The International Regime on the Protection of the North-East Atlantic: A good neighbour

Final Draft, December 2001

Jon Birger Skjærseth
The Fridtjof Nansen Institute
P.O. Box 326
1326 Lysaker
Norway
e-mail: jon.b. skjaerseth@fni.no
1. Introduction

Surrounded by densely populated areas, the North Sea is an area of intense human activity. Land-based discharges (river input and direct discharge), ocean-based discharges (dumping and incineration at sea) and atmospheric fall-out have been among the major sources of contaminant inputs to the North Sea. The intense human activity on and off-shore is the result of increasing economic activity following the Second World War, which led to a rapid growth in waste production. As a consequence, a set of international instruments on dumping at sea and land-based sources have been drawn up in order to combat marine pollution in the North Sea and the wider North-East Atlantic (NEA-regime). These instruments are a significant link in Europe’s marine environment regulation and the 25-year history of the NEA-regime can serve as a fascinating example of development from inertia to action. The result has been significant collective reductions of regulated organic substances, pesticides, heavy metals, nutrients, and dumping and incineration at sea (Skjærseth, 2000).

This paper focuses primarily on the extent to which and how interaction between the NEA regime and other international institutions has affected the effectiveness of marine pollution control. In addition, the paper briefly explores the impact of the NEA-regime on some other environmental regimes operating in other environmental issue areas. Twelve cases of interaction are identified and the main conclusion is that the NEA regime lives in harmony with its surroundings in the sense that almost all cases of interaction have triggered a higher level of effectiveness. The NEA regime has been able to benefit from the influence of other institutions and has itself been able to generate positive influence on other international regimes and EU directives. Besides the crucial interaction between the “soft law” International North Sea Conferences (INSCs) and the “hard law” OSPAR conventions (see below), the NEA regime has been influenced by the Montreal Protocol, the Rhine regime, LRTAP as well as relevant EU directives on nutrients and hazardous substances. Conversely, the NEA regime has affected the UNFCCC, the London Convention on dumping, EU directives on nutrients and hazardous substances as well as EU dumping policy. The structure of the paper is mainly based on Oberthür and Gehring (2001).

The quarter-century history of the North Sea/North-East Atlantic cooperation represents a development from water and marine pollution "anarchy" towards domestic and international regulation and "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 and several standing and ad hoc scientific/technical bodies. Two executive commissions - where the parties met annually - were set up to make joint decisions 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).

The Paris Convention allowed the EC to join as a contracting member and water policy was the first sub-sector developed under EC 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 Substance Directive, which covers inland, coastal, and territorial waters. In 1982, a list of 129 candidate substances for inclusion in List I was adopted. The specific substances are 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 in the Paris Commission in 1980, 1981 and 1982. Up until 1985, two other hazardous substances had been addressed, including cadmium. 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 EC 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 EC did not gain a firm legal basis until the Single European Act was adopted in 1986.

Despite the international institutions (as well as the domestic institutions) established in the 1970s, there were growing indications by the early 1980s that specific parts of the North Sea were becoming severely polluted (Ehlers 1990:4). At the international level, neither the Oslo Commission nor the Paris Commission managed to produce joint commitments with "teeth". Most of the decisions and recommendations adopted aimed to control behavior rather than to change it. EC water directives also failed to produce widespread improvements in water quality (Haigh 1986:104).
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 have evolved into a more permanent institution over time. The Bremen Conference was followed by one in London 1987, in The Hague 1990, in Copenhagen 1993 and most recently in Esbjerg (Denmark) 1995. The next conference is scheduled to be held in Norway in 2002. The conference participants have been the eight North Sea coastal states and the EC, which represent a sub-set of the original Oslo and Paris Conventions (OSPAR) parties. From 1990, Switzerland was also invited to participate.

The London Declaration represented a turning point by aiming 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 as well as the EC 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 EC legislation, the 1991 Maastricht Treaty and the 1997 Amsterdam Treaty changed EC environmental decision-making, and the Oslo and Paris Conventions were in 1992 negotiated into a single legal instrument for the protection of the North-East Atlantic. Recently, the EC adopted a Water Framework Directive (WFD) which replaces seven old directives, including the directive on dangerous substances.

