris Conventions parties. From 1990, Switzerland was also invited to participate.

The London Declaration represented a turning point in its ambition to phase out dumping of industrial waste and incineration at sea, to reduce inputs of nutrients to sensitive areas in the order of 50% between 1985 and 1995, and to reduce total inputs of hazardous substances reaching the aquatic environment in the order of 50% within the same time frame. The 1990 Hague Declaration clarified and strengthened the London Declaration, particularly concerning land-based sources. The Oslo and Paris Commissions (OSPARCOM) together with the EU took significant steps in the same direction in the wake of the 1987 North Sea conference. In addition, these institutions were appreciably amended in the latter part of the 1980s. The 1987 Single European Act incorporated environmental protection into EU legislation, the 1991 Maastricht Treaty and the 1997 Amsterdam Treaty changed EU environmental decision-making, and the Oslo and Paris Conventions were brought together in 1992 to form a single legal instrument for

the protection of the North-East Atlantic (OSPAR Convention). In 2000, the EU adopted a Water Framework Directive (WFD) which replaced seven old directives, including the directive on dangerous substances.

The collective workings of the ‘soft law’ INSC, the ‘hard law’ OSPAR and the ‘supranational’ EU have proved instrumental for the achievements reached. Moreover, these institutions have performed well with a number of other international environmental institutions. In the second part of this chapter, a broad view is taken on the twelve most relevant cases of institutional interaction. The third part focuses on the first phase of marine pollution control and the extent to which and how interaction has affected the effectiveness of marine pollution control. The cases selected are collaborative efforts of the INSCs, OSPAR and the EU. The main argument in this section is that the ‘soft law’ INSC declarations have speeded up the decision-making processes in OSPAR and the EU. Part 4 focuses on the second phase and the role of OSPAR and the EU. The argument here is that OSPAR and the EU in turn have facilitated domestic implementation of the original INSC Declarations. The synergetic relationship between these institutions has been enhanced by means of conscious institutional design. The INSCs were deliberately designed to speed up the decision making processes in relevant bodies. Lessons to be learned from these synergetic processes are discussed in the last part of this chapter.

2. Synergy in practice

Besides the crucial interaction between the INSCs and OSPAR, these institutions have been influenced by the Montreal Protocol, the Rhine regime, LRTAP as well as various EU directives. Conversely, the INSCs and OSPAR have impacted on the UNFCCC, the London Convention on dumping and, again, various EU directives. The list of interactions presented below (Table 2.1) is not exhaustive, but provides the clearest and most important cases within the field of environment.⁵

Table 2.1 Instances of interaction between the INSCs, OSPAR and other international institutions as well as EU directives⁶

Core institution + other institution	Characteristics of interaction
INSC + OSPAR	INSCs facilitates and speeds up development of OSPAR
OSPAR + INSC	OSPAR expands the scope of INSCs and helps implement INSC Declarations on marine pollution
INSC + Montreal protocol	Montreal Protocol helps implement the INSC commitments on carbon tetrachloride and methyl chloroform
OSPAR + UN Framework Convention on Climate change	CO ₂ sequestration in North Sea oil fields to implement climate commitments may violate OSPAR prohibition on dumping at sea
OSPAR + London Convention	OSPAR facilitates agreement on global ban on dumping and incineration at sea within London Convention
OSPAR + Rhine Convention	Implementation of Rhine Convention helps achieve objectives of OSPAR
OSPAR + Convention on Long Range Transboundary Air pollution	LRTAP commitments on NO _x contribute to achieving the objective of OSPAR on nutrients and eutrophication
INSC + EC Nitrates Directive	INSC Declaration facilitates/triggers the adoption of the Nitrates directive
INSC + EC Urban Waste-Water Directive	INSC Declaration facilitates/triggers the adoption of the Urban Waste Water Directive
EC Nitrates Directive + INSC	Nitrates Directive helps implementation of INSC objectives on nutrients
EC Urban Waste-Water Directive + INSC	Urban Waste-Water Directive helps implementation of INSC objectives on nutrients
OSPAR + EC Urban Waste-Water Directive	OSPAR facilitates/triggers inclusion of obligation to phase out sewage sludge dumping in Urban Waste-Water Directive

Source: Skjærseth (2001)

The main conclusion to be drawn from these 12 instances of regime interaction (Table 2.1) is that the institutions governing marine pollution in the North-East Atlantic live in harmony with each other in the sense that almost all instances of interaction have triggered higher

levels of effectiveness. While OSPAR and the INSCs have proven mutually beneficial, they have also been able to benefit from the other institutions and have themselves influenced other international regimes and EU directives in a positive manner. The most interesting question in this issue area is thus not how to avoid conflict, but rather how to enhance synergy.

It would be difficult to trace the origin of the good synergetic effects to any inherent *intentionality* or *ability to influence* the target institution unilaterally. Most cases of interaction have been anticipated, but not intended. One noteworthy exception is the highly synergetic relationship between the INSCs and OSPAR. The combined effect served as the prime engine driving marine pollution control forward. The INSCs were intentionally designed to speed up decision making in other international institutions. There is no clear relationship between effects and the ability of the source institution to instigate changes unilaterally without targets consent. In some cases, such as the Montreal Protocol, changes have been generated without the consent of the affected institution. In other cases, like the London Convention, consent has been required. There appears to be a close link here with regard to whether the influence was exerted at the level of behavioural outcome or collective decision-making. In the latter case, actors will normally respond to external stimuli by instituting collective decision making.

The *causes of interaction* also vary across the cases characterised by synergy. Changes brought about by interaction between the Montreal Protocol and other institutions were brought about by differences in objectives. Parties to the Montreal Protocol and the INSCs/OSPAR were obliged to reduce the same substances in order to counter depletion of the ozone layer and marine pollution. Interaction between OSPAR and the London Convention (LC) is driven by a membership logic. Both institutions have the same objectives and they operate in the same issue area (dumping and incineration at sea). Nevertheless, their membership varies significantly: OSPAR is a regional convention, while the LC has a global scope. Differences in means are most clearly visible in the interaction between the INSCs and OSPAR on the one hand, and between these institutions and the EU on the other hand. Differences in means are *institutional* in the sense that the ‘soft’, ‘hard’ and ‘supranational’ law qualities of the INSCs, OSPAR and the EU imply significant differences in norms, rules and procedures applied in the same issue area.

