Management of Shared Fish Stocks in the Barents Sea

By

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The Barents Sea is a biologically productive ocean but also quite vulnerable. Seawater temperatures are low, which slows down evaporation processes and may serve to reduce the bacteriological degeneration of pollutants. There are considerable fluctuations in light intensity and variation in the water inflow from the Atlantic imply continual shifts in temperatures and ice extension. Ecosystems are quite simple in that there are few organisms on each link of the chain, so the disruption of one may have serious implications for the rest of the system.

The major commercial groundfisheries target cod, haddock and saithe, while the pelagic fisheries take Norwegian spring-spawning herring, capelin and blue whiting. Harvests are predominantly by the coastal states, Norway and Russia. Among the challenges to effective fisheries management in this region in recent years are (1) the unsettled *maritime boundary* line between these states and (2) their joint inability, until 1999, to reach agreement with all distant-water fishing states on conservation and allocation measures pertaining to the *Loophole*, a pocket of high seas located between their exclusive economic zones. The most heated part of this management dispute coincided in time with the global-level negotiations of the United Nations Fish Stocks Agreement. This paper reviews the role of the bilateral fisheries regime in addressing those jurisdictional challenges, as well as its performance with regard to the tasks that any fisheries management regime must face: (3) generation and imputation of *scientific* knowledge; (4) adoption of management *rules*; and (5) establishment of a system of *compliance* control.

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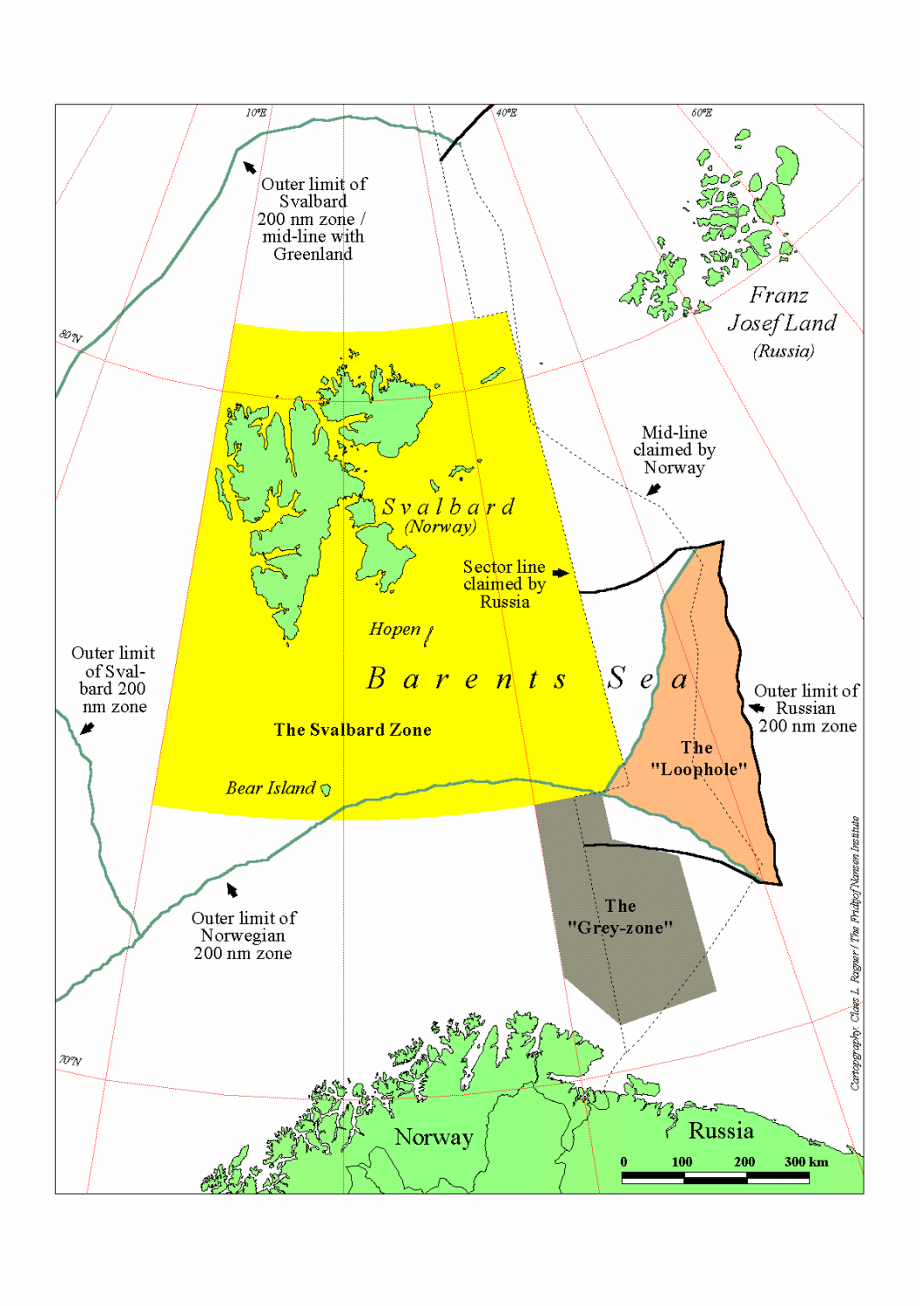
1 Challenges to the Barents Sea Fisheries Regime