OSPAR and INSC can be treated as two separate although closely related institutions: They adopt separate agendas, differ in membership as well as in norms, rules and communication processes applied. The interaction between the “soft law” INSC and the “hard law” OSPAR (and the EU) has generated important insight as to the purpose of deriving policy recommendations on interaction. Therefore, the paper initially focuses on interaction between these institutions. For the remaining part of the paper, these institutions will be treated as one regime, i.e. the NEA regime.
2. Interaction with other international institutions (horizontal interactions)

2.1 The impact of INSC on OSPAR: speeding up

Issue: The relationship between the International North Sea Conferences (INSC) and OSPAR has been symbiotic in the sense that each institution has been critical for the progress witnessed in combating marine pollution. While the original aim of INSC was to speed up the decision-making process within OSPAR, OSPAR has in turn broadened the scope and significantly strengthened the implementation of the INSC Declarations. The INSCs significantly strengthened joint commitments adopted within OSPAR by putting an end to the environmental quality objectives (EQO) versus uniform emission standards (UES) dispute that had hampered progress within OSPAR since the early 1970s and by serving as the first international body ever to explicitly adopt the principle of precautionary action. In addition, the two former achievements represented a necessary condition for the adoption of ambitious joint commitments on nutrients and hazardous substances as well as phasing out dumping and incineration in the North Sea. In turn, these commitments significantly strengthened the joint commitments adopted within OSPAR.

Cause and policy field: Interaction has been rooted in membership as well as institutional differences, particularly the hard/soft law interplay. INSC represented a sub-set of the OSPAR parties, but the principal “laggard” (the UK) participated in both institutions. Therefore, institutional differences were crucial to bring about interaction. For example, the INSC Declarations were based on soft law and could take immediate effect, while amendments to OSPAR took many years.

Initial effect: The effects have been synergetic at output, outcome and possibly impact levels: The INSCs strengthened the effectiveness of OSPAR. First and most importantly, the INSCs were instrumental in affecting OSPAR to ban dumping and incineration at sea, take specific action based on BAT (best available technology) on point sources, as well as developing BEP (best environmental practices) standards for diffuse sources. BAT and BEP have reduced
emissions of hazardous substances and nutrients: 1) Hazardous substances: reductions in the order of 50% to water have been achieved by many of the parties for most of the 36 regulated substances. In 1995, joint commitments were adopted aimed at phasing out hazardous substances completely within one generation. The challenge currently lies more with domestic implementation than international cooperation. 2) Dumping and incineration at sea: have been successfully phased out. 3) Nutrients: a number of challenges remain concerning nitrogen, but phosphorous substances have been reduced significantly. Secondly, the INSCs also served as a model concerning NGO participation and transparency as well as ministerial representation.

**Nature of influence:** OSPAR had the opportunity to reject the INSC Declarations, but chose instead to adopt a number (though not all) of the rules and principles. The principle of differentiated decisions adopted within OSPAR, i.e. the possibility to distinguish between North Sea and non-North Sea states represented a necessary condition for consent. The first INSC was intended to speeding up OSPAR. The idea of creating a new North Sea Convention was rejected in order to base the INSCs on soft law that could take immediate effect. From 1987, the INSCs also focused directly on domestic implementation.

**Responses:** Responses have taken place at international, domestic as well as target group levels. Collectively, the OSPAR secretariat participated as observers during the INSC negotiations and the OSPAR Commission dealt systematically with the implications of the INSC Declarations. The INSC Declarations led directly to the principle of differentiated decisions adopted within OSPAR. By prohibiting dumping and incineration at sea, the INSCs also indirectly induced the merger of the Oslo and Paris Conventions into the 1992 OSPAR Convention. Domestically, the INSC Declarations have significantly strengthened the implementation of OSPAR decisions and recommendation. At target group level, industry, agriculture and municipal waste-water treatment have responded, directly and indirectly, to the INSC declarations.

**Adequacy of responses:** OSPAR response to the INSCs has been adequate. OSPAR changed its institutional set up in order to maximise positive INSC influence.

**Remarks:** In addition to membership, interaction has been driven by institutional differences such as the interaction between “soft” and “hard” international law. While the INSC
Declarations could take immediate effect, the INSC declarations were not binding and could easily end up as paper tigers. Accordingly, of equal importance was the subsequent transformation of the INSC Declarations into hard law by OSPAR/EU (see next section). The combined “hard” and “soft” law institutional design bear consequences beyond this issue—are since the respective institutions fulfilled a number of different functions that are mutually important for the effectiveness of international environmental cooperation.

Source: Skjærseth (2000).

2.2 The impact of OSPAR on INSC: strengthening compliance and expanding scope

Issue: Since the INSC Declarations were not legally binding, they were vulnerable to changes in political leadership in the participating countries. In addition, the declarations only applied to the North Sea states and not the wider North-East Atlantic. OSPAR has cemented a number of INSC commitments in international law and expanded their scope to cover non-North Sea states, such as Spain and Portugal. For example, in the 1998 SINTRA statement, OSPAR adopted the aim of the 1995 INSC (Art. 17) on a total phase out of emissions of hazardous substances by 2020.

Cause and policy field: Interaction is based on a combination of membership and institutional differences. First, four OSPAR states do not participate in the INSC. Secondly, the authoritative force of the INSC Declarations increased when OSPAR transformed them into international law.

Initial effect: The interaction has caused synergy at outcome and possibly impact levels by strengthening marine pollution control and consequently by supporting the purpose of the INSCs. OSPAR has strengthened compliance with, and expanded the scope of the INSC.