The positive relationships between international institutions in this issue area have most likely been facilitated by two factors that are common to most instances. First, all the

institutions share roughly the same environmental goals, in contrast to institutions dealing with e.g. trade and the environment. A second probable explanation for the high level of synergy is the relatively long history of institutional cooperation on marine pollution control. Effectiveness tends to increase along with regime ‘age’ – at least up to a certain point (Miles and Underdal et al., 2001). Most international institutions need a period of learning by doing before they mature. And most of the cases of interaction mentioned in this chapter trace their beginnings to the 1970s and 1980s. The institutions involved have thus had time to adapt and adjust. In contrast, it is not difficult to find many examples of disharmony among recently established complex regimes dating from the 1990s.

The vertical relationship between the EU and OSPAR is quite illustrative. In the first half of the 1980s, the EU Commission was the major ‘blocker’ of proposals for pollution abatement within the Paris Commission (Sætevik, 1988). The Council of Ministers had to take the final decision in those cases where legally binding decisions were proposed by the Paris Commission. The distribution of competence between the Commission and the member states was unclear and defined as an ‘internal’ matter. Moreover, the EU did not allow for majority decisions on environmental directives until the Single European Act entered into force in 1987. Thus, single EU member states not participating in OSPAR, such as Greece, could, in principle, block PARCOM proposals in the Council of Ministers. In essence, institutional interaction may lead to deadlock whenever there is a mismatch in participation between the source and target institution and unanimity is required. This obstacle has gradually been removed by the introduction of qualified majority voting within the EU.

3. Speeding up decision making by ‘soft laws’

The International North Sea Conferences (INSCs) have had a profound impact on the Oslo and Paris Commissions (OSPARCOM) as on the water and marine pollution policy of the EU. In this section we analyse the outcome of these INSC conferences, explore the responses of the OSPARCOM and EU and explain how the INSCs succeeded in changing OSPARCOM and EU policies. In order to trace historical progress in this area, we need first a baseline or background against which subsequent changes can be measured.

3.1 Background: First phase of marine pollution control

The main objective of the 1974 Paris Convention on land-based sources was to take all possible steps to prevent pollution of the sea by adopting individually and jointly measures to combat marine pollution and by harmonising the parties' policies in this regard. The Paris Convention was structured around a black (and grey) list system. The parties were required to implement measures to eliminate pollution by substances on the blacklist, and to reduce or eliminate pollution by substances on the greylis. The Paris Commission chaired the supervision of the Convention. In retrospect, the Paris Commission did not even come close to the aims of the Paris Convention.

On average, the Paris Commission produced roughly only one legally binding decision and one recommendation each year from 1974 to 1987 (Skjærseth, 2002b). Most of the adopted recommendations and decisions concerned the blacklist substances mercury and cadmium about which the parties were free to choose whether quality standards or emission standards should apply. In practice, quality standards – defining the minimum quality of water – gave the parties a considerable amount of leeway due to inadequate monitoring and scientific uncertainty. Moreover, the commitments adopted frequently required the parties to do something as soon as *practicable* or as soon as *possible*. Added to the poorly developed reporting routines, it is questionable whether the parties were actually bound to do anything at all.

The situation on reporting was somewhat better under the 1972 Oslo Commission on dumping and incineration at sea. The 1972 Oslo Convention established a permit system which required parties to submit to the Commission records of dumping permits and approvals they had issued. Thanks to this procedure, the Commission obtained an overview over who dumped what, where and how much. Nevertheless, the performance of the Oslo Commission was even worse than the Paris Commission's on substantial action. By 1987, the Oslo Commission had adopted two decisions, three recommendations and seven so-called 'agreements' (Skjærseth, 2001a). Most of these agreements were directed at establishing cooperative procedures aimed at controlling current behaviour rather than changing it. In essence, the parties continued to use the North Sea as a trash can for hazardous industrial waste and sewage sludge.

The EU had been working on regulating dumping since the beginning of the 1970s. The Commission tabled the first directive in 1976. Despite these efforts, the Council did not succeed

in adopting any specific directives on dumping. Concerning land-based sources, the EU focused mainly on mercury and cadmium in line with the Paris Commission. In 1982, a list of 129 candidate substances for inclusion in List I was adopted. The specific substances were to be controlled by subsidiary directives. The first subsidiary directive, adopted in 1982, concerned mercury from the chlor-alkali industry and covered roughly the same activities as various decisions adopted under the Paris Commission in 1980, 1981 and 1982. Up until 1985, only two other hazardous substances had been addressed, of which one was cadmium. Note that also due to UK pressure the directive also allowed for the option of using emission limits or water quality objectives to guide discharge controls.

As a party to the Paris Commission, the EU wielded significant influence on the type and content of the decisions adopted. As noted in section 2, the EU lagged behind and blocked several proposals on seven different substances within the Paris Commission. The behaviour of the EU thus represents one explanation for the lack of action of the Paris Commission. EU water directives also failed to produce widespread improvements in water quality (Haigh 1986:104).

At the national level, some actions were initiated, though the results were mixed. New legislative measures were adopted in the early 1980s; 'first generation' abatement programmes had some impact, especially in the industrial and municipal sectors in the countries party to the Commission. However, the agricultural sector, representing a large source of nutrients and pesticides, was largely ignored by the environmental authorities throughout Europe (Tinker, 1989). In England and Wales for example, the 1985 river quality survey was the first since 1970 to show increased lengths of river degrading in quality rather than improving (Kinnersley, 1994).

3.2 The breakthrough: International North Sea Conference Declarations

By the early 1980s there were growing indications that specific regions in the North Sea were becoming severely polluted (Ehlers, 1990). At the international level, neither the work of OSPARCOM or the EU suggested that stringent commitments could be initiated without additional political impetus. Against this backdrop of inertia, Germany took the initiative to arrange the first INSC at ministerial level in 1984.