Due to the extension of coastal zones from the mid-1970s, a new and largely bilateral fisheries regime evolved as the most appropriate means for management of Barents Sea fish stocks. The new regime replaced a wider regional regime that had its basis in the North-East Atlantic Fisheries Convention. Three agreements between Norway and the Soviet Union form the basis of the Barents Sea fisheries regime. A 1975 Framework Agreement provides for the Norwegian-Russian *Fisheries Commission* as the institutional hub of the regime. The Commission meets annually to make consensual recommendations on total quotas of the three main shared stocks – cod, haddock and capelin, each of which are seen as a single biological unit. Based on fixed initial allocation keys, it allocates quotas to the parties, decides on the shares to be allocated to third parties, and determines operational restrictions. It also coordinates scientific research among institutions in the two countries. The Mutual Access Agreement paves the procedural ground for reciprocal fishing; this Agreement secures parties' access to the 200-mile zone of the other, i.e., access within agreed-upon quotas, beyond 12 miles, and subject to coastal state rules and licensing. For its part, the Grey Zone Agreement sets up a system of enforcement applicable, *inter alia*, to a disputed part of the Barents Sea (see map). This Agreement acknowledges parallel jurisdiction in an 'adjacent area' that also covers most of the disputed waters. Russia and Norway have agreed that the enforcement of conservation and management measures in the Grey Zone is to be exercised by the state that has issued the licence to operate there – and both coastal states may issue licenses within agreed quotas.

In addition to these agreements between Russia and Norway, a set of other agreements between these two coastal states and non-coastal user states forms part of the basis for the Barents Sea fisheries regime. In essence, the latter agreements imply that certain non-coastal states obtain access to the Barents Sea fisheries within the overall regulatory framework set up by the coastal states.[1]

While the Barents Sea fisheries complex is simpler than in many other ocean areas, since the harvest is largely taken by two coastal states, a complicating feature is the fact that the area is extremely sensitive in a military sense. This is due to the importance of nuclear submarines deployed in Northern waters for the maintenance of the strategic deterrence, especially during the Cold War period. One consequnce of this sensitivity has been helpful to fisheries management, namely that both Norway and the Soviet Union were eager to avoid unnessecary political tension in the area.

[1] Based in reciprocal access agreements, the European Community, the Faroes, Greenland, and Iceland presently have fishing rights in specified national zones in the Barents Sea. In addition, and based on historical fishing, Poland has certain quotas in Norway's EEZ and in the Svalbard zone; and on similar grounds, Canada, Estonia, and Lithuania are granted access to the shrimp fishery in the Svalbard zone; Report to the Storting, Norway, *St.meld.* 11 (1997-98), Sec. 3; a broader discussion is found in *St.meld.* 49 (1994-95).



2 Managing Fisheries in Disputed Waters

Norway and Russia have still not settled their disagreement over whether the marine *delimitation* should follow a line of equidistance or the sector line, the latter argued by the Russian side. At stake is a disputed area of some 155,000 square kilometres where fishing grounds are rich and the prospects for finding petroleum quite good. Because of the link in

international law between the accepted exercise of management authority and the strengthening of jurisdictional claims, this dispute has been hampering resource management in the Barents Sea. Notably, the regime has been structured in order to avoid situations where Norwegian fishermen are subject to Russian inspections in waters claimed by Norway, and vice versa, as such inspections would be seen as jeopardizing the respective claims of these countries to sovereignty over the disputed area.