Nature of influence: OSPAR has been capable of strengthening the INSC declarations without consent from the International North Sea Conferences. While OSPAR has systematically addressed the implications of the INSCs, the INSCs have not systematically
addressed the implications of OSPAR decisions. OSPAR has certainly anticipated stronger and broader compliance with the INSC Declarations, but probably not intended such consequences.

**Responses:** Responses have mainly taken place by means of *tacit adaptation* at national and sub-national levels. For example, while the joint commitments on phasing out dumping at sea were agreed during the 1987 London Conference, the transformation of this obligation into international law has proved important for domestic implementation in the UK. The UK – which dumped about half of the amount of hazardous substances in the North Sea - was constrained by the decisions of the Oslo Commission to phase out dumping of hazardous industrial waste in the North Sea.

**Adequacy of responses:** Responses have been adequate. For example, the UK licensed dumping of 50,000 t. industrial waste in spite of the 1987 INSC ban on industrial waste dumping. This case of non-compliance was brought to the Oslo Commission, which put considerable political pressure on the UK. In turn, the UK as well as individual companies decided to end such dumping.

**Source:** Skjærseth (2000)

---

### 2.3 The impact of the Montreal Protocol on the NEA regime: facilitating implementation

**Issue:** Two of the 36 hazardous substances covered by articles 2 and 3 of the 1990 Hague Declaration are also covered by the Montreal Protocol on the ozone layer. The Montreal Protocol requires a 100 per cent reduction of these two substances (carbon tetrachloride and trichloroethane) by 1996. This requirement has facilitated domestic implementation within the NEA regime.

**Cause and policy field:** The interaction is caused by the fact that participants in both the Montreal Protocol and the OSPAR regime have to reduce emissions of these substances in
order to counter depletion of the ozone layer and marine pollution. Therefore, interaction is
caused mainly by differences in goals (i.e. protecting the marine environment versus
protecting the ozone layer). However, influence has also been stimulated by membership in
the sense that all OSPAR parties are parties to the Montreal Protocol. Both the source
(Montreal) and the target regime (NEA) are environmental institutions.

**Initial effect:** The effect has been *synergetic* since the Montreal Protocol has facilitated
implementation of NEA commitments. The causal influence has operated at the outcome and
possibly the impact levels.

**Nature of influence:** The source institution has been capable of affecting the (consequences
of the) target institution *unilaterally* since the outcome of the source institution has affected
the outcome of the target institution. This influence has not been intended.

**Responses:** responses have taken place at *domestic level* by means of adaptation. For
example, the influence of the Montreal Protocol on Norway’s implementation of the North
Sea Declarations has been explicitly discussed in a White Paper to the Storting.

**Adequacy of responses:** parties have responded by reducing emissions of hazardous
substances to the North Sea and can thus be classified as adequate.

**Remarks:** The causal effect of the Montreal Protocol on relevant substances is highly
uncertain.

**Sources:** Skjærseth (2000) and White Paper No. 64 to the Storting (1992).

2.4 The impact of the NEA regime on the UNFCCC: potentially preventing
CO₂ injection into the seabed

**Issue:** Since 1996, 1 million tons of CO₂ per year have been stored at the Statoil operated
Sleipner Field in the North Sea. The capacity for underground storage only within Europe is
estimated to more than 800 billion tonnes of CO₂, particularly under the North Sea. This equals more than the total amount of CO₂ accumulated in the atmosphere since pre-industrial times. Greenpeace has recently argued that this practise violates international law on sea dumping (into the sebed).

**Cause and policy field:** Interaction is spurred by contradictions between the need to protect the sebed from dumping and the need to reduce CO₂ emissions. Accordingly, interaction is essentially caused by differences in goals. However, all NEA parties participate in the UNFCCC. Both regimes are environmental.

**Initial effect:** Interaction may cause disruption at output and outcome levels. The short-term consequence of prohibiting CO₂ injection means that Norwegian CO₂ emissions will increase by nearly 3%. Long term consequences may imply an end to this “sink” option world-wide: a similar project is e.g. under consideration in the South China Sea. Effects are probably not in line with the purpose of the UNFCCC.

**Nature of influence:** The rules and procedures applying to dumping within the NEA regime (as well as the London Convention) were developed before the UNFCCC and did accordingly not depend on consent. For the same reason, interaction is clearly unintentional. The Oslo Convention was ratified even before climate change appeared at the international agenda.

**Response:** So far, the response has not moved beyond the point of unilateral concern. The Norwegian oil company - Statoil - worries whether the pilot project violates international dumping law. The response might, however, develop into institutional modification of the UNFCCC. As far as I can see, the Kyoto Protocol (Arts.3.1 and 3.4) does not explicitly mention CO₂ disposal at sea, or injection into the seabed as a “sink” option. On the other hand, the Protocol does apparently not prohibit such activities. International law on dumping may affect further specification of these Arts, or alternatively: the UNFCCC may affect international dumping rules. Greenpeace is lobbying for the former option.