The 1984 Bremen Declaration: The aim of the Bremen conference was not to create a new set of international agreements, but to provide political impetus for intensifying the work of the

existing international bodies. References to the Oslo and Paris Commissions and the EU are sprinkled throughout the Declaration (Ministerial Declarations, 1995). Ministers of the eight North Sea Coastal States – Belgium, Germany, France, the Netherlands, Norway, Sweden, Denmark and the United Kingdom – met, as did representatives of the European Commission. However, the Conference Declaration did not significantly strengthen international marine pollution commitments. As Pallemmaerts (1992:6) correctly points out, the elasticity of such phrases as ‘as far as possible’, ‘practicable’ and ‘economically feasible’ meant that the Declaration contained hardly any substantive commitments. On the other hand, the Bremen Declaration was probably the first international text to hint at the precautionary principle: ‘...coastal states and the EEC must not wait for proof of harmful effects before taking action’ (Ministerial Declarations, 1995:22). The Bremen Conference had initially been envisaged as a one-off event, but the Ministers welcomed an invitation from the UK to host a second INSC to review implementation and adopt further measures.

The 1987 London Declaration: Particularly with respect to dumping at sea, the London Declaration represented a turning point in stringency compared to the Bremen Declaration as well as OSCOM and the EU. For the first time, it was decided to impose significant targets on dumping and incineration at sea within fixed time-limits. For example, the parties aimed at phasing out the dumping of industrial wastes in the North Sea by 31 December 1989. Commitments covering land-based sources were made subject to similar targets. Eutrophication was included for the first time, and ambitious goals were agreed for phosphorus and nitrogen substances: a substantial reduction (of the order of 50%) between 1985 and 1995 of inputs of phosphorus and nitrogen to those areas of the North Sea where such inputs are likely, directly or indirectly, to cause pollution. In effect, the agricultural sector was saddled with joint commitments. The commitments made with regard to hazardous substances also appear quite specific at first glance: a substantial reduction (of the order of 50%) between 1985 and 1995 in the total inputs to the North Sea via rivers and estuaries of substances that are persistent, toxic and liable to bioaccumulate. However, the Ministers failed to agree on specific substances beyond those already covered by international commitments. In contrast to the Bremen Declaration, the London Declaration focused squarely on domestic implementation by requiring the preparation of national action plans on implementation. The 1987 London Declaration was finally the first international environmental text ever to incorporate explicitly the principle of precautionary action (Cameron 1994:267).

The 1990 Hague Declaration: The Hague Conference clarified and strengthened the London Declaration particularly concerning land-based sources. With regard to hazardous substances, the aim of reducing discharges of such substances to levels not *harmful to man or nature* was adopted for the first time, as a principle in Article 1 (Ministerial Declarations, 1995). Against this backdrop, a list of 36 hazardous substances was adopted and directly linked to the 50% reduction target concerning hazardous substances. Moreover, the goal was changed from ‘of the order of 50%’ to ‘50% or more’. With regard to nutrients, measures in the municipal, industrial and agricultural sectors were agreed upon, the most specific covering the municipal sector. Targets aimed at 70% reduction of land-based and atmospheric inputs were adopted for the most dangerous substances – dioxins, cadmium, mercury, and lead. Some new obligations were also adopted at the Hague Conference. Agreement was reached on phasing out and destroying PCBs and hazardous PCB substitutes by 1999 at the latest.

The 1995 Esbjerg Declaration: The commitments adopted on hazardous substances in 1995 could stand as a symbol of the significant gains made in behavioural changes from the 1970s to the present. In the mid-1980s, only a few substances were under international regulation and even fewer were made subject to elimination. Only, ten years later, the Ministers were agreeing to prevent the pollution of the North Sea by phasing out all hazardous substances:

...by continuously reducing discharges, emissions and losses of hazardous substances thereby moving towards the target of their cessation within one generation (25 years) with the ultimate aim of concentrations in the environment near background values for naturally occurring substances and close to zero concentrations for man-made synthetic substances. (Esbjerg Declaration, 1995:18)

As we have seen, while the 1984 Bremen Conference had initially been intended to be a one-off event its life was prolonged. In a similar context, we should also note that the 1995 Conference decided to make its ad hoc institutional structure more permanent by establishing a permanent committee, the Committee of North Sea Senior Officials (CONSSO).

Commitments aimed at combating North Sea pollution have, over time, clearly become more stringent. However, the INSC process also introduced ‘soft law’ on a relatively systematic basis that was not legally binding for the parties. Since ministers come and go as governments change, the political Declarations clearly carried a potential risk of ending up as ‘paper tigers’. Below, we shall see how this was avoided.

3.3 The responses: OSPAR and the EU

The direct consequences of OSPAR and EU responses to the North Sea Declarations would be twofold. First, the North Sea Declarations would be transformed into legally binding commitments within the framework of international law in the form of OSPARCOM commitments and/or EU Regulations, Directives or Decisions. Second, the geographical coverage of the Declarations would be extended to the EU area and/or the North-East Atlantic area.

The specific pathways this process took resulted from a conscious effort to link the activities of different institutions. As we have seen, the INSC addressed issues and adopted commitments aimed at subsequent action within – to paraphrase the Declarations – ‘other competent bodies’. The key to understanding how this worked lies in (partly) the overlapping participation of involved bodies. The Oslo and Paris Commissions (OSPARCOM) were not invited to participate in the preparatory work of the INSCs, although they attended as observers (Hayward 1990:94). The Secretariat, acting on behalf of OSPARCOM, responded to the Declarations by preparing documents on their implications for OSPARCOM as a whole, and its constituent parts, the Oslo and Paris Commissions, separately. The relations between the EU and INSC were even closer in the sense that the European Commission was a party to INSC.

The cooperative process within OSPARCOM in the wake of the 1987 conference followed the same procedure of preparing documents on INSC implications as followed after the Bremen Conference. However, the second INSC was given higher priority than the first. The London Declaration made its strongest impact on the Oslo Commission. The first decision adopted by OSCOM in 1988 stated that the riparian states of the North Sea would apply the principles on the reduction and cessation of dumping of polluting materials as set out in the North Sea Conference Declaration. This represented a sea change in dumping policies and the collective results of the Oslo Commission in this period show a significant expansion in number, legal status, and content compared to previous periods (Skjærseth, 1999). The Oslo Commission achieved significantly more from 1987 to 1990 than it had from 1974 to 1987.

Even though the total number of PARCOM commitments did not increase significantly, the parties adopted several ‘new’ commitments including a recommendation on the reduction of inputs of nutrients in 1988 and a coordinated programme for the reduction of nutrients in 1989. On the other hand, PARCOM did not act effectively to reduce discharges of hazardous substances.