The key regime component here is the Grey Zone Agreement with its parallel systems of licensing and enforcement in the agreement area, which includes the disputed segment. Before the establishment of that zone, Norway and the Soviet Union were faced with basically three alternative policy options, none of which would have been very helpful with respect to the jurisdictional problem. (1) In order not to provoke the territorial jealousy of the other, both parties might have refrained from intrusive monitoring in the disputed area. In an increasingly regulated fishery, however, such a blind spot would have been quite intolerable, especially as the fish have been very profuse in the disputed area. Moreover, the parties would have had to abstain from the regulation and enforcement of third countries as well, quite detrimental to the thrust of the emerging Law of the Sea Convention. In consequence, coastal state fishermen would have suffered and the health of the fish stocks would have been in jeopardy. (2) Alternatively, one of the parties could have kept a low profile and left regulation and enforcement to the other. There is little doubt that this would have seriously undermined the territorial claims of the restrained party; indeed, the fear that without an agreement the Soviets might try to enforce regulations in the disputed area on their own was very much a concern among key Norwegian decision-makers.[2] (3) Finally, both parties could have behaved as if they were in charge of the disputed area and conducted both regulation and enforcement on all vessels in that area. As the Svalbard experience showed, however, Norwegian inspections of Soviet vessels in an area where Norwegian jurisdiction is not clarified was likely to meet opposition from the Soviet government;[3] and this opposition should logically be even stronger when the Soviets had a claim of their own to the area. The same argument, although softened by the asymmetry in general power relationship, would be valid for Soviet inspections of Norwegian vessels. In both cases, there would be a considerable risk of embarrassing incidents leading to diplomatic activity and possibly conflict escalation.

With the Grey Zone Agreement in place, agreed-upon management measures could be implemented and enforced without such risks; and also without one party having to accept enforcement activity from the other in waters claimed to be her own. Nevertheless, it was a deeply split Norwegian parliament which by only a slight majority passed the Grey Zone Agreement after an unusually bitter debate. The opposition argued that the Agreement was geographically biased by covering an area to the west of the disputed area which was far

[2] Minister of Maritime Law, Jens Evensen, in Debates in the Storting (St.f.) 9 March 1978.

[3] See R. R. Churchill and G. Ulfstein, *Marine Management in Disputed Areas: The Case of the Barents Sea*. London: Routledge, 1992.

bigger than that to the east; and also that it might give the Soviets expectations about joint management solutions in the Barents Sea regarding both fish and shelf resources.[4]

If the critics of the Grey Zone Agreement were right when arguing that its geographical location strengthens the Soviet position, the regime would have failed to solve the problem of avoiding negative jurisdictional effects of fisheries management in the area. However, the fact that this temporary agreement has been renewed each year for nearly two decades without any debate suggests that these effects, if there, are no longer seen as too significant. It seems safe to conclude, therefore, that the regime has successfully decoupled necessary regulation and compliance control activities from the contested territorial issue.

3 Dealing With Newcomers: The Loophole Case of a Straddling Stock

Because of changes in temperature and salinity, the availability of cod in the Barents Sea Loophole, which spans some 62,400 square kilometres, increased markedly around 1990. Cod thus became a straddling as well as a shared stock, and despite the short season due to ice conditions, this new fishing opportunity soon attracted the attention of distant water vessel operators. In 1991 the fishery began cautiously, with vessels from the European Community, Greenland and the Faroes; but two years later it accelerated when Iceland turned its attention vigorously to this fishery. A drop in the total cod quota in domestic waters to a historic low – combined with a rapid growth in the harvesting capacity of Iceland's fleet – prompted the Icelandic interest.

By 1995, as many as eighty Icelandic trawlers had operated in the Loophole.[5] Whereas the third party catch was a moderate 12,000 metric tonnes in 1993, this increased to roughly 50,000 tonnes the following year. In that peak year of 1994, high seas catches comprised around seven per cent of the total cod harvest in the Barents Sea ecosystem. For several years afterward the fishing effort remained high, but catches declined as the migration pattern of the cod again shifted southwards.

3.1 Coastal state strategies

Faced by newcomers in the Barents Sea, Norway and Russia argued fervently that both *zonal attachment* and *historical fishing* suggested that the cod stock was binational. Noting also that the stock was fully utilized, the coastal states rejected the legitimacy of the unregulated activity in the Loophole. Many of the foreign fishing vessels that operated in the area were flying flags-of-convenience, and this rendered the traditional, diplomatic channel less effective as a means of dealing with such a problem.

The Barents Sea fisheries regime did not serve as an effective tool for the coastal states in their efforts to cope with the Loophole challenge. The gradual phasing-out of non-coastal state fishing from the region in the 1970s had been validated by the acceptance of

[4] Recommendation S. of the Standing Commitee on Foreign Affairs and the Constitution (Innst. S.) 190, 1977-78; and Debates in the Storting (St.f.), 9 March 1978.

[5] *Daily News of Iceland* (online at www.icenews.is/), 3 November (1995).

EEZs in international customary law, but no such support from broader normative developments was forthcoming in the early 1990s. On the contrary, the Icelandic appearance in the Loophole coincided with the first session of the UN Fish Stocks Conference, which implied that the rules governing the interaction between coastal states and distant water fishing nations on the high seas were in a state of flux.