**Adequacy of responses:** CO₂ injection as a disposal method is still surrounded by high uncertainty as to whether it represents an environmentally effective option. Accordingly, any judgement of responses remain difficult at this stage.
Remarks: Currently, this is merely a potential problem.

Sources: Johnston, P (1999) and EU Commission, SACS Project 306/98/NO.

2.5 The impact of the regime for the protection of the Rhine on the NEA regime: complementary interests

Issue: The river Rhine is a major cause of North Sea pollution. However, the International Commission for the Protection of the Rhine (ICPR) - established in 1950 – (as well as the Bern Convention and the Rhine Convention on Chemicals, replaced by the 1999 Convention on the Protection of the Rhine) did not focus on North Sea pollution until the Rhine Action Programme (RAP) was adopted in 1987. Nevertheless, the RAP led to additional reductions of polluting substances entering the North Sea.

Cause and policy field: These regimes govern different issue-areas and are functionally linked since pollution of the river Rhine is a major source of North Sea pollution. Accordingly, interaction is mainly caused by differences in goals. However, the Rhine bordering countries (Switzerland, France, Luxembourg, Germany and the Netherlands) also participate in the NEA regime. (Switzerland has participated in the INSCs since 1990; both Switzerland and Luxembourg have been part of OSPAR since 1992). Both regimes are environmental institutions.

Initial effects: The effect of this interaction has been synergetic at outcome and possibly impact levels since the Rhine regime has contributed to reducing North Sea pollution, particularly by focusing on accidental pollution. Such causes have had low priority within OSPAR and the INSCs. RAP was also somewhat ahead in the identification of priority branches for industry and priority substances to be controlled by Best Available Technology (BAT) and may have served as a model regime. On the other hand, the INSCs may have served as model concerning nitrogenous substances.

Nature of influence: Influence has not depended on consent since the Rhine regime directly affected the outcome and impact stages of the NEA regime. However, the influence of the
Rhine regime depended on consent to the extent it served as a model. Until the late 1980s, protection of the North Sea was an anticipated though *unintended side-effect* of the Rhine cooperation. Since then, combating North Sea pollution has been added as an explicit objective. For example, this obligation is included in Art.3 of the 1999 Convention on the Protection of the Rhine.

**Responses:** Responses have mainly taken place *individually* by means of domestic implementation. The Netherlands has for example combined the lists of substances provided for by the RAP and the INSC Declarations and extended RAP obligations to all rivers. To the extent RAP has served as model, responses have also taken place at collective level.

**Adequacy of responses:** The response has apparently been adequate. However, implementation according to two partly overlapping lists of priority substances may have caused coordination problems. Accordingly, the situation could possibly be improved further.

**Remarks:** In the latter part of the 1980s, RAP and the INSCs developed their new approaches roughly simultaneously. However, the reasons varied. RAP came as a consequence of the Sandoz disaster in 1986 – causing major threats to the ecosystem of the Rhine - while the breakthrough at the second INSC in 1987 had little to do with this incident. Therefore, their parallel development appears mainly as a coincident.


### 2.6 The impact of the NEA regime on the London Convention: pushing for tougher targets

**Issue:** In 1972, the regional Oslo Convention and the global London (dumping) Convention (LC) were signed. These conventions have been dealing with the same activities at different levels. However, the Oslo Convention (OSPAR from 1992) has been well ahead of, and directly affected the development and performance of the London Convention.
Cause and policy fields: Interaction is driven by membership logic. The regimes operate in the same issue area (dumping and incineration at sea), but their membership varies significantly: OSPAR has been ratified by 12 states plus the EC Commission while the LC has been ratified by 77 (as of 1997). Both are environmental institutions.

Initial effect: The effect of the membership driven interaction has been synergetic at output level since the principles of precautionary action, stringent control and eventually a total phase out have been transferred from the “activist” core of the Oslo Commission to the LC.

Nature of influence: The control of this influence has remained in the hands of the target institution, which is based on consensus. In the case of incineration at sea, however, the Nordic countries followed up the decisions taken within INSC and OSCOM in the Consultative Meeting of the Parties in LC. In 1990, the Association of Marine Incinerators stated that their incineration ships would phase out this activity completely. As consequence, this method of dealing with waste has ceased globally. The Oslo Convention was not intentionally designed to speeding up the work of LC, but came primarily as a response to the Stella Maris incident in the North Sea in 1971.

Responses: In addition to the direct response at target group level, collective decisions have been taken in order to modify the target institution. In 1996, the parties agreed to a new LC Protocol based on the principle of precautionary action, a total ban on incineration at sea as well as general prohibition of dumping combined with exceptions listed explicitly. This protocol has not yet entered into force.

Adequacy of responses: The response of the LC can be judged as adequate given that the 1996 Protocol enters into force.