EU responses to the 1987 conference related mainly to inputs of nutrients. In the fourth Action Programme on the Environment, adopted by the EU Council of Ministers in 1987, the fight against sea-water pollution from either point or diffuse sources was considered to be a matter of priority. In 1988, the Council adopted a resolution specifically related to the protection of the North Sea, requesting the Commission to take two specific actions. First, the Commission were requested to combat nutrients from different sources, particularly agriculture. Secondly, the Commission were requested to present proposals on urban waste water treatment. These Directives were to become the major means of combating eutrophication in the North Sea. Concerning hazardous substances, a proposed directive on the elimination of PCBs and PCTs was directly inspired by the 1987 London Declaration (Prat, 1990).

The Hague Declaration made its strongest impact on the Paris Commission. On the basis of the list of hazardous substances adopted by The Hague Conference, the Paris Commission started systematically addressing discharges from specific industrial sectors. PARCOM took action on several fronts, including Best Environmental Practices (BEP) on diffuse sources and BAT on specific industrial point sources. In addition to the two recommendations adopted in 1988 and 1989 on nutrients, PARCOM adopted Recommendation 92/7 on the Reduction of Nutrient Inputs from Agriculture.⁷

The INSCs and OSPAR created a dumping policy for the EU. The EU copied the INSC/OSCOM decision on phasing out sewage sludge dumping by including this obligation in the Urban Waste Water Directive (see below). Moreover, the EU attended to OSPAR dumping policy by ratifying the 1992 OSPAR Convention in 1998.⁸ Concerning nutrients, two important EU Directives were adopted in 1991 based on the initiatives of the late 1980s. Besides their importance for the North Sea, the Nitrates and the Urban Waste Water Directives reflected a slightly different approach from previous directives. Like the North Sea commitments, the new Directives attacked the sources of pollution and described clear goals within given time-frames, while relying less on quality objectives (Richardson 1994:150). The Urban Waste Water Directive set specific requirements on waste-water collecting systems to be implemented by the year 2000 or 2005 concerning nutrient discharges. The Nitrates Directive aims at supplementing the above Directive by specifically addressing nutrient emissions from the agricultural sector. The agricultural sector was also made subject to a regulation on environmentally friendly production methods in 1992. These commitments overlap both the INSC Declarations and OSPARCOM commitments.

The Esbjerg Declaration on hazardous substances initiated actions both within OSPAR and the EU. In 1995, the North Sea Ministers agreed to phase out hazardous substances within 25 years with the ultimate aim of achieving concentrations in the environment near background values for naturally occurring substances. Para 17 of the Esbjerg Declaration has been viewed a breakthrough, and has subsequently served as a model for many international environmental regimes. In 1998, OSPAR adopted para 17 in the so called SINTRA statement on a total phase out of emissions of hazardous substances by 2020.⁹ In 2000, the EU adopted the Water Framework Directive which sets out its ambition to eliminate priority substances:

The ultimate aim of this directive is to achieve the elimination of priority hazardous substances and contribute to achieving concentrations in the marine environment near background values for naturally occurring substances.¹⁰

3.4 The causes: Changes in membership and institutional set-up

Why did the breakthrough on nutrients, hazardous substances and dumping and incineration at sea take place within the INSCs and not OSPARCOM or the EU? The INSCs solved two contradictions present in existing institutions. First, although the pressing ecological problems concerned the North Sea, the Oslo and Paris Conventions and EU initiatives covered the entire North-East Atlantic. Secondly, the Oslo and Paris Commissions and the EU lacked political momentum, though for different reasons. OSPARCOM had developed into a stagnant institution which proved hard to change. Collaborative efforts induced only low levels of participation, the decision making procedures in use were based on unanimity, decision making systems were incremental and bureaucratic, access for the green movement was denied and actors worked together within a legally binding framework that was difficult to amend and changed very little in practice (Skjærseth, 2000). The EU embraced a unanimity decision making procedure at the time – and the environment was not included in the Treaty until the adoption of the Single European Act. The INSCs solved these problems by changing its *membership* and *institutional set-up*.

The establishment of the first INSC was an act of leadership. Germany's initiative was a combination of entrepreneurial and intellectual leadership (Underdal, 1991, Young, 1991). Entrepreneurial leadership can be seen in the establishment of institutions conducive to 'good' solutions. Germany had a choice between essentially two different ways of transforming the

OSPAR. First, a new convention on the North Sea could be established.¹¹ This would have taken care of the first contradiction by excluding states not bordering the North Sea, but could easily lead to new time-consuming legal re-arrangements including the need for dismantling existing conventions. The second option was to generate political impetus in existing conventions by convening a North Sea Conference aimed at producing ‘soft law’ declarations that could take immediate effect. This option coped with both problems and obviated the need for dismantling existing conventions.

In addition to this entrepreneurial leadership, intellectual leadership was evident in the introduction of the principle that protection of the North Sea had to be based on ‘Vorsorgeprinzip’, i.e. the precautionary principle. Agreement on the precautionary principle was a precondition for the percentage reduction targets and the phasing out of dumping at sea. In 1980, The Council of Environmental Advisors, an independent body of experts appointed by the German Government, introduced the principle in a report on environmental problems of the North Sea (Ministerial Declarations, 1995). The Bremen Declaration subsequently hinted at the precautionary principle and the London Declaration adopted it.

The scope of OSPAR institutional arrangements entailed that Mediterranean states such as Portugal and Spain were parties. These states frequently allied with the UK to form a strong minority that was in a position to secure that decisions reflected the lowest common denominator. In essence, the INSCs excluded the non-North Sea states and left the UK alone as the main ‘laggard’ among the North Sea states. The position of the UK rested upon its dedicated defence of Environmental Quality Objectives (EQO) which in turn was closely linked to the fact the UK was a net-exporter of marine pollution due to the counter clockwise direction of the North Sea currents. In contrast, the majority preferred Uniform Emission Standards (UES). Crudely put, UES advocates emphasised that discharges of substances known to be toxic, persistent and bioaccumulative and listed on the ‘blacklists’ should be limited as far as possible at source, whereas the EQO defenders maintained that standards set should be determined by observable negative effects in the marine environment for each particular substance. The UES/EQO dispute infected most of the discussions and hampered joint action on dumping as well as land-based sources from 1974 to 1987 (Skjærseth, 1999). The practical outcome of the attempt to resolve this controversy by the use of the ‘combined approach’ within the 1996 EU IPPC Directive and 2000 Water Framework Directive remains to be seen. However, tensions are most likely to rise in the battle over commitments to phase out discharges.