The measures available to Norway and Russia were therefore largely diplomatic and economic. Unlike the Sea of Okhotsk case, no naval exercises have occurred in the most relevant fishing area that could be perceived as partly motivated by fisheries concerns.[6] Although the coastal states soon agreed to step up diplomatic pressure on flag states and to enhance coastal state presence in the area in terms of control vessels, there was a lack of willingness to use those vessels for anything more drastic than observing the unregulated harvesting activity in the region. Instead, what may be coined the 'quota card' became the most powerful means to dissuade newcomers from engaging in unregulated harvesting. Coordinated allocation of parts of the total quota to third parties was provided for in the annual bilateral protocols drawn up by the coastal states. After bilateral negotiations with Norway in 1991-92, Greenland and the European Community decided to limit activities in the Loophole and keep total harvests in the Barents Sea within the overall quotas allotted under reciprocal access agreements. The Faroes agreed in 1996 to prohibit landings of fish that had been taken without quotas in international waters.

The coastal state diplomatic strategy versus Iceland, the remaining challenger, proved much less effective. When the Icelanders first appeared in the area, Norway and Russia argued that Iceland had no historic record of harvesting in the region and refused to negotiate Icelandic demands for a Barents Sea cod quota. As a result, although their vessels fished on the same stock, coastal and non-coastal user states remained unable to achieve compatible measures through coordination of their management policies. Formal negotiations began in 1995, partly because the Icelanders, refusing to yield to political pressure, had rapidly acquired some 75 per cent of the unregulated harvests in the Loophole, and partly because the coastal states were reluctant to stretch international law regarding unilateral enforcement measures beyond 200 miles, an issue that at the time was under negotiation in the UN. The coastal states sought to establish an arrangement that would give Iceland a share of a separate Loophole quota; the size of the total Loophole quota would correspond with the zonal attachment of the cod stock to the high seas area, estimated at two per cent.[7] After years of negotiations, however, no agreement had been reached, despite various economic sanctions launched by the coastal states to render unregulated harvesting more costly. In Norway, domestic legislation was introduced in 1994 prohibiting the landing of high seas catches taken without a quota; in practice, even port calls were rejected.

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[6] On the Sea of Okhotsk situation, see A. G. Oude Elferink, "The Sea of Okhotsk Peanut Hole: *De facto* extension of coastal state control", in Stokke, *Governing High Seas Fisheries*.

[7] *St.prp.* 74 (1998-99), Sec. 4.

Another significant coastal state measure to deter unregulated high seas activities was the practice of *blacklisting* Loophole vessels from subsequent access to the Norwegian EEZ, even if the vessel had changed ownership in the meantime.[8] In 1998, such blacklisting was extended to port calls and the result was to reduce the second-hand value of vessels with a history of contravention of rules created by the Norwegian-Russian Fisheries Commission, especially on the European Community market.[9] Like blacklisting of vessels, industry-level sanctions cannot be challenged on the basis of international trade rules, and during the peak years of the Loophole fishery, a series of private *boycott* actions were introduced that aimed at strangling Norwegian supplies of provisions, fuels, and services to Loophole vessels, as well as punishing domestic companies that failed to adhere to such boycotts. The Russian Fisheries Committee exerted similar pressure to bear even in Icelandic ports by encouraging the Murmansk-based industry to discontinue landings of cod from Russian vessels at ports in Iceland. Because of the cod crisis in Icelandic waters, supply contracts with Russian companies were important to the processing industry of that country during the 1990s.

The public and private sanctions did not deter unregulated harvesting activities, mainly for two reasons: The fleets operating in the Loophole were able to operate independently of the Russian and Norwegian fishing industries, and the Icelanders were determined to establish a sizable fishery in the Loophole. In the long run, however, reliance on Icelandic ports, some four day-trips away, would add considerably to the over-all costs of fishing in the Barents Sea. This is especially true for new, efficient trawlers, the profitability of which tends to be highly sensitive to reductions in the number of annual fishing-days.

3.2 The Loophole Agreement

In 1999, a regional accord was finally reached. The terms of the Agreement are similar to those previously drawn up bilaterally between Norway and Greenland and the Faroes. In exchange for cod quotas in the EEZs of the Barents Sea, Iceland must refrain from harvesting cod or seeking new fishing rights for the cod stock beyond the coastal zones; Iceland must also open its national waters to vessels from the other two countries. Other provisions oblige the parties to discourage their nationals from operating vessels under flags of convenience in the Barents Sea, to prohibit landing of catches that are taken without a quota, and, subject to other obligations under international law, to deny port access to vessels that engage in these activities. As a result of the Agreement, Icelandic vessels were removed from the 'black list' of vessels that are banned from the Norwegian EEZ. The steep decline of the Loophole fisheries in the years preceding the signing of the Agreement had served to reduce the distance between coastal state quota offers and Icelandic demands, and the Agreement provides for a stable Icelandic share of a little less than two per cent of the TAC.

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[8] *St.prp*. 73 (1998-99), Sec. 2.2; legislation providing for such blacklisting was introduced in 1994 but not used in practice until 'around 1997'; *ibid*.