Remarks: 1) Case shows that the source regime may have a direct influence on sub/multi national target groups under the target regime; 2) The original breakthrough on dumping and incineration at sea came among the eight North Sea states in 1987. In turn, the new principles were expanded to the twelve OSPAR states in 1989/1990 and then elevated to the global level in 1996. This case represents and interesting example of synergetic (mainly) membership-driven interaction.
2.7 The impact of LRTAP on the NEA regime: division of labour

**Issue:** The NEA regime has dealt with land-based discharges of nutrients. However, indirect discharges from the atmosphere are also important for nitrogen levels in the marine environment. Accordingly, the NOx Protocol and the political declaration adopted within LRTAP in 1988 - calling for 30% emission cut in NOx by 1998 - contribute to the aims of reducing eutrophication in the North Sea.

**Cause and policy fields:** Interaction is caused by a differences in goals since reduction of NOx contributes in cleaning up the North Sea. In addition, there is significant overlap in membership which has contributed to a constructive division of labour. In 1986, PARCOM adopted a protocol aimed at covering emissions into the atmosphere – subsequently included in the 1992 OSPAR Convention. However, OSPAR has never taken any decisions on NOx. Both institutions are environmental.

**Initial effect:** The effect has been synergetic at outcome and possibly impact levels since LRTAP achievements have had a positive impact on NOx emissions and eutrophication in the marine environment.

**Nature of influence:** The NEA regime has no control of this influence and combating eutrophication in the marine environment was an anticipated, though not intended consequence of the NOx Protocol. This Protocol was mainly directed towards coping with damage to forests and acidification of fresh water.

**Response:** The response can be described as adaptation at both collective and domestic levels. Domestically, implementation of the NOx Protocol has supplemented the implementation of marine pollution control of nutrients and phosphorus substances. For example, the Norwegian implementation plan on the North Sea Declarations is based explicitly on the assumption that atmospheric deposition of NOx will be reduced within the framework of LRTAP. At collective level, the NOx protocol is explicitly accepted as a part of OSPAR’s framework for
combating eutrophication. Achievements by LRTAP are regarded as a part of the framework for implementing OSPAR’s strategy in this issue area. The 1992 OSPAR Convention explicitly states that other sources (than dumping/incineration, land-based emissions and pollution from offshore sources) shall only be considered if such pollution is not already the subject of effective measures agreed by other regimes (Art 7). This Art. may have been triggered by LRTAP.

**Adequacy of responses:** Division of labour appears as *adequate*.


---

### 3. Interaction with EU legislative instruments (vertical interactions)

**3.1 The impact of the NEA regime on EU nutrient Directives: triggering the adoption of the Urban Waste-Water and Nitrates Directives**

**Issue:** In 1987, the second INSC agreed to cut emissions of nutrients (to sensitive areas) by 50% between 1985 and 1995. Nutrient emissions are caused by agriculture, (municipal) waste water and industry. The 1987 Declaration on nutrients was subsequently adopted by the Paris Commission as well as OSPAR. In 1988, the EU Council adopted a resolution specifically related to the North Sea requesting the Commission to take action on nitrogen particularly concerning agricultural sources as well as urban waste water treatment. This request led to the adoption of two directives in 1991: the Urban Waste Water Treatment Directive (91/271/EEC) and the Nitrates Directive (91/676/EEC).
**Cause and policy field**: This interaction is rooted in an *institutional* logic since the EU was a party to the INSCs as well as the Paris Commission. The “soft law” nature of the INSC triggered action in this issue area. The consent given by the EU to the second INSC Declaration can thus been seen as a first step towards EU regulation in this issue area. Relevant institutions are environmental.

**Initial effect**: The effect of this interaction has been *synergetic* at output and possibly outcome levels since it induced regulation in a previously uncontrolled issue-area. The Urban Waste Water Directive was conceived of as, in economic terms, the most far-reaching environmental legislation of the Community.

**Nature of influence**: The influence was under the control of the EU. Since the INSC Declarations as well as the PARCOM recommendation were not legally binding, the EU could choose freely whether to proceed or not. In contrast to the first 1984 INSC, the second INSC focused directly on domestic implementation among the North Sea states. Accordingly, the EU directives were probably anticipated, but not intended by the second INSC.

**Responses**: The Council Resolution as well as the Directives were acts of *collective* decision making. The Directives on urban waste-water and nitrates from agricultural sources currently constitute the core of the Water Framework Directive (WFD) (together with the 1998 Drinking Water Directive and the 1996 IPCC Directive). The WFD aims to achieve good surface water status in all European water bodies by 2015.

**Adequacy of responses**: Phosphorus pollution of rivers is decreasing mainly as a result of more and better waste-water treatment. However, nitrate pollution, mainly from agriculture, remains unacceptably high. In other words, the situation could be improved further.

**Remarks**: In addition to the INSC Declarations, the EU Council initiative came as a result of the algae “invasion” in the North Sea in 1988 and 1989.