Changes in the membership were not sufficient to reach any breakthrough since the UK remained within the INSCs. However, thanks to its soft law qualities and political nature the INSCs became a truly dynamic institution. First, the INSCs were based on ministerial representation, a circumstance which opened up for political pressure to be put on the UK. Second, INSC Declarations could take immediate effect since they were based on soft law while proposed amendments to OSPAR or EU could take many years. Third, INSC Declarations were specific and visible, thus generating pressure from within ENGOs and more progressive states. As a consequence of the increasing political costs involved, the UK accepted the precautionary principle and gradually changed its position on dumping and land-based emissions of hazardous substances (Skjærseth, 1999). In addition, the timing of the INSC establishment appears close to perfect in retrospect since it could draw upon the experiences of both the EU and OSPAR.

3.4.1 Rival explanations

Interaction between international environmental institutions do not take place in a vacuum but in changing political, economic and social contexts. Several exogenous factors contribute to explaining the patterns witnessed. First, there were ‘shocks and crises’ in the North Sea in the form of the exceptional 1988 and 1989 toxic algae blooms and seal epidemics. They helped instigate the 1988 EU resolution on the North Sea (Prat, 1990). But they cannot explain the 1987 INSC breakthrough since they occurred later. Moreover, they should not be exaggerated since their political impact faded rapidly (Skjærseth, 1999).¹² Second, public opinion on environmental matters changed significantly throughout Europe in the latter part of the 1980s (Hofrichter, 1991). The adoption of Ministerial representation within the INSC became important at this point. Since Ministers are responsible to their domestic electorates, the ‘green wave’ of the late 1980s could be channelled more effectively into international negotiations than the former low-level government representation in the Oslo and Paris Commissions allowed for. In this way, the impact of the changes in level of representation became closely linked to the changes in public opinion. However, since public values and attitudes changed most significantly after 1987, they can hardly in themselves explain the 1987 INSC breakthrough, even in connection with the algae blooms. Moreover, public interest in environmental questions has been on the wane in most central North Sea states since the early 1990s. Nevertheless, the 1995 INSC and OSPARCOM have continued to tighten up previous commitments, not least on

hazardous substances, which shows that the dynamic impact of the institutions have continued despite fluctuations in public opinion.

While such exogenous factors contribute to our understanding of the influence of one institution on another, other potential explanations can be ruled out. Phenomena similar to the Antarctic ozone hole in 1985 were not uncovered. As far as the North Sea is concerned, uncertainty relating to the causes and consequences of marine pollution has gradually receded which means that the 1987 INSC Declaration cannot be traced back to any corresponding breakthrough in scientific knowledge comparable with the first indication that something was wrong with the ozone layer. The North Sea Quality Status Reports presented in 1984 and 1987 both painted a picture of high uncertainty and ‘moderate’ pollution levels. Moreover, the basic interests of the participating states did not change significantly since these interests were largely caused by the counter-clockwise direction of the North Sea currents that placed the states in a chain-wise relationship of exporters and importers of marine pollution. In addition, the UK, as the least ambitious nation, actually controlled the largest issue-specific capabilities, such as marine scientific knowledge, and controlled all events important to it (Skjærseth, 1999).

The main explanation for the accelerated decision making process in INSC, OSPAR and the EU boils down to changes in membership and institutional set-up. Some exogenous factors play a minor role, but others can be ruled out. Changes in public opinion, the algae blooms and the seal epidemics all had a positive effect on the workings of the institutions in the late 1980s, but they cannot explain the 1987 breakthrough in institutional development after 1990. More scientific knowledge, material interests or power/capabilities cannot contribute to our understanding of interaction that occurred in this case.

4. Strengthening implementation by ‘hard law’

The INSCs accelerated the decision making process at OSPAR and the EU. In turn, OSPAR and the EU strengthened the domestic implementation of the initial INSC Declarations. How

did the INSCs respond and how did OSPAR and the EU facilitate domestic implementation of the INSC declarations?

4.1 Background: Second phase of marine pollution control

The world is full of political pronouncement that never come to fruition – a phenomenon well known from international diplomatic conferences. The political North Sea conferences, however, did have a significant impact on implementation even though they were vulnerable to changes in political leadership and priorities. All North Sea states were politically committed to drawing up focused North Sea Action Plans to reach the various targets. These plans show a clear link between common commitments and national policy shortly after the 1987 and 1990 London and Hague conferences (Skjærseth, 1999). In Norway, for example, the government released a comprehensive White Paper (1991–92) focusing exclusively on the implementation of the Hague Declaration (Ministry of the Environment, 1992). The INSCs possessed the power to cause some embarrassment by making targets and achievements transparent. In contrast to OSPARCOM and the EU, the assessment of ‘deep’ implementation was immediately accorded high priority. Comprehensive implementation reports were prepared for each conference. For example, the 1990 report presented to the Hague Conference contains 553 pages of detailed assessments of the implementation of the London Declaration (Implementation Report, 1990). The Progress Report presented at the 1995 Esbjerg Conference contained more hard data and placed even more emphasis on what had been achieved, where failures in implementation had occurred and the reasons for lack of implementation (Progress Report, 1995). This report also reveals significant progress towards stated goals between 1985 and 1995.

Transparency was necessary, but not sufficient to secure domestic implementation. Moreover, some implementation challenges related to the 1987 and 1990 Declarations concerning certain hazardous substances and nitrogen have still to be addressed. The 1995 target on hazardous substances will require significant efforts at domestic level over the next 20 years. Against this backdrop, the subsequent adoption of the INSC declarations by OSPAR and the EU has proved important and *will* prove even more important for future implementation. The real regulatory punch of marine pollution control in this area lies in the

combined impact of different institutions fulfilling different functions all of which are necessary to make regulation effective.