[9] The European Community is granted considerable quotas of several species in the Norwegian EEZ.

3.3 Regional-global interplay: The U.N. Fish Stocks Conference

Because there was a partial overlap in time between the Loophole dispute and the negotiation of the U.N. Fish Stocks Agreement, it is of interest to examine how the regional-level process influenced the global negotiations. There are generally at least two ways in which regional management disputes can influence the course and outcome of global negotiations. First, by a process that may be termed diffusive interplay, the substantive or operational solutions to difficult problems that regional negotiations may reach can be adapted for use at the global level. Second, through political interplay, regional disputes may influence the relative bargaining power of competing blocs or encourage or facilitate various types of leadership activities at global negotiations.

In the years it took to negotiate the U.N. Fish Stocks Agreement, regional efforts to manage the Loophole fishery moved from disappointment to disillusionment. Several rounds of negotiations, bilateral and trilateral, were held without the emergence of any substantial resolution. The only allocative "solution" discernible in the Loophole case was the usage by the coastal states of the quota card to dissuade long-distance fishing operations. The quota trade-off solution was ineffectiveness with respect to Iceland and not consistent with the emphasis in the Fish Stocks Agreement of a multilateral approach to regional management. *Diffusion*, therefore, formed a negligible part of the interplay between the evolving Loophole regime and the U.N. Fish Stocks Agreement.

With regard to *bargaining power*, the three main antagonists in the Loophole dispute all belonged to the coastal state bloc during the negotiation of the Fish Stocks Agreement; but each state also had a tradition of distant water fishing operations.[10] True to tradition, Iceland was one of the original members of the so-called core group, the group of coastal states that played a very active role in the process that led up to the Fish Stocks Conference. Throughout the negotiations, the core group remained a salient forum for joint action, including the drafting of proposals on controversial issues. When a large fleet of Icelandic vessels became engaged in controversial high seas activities in the Barents Sea, however, Iceland's participation in the core group became more problematic.

Because of its distant water fishing interest, and also with a view to upcoming membership negotiations with the European Union, Norway responded with caution to the idea of convening a straddling stocks conference under the auspices of the United Nations and did not support the so-called "Santiago Document" that emerged from the Fourth Preparatory Committee Meeting to the UN Conference on Environment and Development in 1991.[11] The Norwegian fisheries bureaucracy had entered the process at a fairly late stage and it was only in the months prior to the first substantial session of the Fish Stocks Conference in July 1993

[10] For a lucid exposition of key issues and bargaing blocs during the Fish Stocks Conference, see D. A. Balton, "Strengthening the Law of the Sea: The New Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks", *Ocean Development and International Law*, Vol. 27 (1996), 125.

[11] The "Santiago Document", drawn up at the initiative of a group of Latin American states prior to the Third Preparatory Committee Meeting in August 1991, argued strongly in favour of the coastal states' having a greater say in the management of high seas fisheries.

that a broad assessment was made of the various interests involved. Influenced partly by the Loophole situation, but also by the expected resumption of high seas fisheries for Norwegian spring-spawning herring by non-coastal states in the North-East Atlantic, Norway placed itself firmly on the coastal state side of the straddling stocks issue.

Russia, for its part, has traditionally loomed large in the global distant water fishing league. However, a decade of phase-outs from foreign coastal zones had prompted a partial return to domestic waters that was accelerated by the economic decline of the 1990s and the rapid privatization of the fishing industry, both of which implied greater attention to the fleet's operational costs. Whereas an estimated half of the Russian catch was taken in waters beyond its jurisdiction in 1980, the share had fallen to 22 per cent in 1994.[12] However, the Barents Sea situation was hardly decisive for Russia's position as being "like-minded" with the coastal state core group on key issues at the Fish Stocks Conference. The Russian posture preceded the escalation of the Loophole issue in 1993 and was largely shaped by the already well-established high seas dispute in the Far East, a region where today no more than two per cent of the harvest is taken outside the EEZ.[13]

Whereas several forms of *leadership* were exercised by the parties to the Loophole dispute during the Fish Stocks Conference, on close inspection none of these leadership roles appears to have been triggered by the Barents Sea situation.[14] Historically, Iceland's dependence on fisheries and overall reliance on proximate fishing grounds that traditionally had also been exploited by others largely explains the structural leadership it was able to provide in the early 1970s to expanding fishing zone states. Structural leadership implies the ability to bring material capabilities to bear on the negotiation of particular issues. Iceland's establishment and stubborn enforcement of first a 50-mile and then a 200-mile exclusive fishery zone placed Iceland among the coastal state front-runners in the Law of the Sea context.[15] In the pre-negotiation stage of the UN Fish Stocks Conference, Iceland again was actively promoted coastal state interests. The emergence of the Loophole controversy, however, blended the traditional interests with a concern for the rights of newcomers on the high seas and a corresponding reluctance to extend coastal state enforcement rights in such waters.