3.2 The impact of EU nutrient Directives on the NEA regime: strengthening implementation

Issue: Once the Urban Waste Water and the Nitrates Directives were adopted, they were subsequently identified by the NEA parties as important means to implement the INSC Declarations as well as OSPAR’s strategy with regard to eutrophication. The directives did not go any further than the NEA obligations, but they carried significantly more political weight due to their authoritative force. Accordingly, the EU directives have strengthened the implementation of the NEA regime concerning nutrients and eutrophication.

Cause and policy field: Interaction is caused by an institutional logic. The effect on NEA is mainly due to the supranational qualities of the EU.

Initial effect: The effect has been synergetic at outcome and possibly impact levels due to improved sewage treatment and reduction in emissions of phosphorus substances. This is an example of a truly dynamic relationship: the INSCs eutrophication policy induced OSPAR, which subsequently induced EU activity in this area. In turn, EU policy has become important to implement the original INSC and OSPAR policy.

Nature of influence: The influence of the EU on the NEA regime has occurred unilaterally beyond the control of OSPAR and the INSCs. The EU intended primarily to reduce relevant emissions. Accordingly, the influence of the source regime on the target regime was anticipated, but probably not intended.

Responses: The INSCs and OSPAR have explicitly recognised relevant EU directives as major means to implement joint commitments in order to combating eutrophication in the North Sea. However, the principal response has taken place at individual level by means of domestic implementation.

Adequacy of responses: Responses appear adequate. The NEA regime has apparently succeeded in exploiting the legal and political weight of the EU in implementing NEA commitments.
3.3 The impact of the NEA regime on EU’s dumping policy: creating a dumping policy for the EU

**Issue:** Since the 1970s, the Oslo Convention has regulated dumping by means of permits issued in each member country. As a response to the INSC Declarations, the 1992 OSPAR Convention prohibits incineration at sea as well as other types of dumping (with some exceptions, e.g. dredged material). In contrast, the EU has not succeeded in adopting a dumping directive even though the first proposal was submitted to the Council as early as in 1976. However, the EU copied the INSC/OSCOM decisions on phasing out sewage sludge dumping by including this obligation in the Urban Waste Water Directive. Moreover, the EU has attended to the dumping policy of the NEA regime by ratifying the 1992 OSPAR convention in 1998 (Council Decision 98/249/EC (12).

**Cause and policy fields:** This interaction has been stimulated by a combination of institutional and membership logic. Partly as a consequence of the INSCs, the UK changed its policy on sea dumping. This change was a necessary condition for the NEA impact. Relevant institutions are environmental.

**Initial effect:** The impact of the NEA regime on EU’s dumping policy has been synergetic at output and possibly outcome levels since influence has stimulated the development of an EU dumping policy. The obligation of phasing out sewage sludge subsequently included in the Urban Waste Water Directive placed additional pressure on the UK to comply with this provision. The main impact of the ratification of the OSPAR Convention lies probably in a systematic pressure directed on France and the UK concerning their positions on dumping of low and intermediate levels of radioactive substances. These countries are currently excepted from prohibition, but obliged to search for land-based options. A new decision is scheduled before 2008 at the latest.

Nature of influence: Control of influence has been in the hands of the EU depending on decision procedures applied. The NEA regime intended primarily to change the position of the UK and did not directly intend to affect EU dumping policy.

Responses: The inclusion of sewage sludge dumping in the Urban Waste Water Directive as well as the ratification of the 1992 OSPAR Convention were acts of collective decision making.

Adequacy of responses: Responses may be classified as adequate. For example, the UK has actually phased out dumping of contaminated sewage sludge.


Issue: Until the late 1980s, the Paris Commission put forth several proposals on hazardous substances that were vetoed or watered down by the EU within the framework of Directives 76/464/EEC (Dangerous) and 79/117/EEC (Pesticides). This general tendency changed after the adoption of the Single European Act. For example, proposals for EU legislation on PCBs and PCTs have been directly inspired by the 1987 INSC. 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 as a breakthrough, which has served as a model for many international regimes. In particular, the Water Framework Directive (2000/60/EC) has included this ambition to apply on priority substances.

Cause and policy field: Interaction has been rooted in a combination of membership and institutional aspects – particularly the latter. The EU Commission was a party to the Paris Convention before the environment was included in the treaty in 1987. In those cases were
Community legislation lagged behind PARCOM developments, the EU Commission would veto, postpone or water out PARCOM proposals. Note that most EU states were PARCOM parties in this period and PARCOM had more members than the EU until the accession of Spain, Portugal and Greece. Interaction between the 1995 INSC and the WFD has been caused by a combination of membership and soft law.

**Initial effect:** The interaction between the EU Commission and PARCOM appears *disruptive*, while the interaction between the INSCs and the WFA has been *synergetic* at output level. In general, changes in the EU institutional machinery since the Single European Act appear to have changed interaction from disruption to synergy. Presently, OSPAR is given credit by the EEA for reducing hazardous substances in European marine waters.