4.2 The final reaction of the INSCs

The 1995 Esbjerg Declaration identified previously adopted OSPAR decisions and EU Directives and Regulations as the principal measures for goal attainment. While this change in focus reflects important changes in EU marine and water policy, it also reflects the fact that Norway and Switzerland were the only non-EU North Sea conference countries as of 1995. Concerning hazardous substances like pesticides, the Declaration refers to PARCOM Recommendation 94/7 on national plans for reduction of pesticides from agriculture as well as the Directive concerning the placing of plant production products on the market.¹³ On nutrients, the declaration links progress directly to national action plans based on a number of OSPAR recommendations and EU Directives, i.e. the Urban Waste Water and Nitrates Directives. According to the Progress Report (1995:33):

Although the North Sea Conferences have provided the political skeleton, it has been left to the established legal frameworks, in particular the Oslo and Paris Commissions, the EU (and more recently the EEA Agreement),...to implement Ministers` decisions by providing the necessary detailed and binding (legal) framework for the North Sea States, in particular through the medium of Decisions and Recommendations adopted by the Oslo and Paris Commissions and by EU Directives.

This process of identifying previously adopted EU and OSPAR commitments continued at the latest INSC in Bergen in 2002 (Bergen Declaration, 2002). The conference showed that there had been progress towards achieving the targets on hazardous substances, and most North Sea states had achieved a 70% reduction of mercury, lead and cadmium. The OSPAR strategy on hazardous substances and the EU Water Framework Directive were regarded as effective means for coping with remaining implementation deficiencies and future challenges. According to the European Environment agency (EEA), the control of hazardous substances in marine waters has been a success largely due to OSPAR (EEA, 2001).

There were more problems for the North Sea states in terms of nitrogen. Lack of progress was directly related to delays in implementing the Nitrates and Urban Waste Water Treatment directives. In Bergen, the North Sea Ministers agreed on full implementation of these directives,

the water framework directive as well as reducing the use of fertilizer through the Council Regulation on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF).¹⁴

4.3 The causes: Institutional authoritativeness and enforcement

How have OSPAR and the EU strengthened the implementation of the INSC Declarations? While the non-legally binding INSC Declarations have speeded up decision making by injecting political energy, OSPAR and the EU have strengthened implementation and compliance through imposing norms and incentives. In essence, *institutional differences* between the INSCs, OSPAR and the EU account for the progress in implementation witnessed.

4.3.1 OSPAR

OSPAR has strengthened implementation mainly through the legally binding nature of commitments. In general, there is a conviction in the legal literature on international obligations that joint commitments should preferably be legally binding on states (Nollkaemper, 1993). This view is based on the assumption that states will be more inclined to comply with legal than with non-legal obligations. The distinction between binding and non-binding commitments has been perceived as important by the OSPAR parties and the legal nature of commitments has been discussed repeatedly (Skjærseth, 1999). Likewise, the INSC Declarations contain several references indicating that the North Sea states considered it important that joint commitments be implemented as binding decisions within OSPARCOM. However, the legal literature on marine pollution emphasizes also that the distinction between binding and non-binding obligations has little effect – if any – when it comes to enforcement. Enforcement has been regarded as the weakest part of international efforts to regulate marine pollution: deterrence is considered unlikely since very few disputes are actually settled by international courts (IJIstra, 1986, Nollkaemper, 1993). The 1992 OSPAR Convention contains detailed dispute settlement procedures and places slightly more weight on enforcement, but does not set out which specific steps should be taken in cases of non-compliance. Thus, it seems reasonable to assume that legally binding OSPARCOM decisions have constrained state behaviour due to their authoritativeness rather than due to their theoretical capacity to affect incentives.

The phasing out of dumping of industrial waste in the North Sea is quite illustrative. In this case, the EU had no competence and the Community was not a party to the Oslo Convention. The 1987 London Conference took the decision to phase out such dumping by December 31, 1989, and the Oslo Commission followed up by translating this political agreement among the North Sea states into a legally binding Decision. There are clear indications that the UK did not seriously plan to change its behaviour in accordance with the international commitments (Skjærseth, 2002a). In late 1989, the UK Ministry of Agriculture, Food and Fisheries decided to support applications for licensing 50,000 tons of toxic waste through the OSCOM Prior Justification Procedure (PJP). This procedure was adopted in 1988 as a direct consequence of the introduction of the precautionary principle by the 1987 INSC: PJP reversed the burden of proof upside down: potential dumpers were now obliged to prove through complicated and expensive laboratory tests that substances they were intending to dump *could not* harm the marine environment. Several North Sea states protested against the UK decision and Greenpeace brought the case to the media's attention. An extraordinary meeting of the OSCOM ad hoc working group on dumping was convened. The final decision to phase out dumping of industrial waste (and sewage sludge) was taken by the Agriculture Minister John Gummer in 1990.

4.3.2 The EU

In cases of non-compliance, OSPAR has more competence than the INSCs due to its legally binding qualities and the EU has more competence than OSPAR owing to its supranational qualities. When the EU acts it does so with significantly more force than traditional regimes simply because the compliance instruments at its disposal are more powerful. These include competence to facilitate implementation by enhancing the capacity of states to comply with their commitments (management approach) as well as enforcement aimed at deterring non-compliance (enforcement approach). According to Tallberg (2002), enforcement and management mechanisms are most effective in combination, and it is this factor that makes the EU relatively successful in combating violations. Concerning enforcement, the main formal difference between OSPAR and the EU is that EU Directives impose legal obligations directly upon the member states (Skjærseth and Wettestad, 2002). Failure to comply with EU law can be relied upon in national courts required to interpret national laws in line with EU law (sympathetic

interpretation). Such failure can even result in awards of damages to individuals who have suffered loss as a consequence.

The existence of the European Court of Justice (ECJ) is also unique, although its opposite number in regime terms is in the international court in the Hague. According to Haigh (2002), the ECJ has developed a number of principles affecting national law, policies and how EU policies apply. One of these tools is fines against member states. Since 1993, the ECJ may impose fines on states that have failed to comply with previous rulings of the court. This provision is being applied for the first time against Greece for its failure to observe a court ruling on waste management and a new fine may be underway for its breach of the dangerous substance in water directive.¹⁵ The UK was also threatened with heavy daily fines for persistent failure to comply with EU bathing water rules.¹⁶ Note that the UK is now in compliance with regard to the specified bathing waters so the threat has passed – if a few decades behind schedule. The ECJ has initiated legal action on a number of water directives linked to marine pollution including the dangerous substances directive, the urban waste water directive, the shellfish directive, the surface waters directive, the nitrates directive and the bathing waters directive.