The Barents Sea situation was not conducive to motivating Norway and Russia to take coercive measures and thus provide the type of structural leadership that had been provided by Iceland in the 1970s and by Canada in the high seas detention of the Spanish trawler

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[12] The estimate is made in *Seafood*, Report of the American Embassy, Moscow, as cited in Oude Elferink, *supra* note 14. More recently, Russian attention to distant water fisheries is reportedly again on the rise.

[13] V. Monakhov, "The Fishery Industry in the Russian Far East", *Eastfish Fishery Industry Profile*, 19 (Copenhagen: Eastfish, Food and Agriculture Organization, 1998), 16.

[14] For an interesting discussion of three types of leadership in multilateral negotiations, see O. R. Young, "Political Leadership and Regime Formation: On the Development of Institutions in International Society", *International Organization*, Vol. 45 (1992), 281.

[15] For an overview, see J. T. Thór, *British Trawlers and Iceland 1919-1976* (Gothenburg: Department of Economic History of the University of Göteborg, 1995).

Estai.[16] As unregulated fishing in the Loophole continued to grow, fishery organizations in Norway and Russia called for emergency measures and demanded a more activist approach to unregulated harvesting, including intrusive enforcement measures towards foreign vessels. In 1997, a centre-liberal coalition government was formed in Norway on a political platform that included "consideration of…a Norwegian-Russian initiative to extend the Norwegian and Russian exclusive economic zones to 250 nautical miles".[17] Once in position, however, the new Prime Minister assured that no unilateral measure was contemplated and that any initiative would occur within the framework of international law.[18] The tactical wisdom of any type of unilateral measures in this case would indeed have been highly questionable. Such measures, were they to contribute to the making of international law, would require consent or acquiescence on the part of those subject to them as well as third parties. Dealing with a much more threatened fish stock, a leading scholar, W.T Burke, has argued that even for a stock that occurs mainly within the EEZs, customary international law does not authorize unilateral measures by coastal states unless *bona fide* efforts to reach an agreement with the high seas fishery nations have failed and even then only if no scientific doubt exists that the unregulated fishery will jeopardize the health of the stock.[19] Partly for this reason the United States and Russia abstained from unilateral or bilateral regulation of high seas activities in the Bering Sea Doughnut Hole, even when the level of overfishing was known to be destructive to the pollock.[20]

Compared to the Bering Sea situation, or Canada's high seas problem in the Northwest Atlantic, the Loophole case was an unlikely candidate for yielding the consent necessary before unilateral action may contribute to changing the existing international law. Even in the record year of 1994, the unregulated cod catch was no more than one third of the increase in the total quotas from the preceding year. While certainly a nuisance, this level of unregulated fishing could hardly be said to create a state of emergency. This, combined with the fact that Iceland repeatedly declared its willingness to negotiate with the coastal states, implied that unilateralism on the part of Norway or Russia would have been very hard to justify.

Norway had a very high profile during the Third Law of the Sea Conference, not least because its delegation head had the role of leader of the informal "group of legal experts" which hammered out compromises on some of the more controversial issues.[21] Also at the Fish Stocks Conference, Norway sought an influential position by assuming a high level of

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[16] On the 1995 *Estai* incident, see C. C. Joyner, "On the Borderline? Canadian Activism in the Grand Banks", in Stokke, *Governing High Seas Fisheries*.

[17] *Sentrumsalternativet - Vilje til ansvar*; <www.aftenposten.no/spesial/valg97/sentrum.htm>, Sec. 2.2.2.8; author's translation.

[18] Kjell Magne Bondevik in *Aftenposten*, 17 October 1997.

[19] W. T. Burke, "Fishing in the Bering Sea Donut: Straddling Stocks and the New International Law of Fisheries", *Ecology Law Quarterly*, Vol. 16 (1989), 285.

[20] D. A. Balton, "The Bering Sea Doughnut Hole Convention: Regional Solution, Global Implications", in Stokke, *Governing High Seas Fisheries*.