**Nature of influence:** The control of the EU Commission as well as each member state in the Council has changed over time, from full control to shared control. Conversely, the control of the Parliament has increased. PARCOM intended to influence the EU since EU consent was a necessary condition for adopting binding decisions within the Paris Commission (see below).

**Responses:** The EU has responded in terms of *collective* decision making. However, institutional changes within the EU, which have proved instrumental in improving the relationship with NEA, have not been directly linked to NEA influences.

**Adequacy of responses:** The response of the EU in the case of hazardous substances has generally speeded up the work of the EU.

**Remarks:** This case could have been disaggregated into two phases and at least three Directives. However, I have chosen a coherent approach in order to grasp the overall dynamic development.

**Sources:** Sætevik (1988), Prat (1990), Skjærseth (2000), EEA (2001)
3.5 The impact of the EU on the NEA regime with regard to hazardous substances: strengthening implementation through Dangerous Substance, Pesticide, LCP and IPPC Directives.

**Issue:** While the EU protracted NEA decision making until the late 1980s, new and more stringent EU Directives on hazardous substances have strengthened implementation of the NEA regime in the 1990s. In the case of the Large Combustion Plant Directive, the EU even served as a model for a PARCOM Recommendation.

**Cause and policy fields:** Interaction is caused by an *institutional* logic owing to the supranational qualities of the EU.

**Initial effect:** The effect has been *synergetic* mainly at outcome and possibly impact levels since the relevant EU directives have strengthened compliance with the NEA regime. Controlled substances have decreased significantly overall. According to the EEA, the control of hazardous substances in marine waters has been a success. However, about 10,000 chemicals enter the marine environment and most of these chemical substances remain unexplored and uncontrolled. In the case of the LCP Directive, the EU induced the adoption of PARCOM Recommendation 97/2 on measures to be taken to prevent or reduce emissions of heavy metals and POPs due to large combustion plants.

**Nature of influence:** Influence has been *unilateral* and beyond the control of the target institution with the exception of the PARCOM Recommendation. The EU has *not intended* to affect the implementation of the NEA obligations, but rather to improve the European environment.

**Responses:** Responses have mainly taken place at the *domestic level* (with the exception of the PARCOM Recommendation 97/2) Relevant Directives are identified in the various OSPAR and INSC progress reports as important means towards reducing emissions of hazardous substances entering the North Sea.
Adequacy of responses: Responses appear adequate. The NEA regime has apparently succeeded in exploiting the legal and political weight of the EU in implementing NEA commitments.

Remarks: Could have been disaggregated, but is aggregated due to general dynamics.


4. Summary of cases

4.1 Horizontal interaction

Table 1: Interaction between the NEA regime and other environmental regimes

<table>
<thead>
<tr>
<th>Institutions</th>
<th>INSC-OSPAR</th>
<th>OSPAR-INSC</th>
<th>MONTREAL-NEA</th>
<th>NEA-UNFCCC</th>
<th>ICPR-NEA</th>
<th>NEA-LC</th>
<th>LRTAP-NEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cause</td>
<td>Membership/ institutional</td>
<td>Membership/ institutional</td>
<td>Goals</td>
<td>Goals</td>
<td>Goals</td>
<td>Membership</td>
<td>Goals</td>
</tr>
<tr>
<td>Effect</td>
<td>Synergetic</td>
<td>Synergetic</td>
<td>Synergetic</td>
<td>(Disruption)</td>
<td>Synergetic</td>
<td>Synergetic</td>
<td>Synergetic</td>
</tr>
<tr>
<td>Influence</td>
<td>Consent/ intentional</td>
<td>Unilateral/unintentional</td>
<td>Unilateral/unintentional</td>
<td>Unilateral/unintentional</td>
<td>Unilateral/(change in intentions)</td>
<td>Consent/unintentional</td>
<td>Unilateral/unintentional</td>
</tr>
<tr>
<td>Response</td>
<td>All levels</td>
<td>Individual</td>
<td>Individual</td>
<td>Individual</td>
<td>Individual</td>
<td>Collective</td>
<td>Collective/Individual</td>
</tr>
<tr>
<td>Result</td>
<td>Success</td>
<td>Success</td>
<td>Success</td>
<td>?</td>
<td>Success</td>
<td>Success</td>
<td>Success</td>
</tr>
</tbody>
</table>

4.2 Vertical interaction

Table 2: Interaction between the NEA regime and relevant EU environment directives