The Nitrates Directive is particularly interesting for two reasons. First, it was triggered by the 1987 INSC and it encountered serious implementation problems. Implementation problems in the case of nitrogen have mainly been related to strong farming lobbies and conflict of interests between environmental and agricultural authorities. British farmers have for instance attempted, unsuccessfully, to overturn a decision made by UK authorities on ‘nitrate vulnerable zones’ (NVZs) in the ECJ. As to the conflict between environmental and agricultural agencies, the 1991 Nitrates Directive represents a concrete example of the challenges faced by the EU in its environmental policy integration policy (EPI).

Second, these implementation problems are perceived by the INSCs as partly responsible for lack of compliance with the INSC obligation on 50% reduction in nitrogen emissions. Even though the Nitrates Directive is an extremely poor example of ‘effective’ EU implementation, it nicely illustrates that the EU has more powerful tools at its disposal than OSPAR and the INSCs when states do not comply.

In October 1997, EU Environment Commissioner Ritt Bjerrgaard made a strong plea for better implementation of the nitrates directive. Thirteen out of 15 members states are facing legal proceedings. The EU Parliament issued a resolution in late 1998 in which the MEPs said they were ‘shocked by the lack of progress’ in implementing the nitrate law and called for action from governments, the Commission and farmers.¹⁷

Table 4.1. Status of Nitrates Directive infringement actions: Stage of most advanced action as of April, 2000.¹⁸

Austria	Reasoned opinion
Belgium	European Court
Denmark	No action
Finland	Formal notice
France	European Court
Germany	European Court
Greece	European Court
Ireland	Reasoned Opinion
Italy	European Court (Condemned 2001)
Luxembourg	European Court
Netherlands	European Court
Portugal	Formal notice
Spain	European Court
Sweden	No action
United Kingdom	European Court (Condemned 2000)

Reasoned opinion = final warning

Bold = North Sea states

EU members have been pulled before the court for different reasons. Germany, for example, had prepared an action plan as required by the law, but the plan was considered ‘insufficient’ in its provisions for allowable storage capacities of livestock manure and failing to calculate maximum fertilizer application rates.¹⁹ The UK was condemned in the European Court of Justice in December 2000. According to the Commission and the Court, the UK had implemented the directive too narrowly. Whereas the Directive requires member states to identify all surface or ground waters polluted by nitrates or at risk of being so, and to designate all such areas as NVZs, the UK had only identified surface and ground waters used as sources of drinking waters. The UK accepted the Commission's complaint, and announced steps to broaden its definition to substantially increase the area of land designated as nitrate vulnerable.²⁰ However, in October 2001 the Commission announced a repeat legal action stating that the UK still had too few

NVZs. In December, the environment ministry proposed measures to bring England and Wales into compliance with the Nitrates Directive.²¹

The EU Commission and the ECJ took swift action in this specific case of non-compliance and the response from the UK indicates that enforcement may indeed work. Time will show whether these actions prove sufficient for the North Sea Ministers to conclude that the nitrogen target has been met at the next North Sea Conference in Stockholm.

5. Conclusion

Bureaucrats and lawyers defending their respective countries in the court cases related to the Nitrates Directive are probably not aware that present misery can be traced back to a ray of optimism among eight North Sea environmental ministers in 1987. Germany's appearance in the ECJ over the Nitrates Directive can actually be traced back to the 'German' precautionary principle hinted at in the first North Sea Declaration of 1984.

The interactive workings of the International North Sea Conferences, the Oslo and Paris Conventions and Commissions as well as the EU have proved synergetic in two ways: First, the political 'soft law' INSCs have speeded up decision making within OSPAR and the EU. Second, OSPAR and the EU have facilitated domestic implementation of the INSC Declarations through their institutional authoritativeness and enforcement competence. From the early 1970s to the mid 1980s, international cooperation on cleaning up the North-East Atlantic including the North Sea simply did not work. The participating states were unable to agree on any significant reductions of polluting substances and the quality of the marine environment deteriorated. In this situation, Germany provided entrepreneurial and intellectual leadership by establishing the first INSC in 1984. Subsequent INSCs led to a breakthrough by introducing the precautionary principle, reducing the number of parties and by providing a truly dynamic institution capable of injecting political energy into OSPAR and the EU. In turn, OSPAR and the EU strengthened domestic implementation of already adopted INSC commitments, which were based on ambitious and specific percentage reduction targets.

Interaction took place among institutions with a unique history and operating in a specific social, political and economic context. In particular, the timing for change appears good in retrospect. The INSCs could build on ten years of experience with OSPARCOM and

the EU. Some exogenous factors like changes in public opinion, the algae blooms and seal epidemics contributed to forward movement, but these events occurred late in the process and their political impact was too limited to add explanatory power of any significance. Other potential exogenous factors like scientific uncertainty, national interests or power/capabilities cannot explain the advances witnessed.

The uniqueness of the one specific case of interaction counsels caution when gauging the applicability of certain lessons and policy recommendations and we have absolutely no guarantee that re-running the INSC formula will give the same results in other issue areas. The outcome of the broader set of interactions (see section 2) suggests that there are many ways to synergy. Based on the analytical framework underlying this study, we could not trace either a clear pattern or combination of factors and values that led to success across the cases. However, a likely interpretation of the high level of successful interaction is the long history of marine pollution. Time has facilitated adaptations and adjustments to be made within the various institutions operating in this issue area. The relationship between OSPAR and the EU evolved from disorder to synergy during the 1980s. Previously, institutional interaction based on unanimity in the Council of Ministers led to deadlock owing to a mismatch in participation between the source and the target institution. This obstacle has gradually been removed by EU institutional reform measures such as the introduction of qualified majority decision making procedures. It is important to bear in mind that many examples of disruption are linked to relatively recently established complex regimes dating from the 1990s.