[21] This group, widely known as the Evensen Group, was in operation from the very first (organizational) session in New York in December 1973, and the group played a significant role *inter alia*, by drafting negotiating texts.

activity and seeking out powerful allies. After clarification of its position during the preliminary stages, Norway first joined forces with the group referred to as "like-minded" with the coastal state core group before being admitted as a member of the core group in 1994. Among the issues given particular attention by the Norwegian delegation was that of the improved means of non-flag state enforcement. Norway eagerly supported proposals for port state measures, including prohibition of landings from vessels engaged in unregulated fishing operations on the high seas.[22] During the fourth session, moreover, Norway came forward with a formula for the division of duties and responsibilities between inspecting state and flag state; a formula that advanced the negotiations on one of the most controversial aspects of the Fish Stocks Agreement.[23] The Norwegian proposal also contained the idea that agreed upon enforcement procedures would be applicable even to parties of the Agreement that were not members of the relevant regional fisheries management body, thus laying down global minimum standards on enforcement applicable in all regions.[24]

In summary, compared to some of the other regional straddling stocks issues, such as that in the Northwest Atlantic and, in a more restricted sense, that of the Sea of Okhotsk, the high seas problem in the Barents Sea had scant impact on the Fish Stocks Conference.[25] The relative strength of the major bargaining blocs was largely unaffected. Nor did the Loophole issue provide sufficient urgency to prompt structural leadership in the form of unilateral measures on the outer edges of international law. And finally, most of the rather moderate entrepreneurial and ideational leadership provided by the parties to the Barents Sea dispute was only loosely related to the specifics of the Loophole case.

4 Meeting the Tasks of Fisheries Management

Although in practice they often interact, it is useful for analytical purposes to distinguish three aspects of the fisheries management problem: generation of adequate *knowledge* about the health of the ecosystem and the impact of harvesting of various stocks; ensuring that available scientific knowledge is applied in the establishment of adequate *regulations*; and *compliance* control, including monitoring in order to assess adherence to the regulations as well as imposition of sanctions on violators. In the following, the performance of the Barents Sea fisheries regime on those three dimensions is examed more closely.

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[22] The relevant provision in the Fish Stocks Agreement is Article 23.

[23] On Norway's role, see M. Hayashi, "Enforcement by Non-Flag States on the High Seas Under the 1995 Agreement on Straddling and Highly Migratory Fish Stocks", *Georgetown International Environmental Law Review*, Vol. 9 (1996), 1, at 16, citing an Informal Paper of the Chairman of the Conference, "Issue Raised by Norway" (25 August, 1994). The relevant provision in the Fish Stocks Agreement is Article 21.

[24] See Fish Stocks Agreement, Article 21, paras. 1-3 and Hayashi, *supra* note 63, at 16.

[25] On the significance of the situation off Canada for the convening of the Conference, as well as some of the key issues discussed therein, including new measures for enforcement, see D. H. Anderson, "The Straddling Stocks Agreement of 1995 – An Initial Assessment", *International and Comparative Law Quarterly*, Vol. 45 (1996), 463.

4.1 Scientific basis

The science problem of fisheries management is to generate high-quality, consensual assessment of stock dynamics and translate such knowledge to practical regulatory advice. The emergence of the bilateral regime did not lead to dramatic shifts in how fisheries investigations were planned or conducted and how the results were imputed into the process. Rather, bilateralization appears to have supported and stimulated activities that were already underway in the Barents Sea. Even prior to the regime, scientists in each country were called upon to make recommendations on quotas and operational restrictions. Initiated already in the 1950s, non-governmental collaboration between Norwegian and Soviet research institutions grew steadily in scope and intensity. Today, this scientific cooperation, which is nested within the broader cooperation under the International Council for the Exploration of the Sea (ICES), ensures that the Barents Sea stocks are comparatively well covered with respect to scientific investigation. An elaborate reporting system has traditionally formed the backbone of the data input, but as the incentive to under- report catches has gradually grown, fisheries-independent analysis has gained in importance. Cooperative Norwegian-Russian survey programmes are elaborated and implemented each year, ensuring inter-calibration of measurement and data processing for the entire ecosystem.[26] Partly because these scientific organizations have been strong in different areas, this cooperation has probably enhanced their capacity to produce policy-relevant knowledge. The significance of the regime for this growing collaboration is partly to provide a framework that facilitates regularity of interaction between scientists and partly to place scientific investigation close to the center of the decision-making process.

Regarding the Loophole, coastguard vessels from the two coastal states, and at times even from Iceland, maintained a presence in the area throughout the years of large-scale fishing, allowing rough estimates of the amounts taken by foreign vessels. In addition, Iceland published data concerning domestic landings from the Loophole. Icelandic catch statistics have also included the harvest from vessels under Icelandic ownership but which were flying flags-of-convenience, presumably an attempt to accumulate some track level of fishing in the area.

Since 1998, the scientific component of the Barents Sea management regime has established precautionary reference points for the shared stocks, including cod, as called for by the 1995 United Nations Fish Stocks Agreement.[27] Such reference points, corresponding to the state of the stock and of the fishery, are intended to guide fisheries management decisions.

4.2 Conservation and management measures

The bilateral Barents Sea regime has facilitated generation of adequate fisheries regulations in two notable ways. First, the regime provides a clear framework within which the two parties

[26] Since 1997, however, despite efforts of Russian fisheries authorities, Norwegian research vessels have either been denied access to the Russian zone or been severely limited in their operations, a policy widely perceived as originating in naval quarters.