<table>
<thead>
<tr>
<th>Institutions</th>
<th>NEA-EU-nutrients</th>
<th>EU-nutrients-NEA</th>
<th>NEA-EU-dumping</th>
<th>NEA-EU-hazardous</th>
<th>EU-hazardous-NEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cause</td>
<td>Membership/ Institutional</td>
<td>Institutional</td>
<td>Membership/ institutional</td>
<td>Membership/ institutional</td>
<td>Institutional</td>
</tr>
<tr>
<td>Effect</td>
<td>Synergetic</td>
<td>Synergetic</td>
<td>Synergetic</td>
<td>Mixed</td>
<td>Synergetic</td>
</tr>
<tr>
<td>Influence</td>
<td>Consent/ unintentional</td>
<td>Unilateral/unintentional</td>
<td>Consent/ unintentional</td>
<td>Consent/ intentional</td>
<td>Unilateral/unintentional</td>
</tr>
<tr>
<td>Response</td>
<td>Collective</td>
<td>Individual</td>
<td>Collective</td>
<td>Collective</td>
<td>Individual</td>
</tr>
<tr>
<td>Result</td>
<td>Mixed</td>
<td>Mixed</td>
<td>Success</td>
<td>Success</td>
<td>Success</td>
</tr>
</tbody>
</table>
5. Conclusions and Recommendations

Much of the literature on interaction, linkages or regime congestion is concerned with the (potential) coordination problems caused by the high density of regimes in the international society. The interaction between the NEA regime and other international institutions does not support this concern. The main conclusion from these 12 cases of interaction is that the NEA regime lives in harmony with its surroundings in the sense that almost all cases have triggered a higher level of effectiveness. The NEA regime has been able to benefit from the influence of other institutions and has itself been able to generate positive influence on other international regimes and EU directives.

At first glance there is no clear pattern or combination of values leading to success. This is even the case concerning whether interaction has been intended or not. Based on the model underlying this project, this observation may firstly be interpreted as follows: there are many ways to success. This seems to conform well with the so-called convergence hypothesis developed within comparative environmental politics research (see e.g. Vogel, 1986). The point in this literature is that significant differences in environmental policy achievements across countries are hard to find despite widely varying institutional arrangements. This observation is traced back to the interplay between different institutional arrangements working in different political, historical and cultural contexts. It is, however, difficult to see how this interpretation may apply in the case of interaction between international institutions.

Alternatively, there may be one or a few overriding mechanisms applying to each case which is not sufficiently covered by the model. In all cases selected here, there is a certain overlap in membership: a core of European countries participate in all institutions at sub-regional, regional, EU and global levels. This kind of “core community” may appear as a necessary condition for avoiding disruption and enhancing success. For example, the parties have clearly coordinated their efforts at collective and individual levels in the case of NEA and LRTAP, which are dealing with very different media, substances and causes. Accordingly, this observation may also shed light on why many disruptive cases appear as merely potential problems: The main rule may be that potential cases of disruptive interaction is sorted out before they evolve into real problems causing significantly negative impact on effectiveness. For example, the potential problem between NEA and UNFCCC concerning CO$_2$ injection will probably be sorted out in a sensible way.
A third possible interpretation is linked to the finding that effectiveness tends to increase along with regime “age” – at least up to a certain point (Miles and Underdal et al., 2001). Most regimes need a period of learning by doing before they mature. And most of the cases of interaction included in this paper have a relatively long history in which the different regimes have had time to adapt and adjust. In contrast, many examples of potential disruption are linked to relatively new, global and complex regimes from the 1990s.

Against this backdrop, the most interesting question is probably not how to avoid disruption, but rather how to enhance success. The cases related to the NEA regime suggest two main pathways: membership/actor-driven and institutional-driven. The first can be explored by focusing on institutions dealing with exactly the same activity while membership varies significantly. Cases in point here are the links between the INSCs, OSPAR and LC (perhaps also the EU) concerning dumping and incineration at sea. These institutions have dealt with the same problems in the North Sea, in the North-East Atlantic, in European waters (including the Med and Baltic) and globally. Secondly, institutional interaction can be explored by focusing on institutions where there is a high degree of overlap in “laggards”, substances and activities, while institutional arrangements vary significantly. Cases in point are the interactions between the “soft law” INSCs, the “hard law” OSPAR and the “supranational” EU with regard to hazardous substances and nutrients. The INSCs triggered the breakthrough even though the same main “laggard” – the UK – participated in all three institutions. In turn, OSPAR decisions as well as EU directives have significantly strengthened implementation of the original INSC Declarations. This observation implies that success can be enhanced by means of institutional design.

The specific policy recommendations emanating from this inventory lie in the conclusions above. In essence, the lessons from the NEA regime indicate that regime congestion and pluralism in institutional arrangements can be an advantage for the environment. Accordingly, the creation of a global environmental organisation does not make much sense if the main motive is to avoid disruption between environmental institutions. However, synergetic interaction and effectiveness can be facilitated by means of deliberate institutional design. The creation of the International North Sea Conference process has proved instrumental in triggering action among other regimes as well as the EU.
References


White paper No. 64 to the Storting 1992. Oslo: Ministry of the Environment