A long history of contact and cooperation between different institutions is, however, not sufficient for enhancing synergies and avoiding disruption. In all cases listed in table 2.1 there is also a certain *overlap in membership*: a core of European countries participate in all institutions at sub-regional, regional, EU and global levels. In the case of the INSCs, OSPAR and the EU, overlapping participation clearly facilitated cross fertilization from one institution to another (cf.3.3). This kind of ‘core’ community may appear as a necessary condition for enhancing success. For example, the parties have coordinated their efforts at collective and individual levels in the case of OSPAR and LRTAP, which deal with very different media, substances and causes. Accordingly, this observation may also shed light on why many potentially disruptive cases remain potential: the reason is probably that such cases of disruptive interaction – at least among environmental institutions – are sorted out before they evolve into real problems with serious consequences for effectiveness. To take one example, a potential problem emerged recently between OSPAR and UNFCCC concerning CO₂ injection

into the sea. It has been promptly addressed and is about to be sorted out in a sensible way. Recently, Norway scrapped an experiment to dump CO₂ at sea arguing that such deposits may violate international marine law.²²

While caution is required concerning specific policy advice, we can offer *conditional* advice at the level of general casual patterns linking actors and institutions. The most robust finding in this study is that overlapping between institutions does not necessarily imply duplication of work and low effectiveness. This observation is also in line with the twelve cases of interaction discussed in section 2 above. Cooperation on North-East Atlantic environmental management shows that different types of institutions can fulfil different functions all of which are needed to make international environmental cooperation effective. Moreover, it would be difficult to fulfil these functions within one and the same institution due to conflicting institutional requirements. For example, the parties to the INSC Conferences had to make decisions within the space of a couple of days every third year while INSC Declarations were supposed to take immediate effect at governmental level where the major political decisions are made. This secured swift action, but created political vulnerability since governments and political priorities change. Even though the EU is in the process of expanding its arsenal of environmental policy instruments, EU Directives are developed through lengthy bureaucratic processes and have to be transposed into national law. Most environmental Directives now have about a three-year period to allow for transposition, although many are transposed late. In the case of OSPAR, the adoption of new legal instruments can be even more protracted. For example, a new protocol on incineration at sea was signed in 1983, but did not come into force until 1989.

OSPAR and the EU could not match the decision-making speed of the INSCs, but were needed to keep up the pressure on implementation and compliance. Depending on their nature, once EU Directives are adopted, lack of political vulnerability can arise as specific requirements will not be altered after this point. The struggle put up by the UK over the bathing quality law represents an extreme example: In 2000, the UK was given a final warning for breaching the 1976 EU bathing quality law based on infringements originally committed in the 1980s. The EU possesses more power to act when the going gets tough. EU Directives and Regulations are more commanding than INSC or OSPAR commitments due to the 'supranational' nature of the EU. EU action on the 1991 Nitrates Directive shows that EU's enforcement tools in cases of non-compliance are significantly more powerful than those possessed by 'traditional' regimes. The legally binding OSPAR also provided a legal

and stable basis for the INSCs and gave authoritative force in the crucial implementation phase. Such qualities proved particularly important concerning the dumping at sea issue where the EU had no competence.

The 2002 Bergen Declaration does not contain any new significant commitments on hazardous substances or eutrophication. Instead, it sets out a number of new issue areas not included in the Esbjerg Declaration such as climate change, biodiversity, renewable energy and an integrated ecosystem approach. The search for new challenges show that INSCs have ‘solved’ most of the problems related to hazardous substances, nutrients, dumping and incineration at sea through international cooperation. Further achievements now depend largely on domestic political will and capacity to follow through. The EU will have an important role to play facilitating implementation and enforcing compliance also in the future.

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¹ The term ‘European Union’ will be used throughout this chapter also when referring to the period before the Treaty of Maastricht.

² See, e.g., Weiss, 1993, Rosendal, 2000 and Oberthür, 2001.

³ Two executive commissions – which met annually – were set up in order to implement and review the functioning of the Conventions. The Oslo Commission (OSCOM) and the Paris Commission (PARCOM) were assisted by the Standing Advisory Committee for Scientific Advice (SACSA) and the Technical Working Group (TWG) respectively, by ad hoc working groups and by the Joint Monitoring Group (JMG).

⁴ Accordingly, OSPAR and INSC can be treated as two separate although closely related institutions. OSPAR and INSC have separate agendas, differ in membership as well as in norms, rules and communication processes.

⁵ The level of positive interaction is partly determined by the selection of the particular environmental cases. Instances of less than harmonious collaboration can probably be found at the intersection with other issue areas, such as EU agricultural policy. Instances involving the INSCs, OSPAR and EU Directives on hazardous substances are not included. These instances of mutual influence are probably not that different from cases involving nutrients, but any interaction is extremely difficult to pinpoint precisely due to high causal complexity.

⁶ Both the INSC Declarations and OSPAR Decisions and Recommendations deal with nutrients and hazardous substances. Interaction with other international institutions or EC Directives will in most cases therefore affect both the INSCs and OSPAR. In order to simplify this type of interaction, the institution (OSPAR or INSC) most directly involved is listed.

⁷ A report by the Oslo and Paris Commissions to the 1995 Esbjerg Conference on follow-up actions from 1990, shows clearly that a wide range of actions was directly related to the 1990 Conference (1995: Meeting of Heads of Delegation (HOD):OSPAR HOD 95 (1)/Document No. 1).

⁸ Council Decision 98/249/EC (12).

⁹ Sintra Statement. Available at <http://www.ospar.org/eng/html/md/sintra.htm> (Accessed 8 August 2001)

¹⁰ EU Water Framework Directive, 2000/60/EC(27).

¹¹ This option was proposed by the European Parliament in 1993.

¹² Important for the North Sea was action within the Rhine Commission at this point, stimulated in part by the Sandoz accident. The adoption of the Rhine Action Programme addressed a number of issues, including marine, and included some institutional strengthening to aid compliance, thus ensuring continued action after public interest declined

¹³ EU Directive, 91/414/EEC.

¹⁴ EU Regulation, EC,1257/1999.

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- ¹⁵ ENDS, 831 13 September 2000. 'EU Commission back on the compliance warpath.'
- ¹⁶ ENDS, 1074 4 October 2001. 'UK "to escape bathing water fines."'
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- ²¹ ENDS, 1128 December, 2001. 'UK races to comply with nitrates directive.'
- ²² 'Norway scraps experiment to dump CO₂ at sea'. www.planetark.org, 6 September 2002.