[27] *ICES Cooperative Research Report*, 229, Part 1 (Copenhagen: International Council for the Exploration of the Sea, 1999), 17-39 and 79-84.

can license one another's vessels for *operating in their respective EEZs*. This is relevant both for exclusive and shared stocks. Each year Soviet, and later Russian, vessels have been allowed to take roughly half of its groundfish quotas in the Norwegian EEZ. Although this arrangement means more competition for the Norwegians, especially the coastal fishermen with limited operational range, it is widely recognized as rational because the fish are larger in this part of the ecosystem and thus, it takes fewer individuals to fill the quota. Indeed, this was one of the major goals of the negotiators. When presenting the Mutual Access Agreement to the Norwegian parliament, the government noted regarding Arctic cod that 'optimal exploitation of the stocks requires that a rational division is found between catches of juvenile fish in the northern and eastern Barents Sea and those of fertile and spawning fish in the future Norwegian economic zone'.[28]

Although this was never a part of the official rationale for that specific agreement, the Norwegian Foreign Minister later stated in the Barents Sea context that as a result of increasing activity in the northern areas '...we must be both mentally and practically prepared for new episodes to occur...' and that it was '...important to have developed procedures and methods designed to prevent new episodes from leading to conflicts'.[29] Thus, by specifying very clearly in the Mutual Access agreement conditions and procedures to be followed by both parties, the regime removed a set of potential risks which might otherwise have induced Norway to prevent Soviet vessels from taking parts of their quota in Norwegian waters.

The reciprocal access rules are important also because they facilitate a regular and mutually beneficial *quota exchange*, in which Norway has received primarily cod, shrimp, and scallop in exchange for larger quantities of redfish, blue whiting, and sometimes herring.[30] Given the differences between the two states in terms of fleet structure and reliance on groundfish, such trading of fishing rights has cushioned the transition to the new coastal state regime and enabled a better utilization of both existing capital and the fisheries resources.[31] With the regime in place, this became part of a regulated and reciprocal practice, and the amount of cod the Soviets were allowed to take in Norwegian waters could be tailored to the needs of coastal fishermen, hence reducing potential anxiety in the northern fisheries communities.

In an ideal world, conservation and allocation of fish resources would be addressed sequentially. On the basis of the best available knowledge, parties would decide on the appropriate level and mode of fisheries pressure before they addressed the question of how catches should be allocated among various users. The reality, however, is often that problems of allocation permeate the regulatory process and encourage states to compromise on

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[28] Proposition to the Storting (St.t.prp.) 74, 1976-77, p.1; our translation.

[29] Foreign Minister, Knut Frydenlund, Foreign Policy Statement in the Storting (St.f), 15 November 1978; our translation.

[30] For an assessment of the balance of this exchange, see Olav Schram Stokke and Alf Håkon Hoel, 'Splitting the Gains: Political Economy of the Barents Sea Fisheries', *Cooperation and Conflict*, 26 (1991), 49-65.

[31] Unlike the trawler-based Russian industry, as much as two thirds of the Norwegian cod harvest in the Barents Sea is taken by small and medium-sized vessels with few alternative targets.

conservation needs. The second way in which the regime has facilitated regulation is to soften this particular barrier to effective management. Even prior to the signing of the Framework Agreement in 1975, the parties had reached an understanding on an equal sharing of Arctic cod and haddock for 1976; and these *fixed keys* were confirmed two years later.[32] Unlike more mature sharing arrangements, such as those between Norway and the European Union, based on stable or adjustable zonal attachment, the Barents Sea solution reflected partly historical fishing but predominantly a political need among the participants to agree on the issue. Zonal attachment was problematic to assess since the EEZ delimitation was and continues to be a matter of dispute; and besides, there was inadequate knowledge about the biological distribution of the stock. Only in 1979 was the capelin division set, and the 60/40 solution in favour of Norway was a result of both historical catches and additional scientific input on stock abundance and migration.[33] The fact that the initial division of the shared stocks is not subject to negotiation at Commission meetings means that the quota negotiations are not beset with difficult questions of distribution: the fixed keys provide a safety net or a fallback division if these negotiations should fail. As the parties can be confident about the share they will acquire, this year and in the future, they can concentrate on issues of over-time conservation.

4.3 Compliance control

Overfishing of allotted fishing quotas and disregard of technical conservation measures are pervasive phenomena everywhere, and the Barents Sea is no exception. The issue of encouraging adherence to regulatory measures agreed to within fisheries management regimes can be approached from two angles – one discursive and one coercive. A high degree of involvement of target groups in decision making, with a view to strengthening their responsibility for regulative outcomes, is among the more common *discursive* compliance mechanisms in fisheries management. Another mechanism is to assign a rather prominent role to scientific advice in the regulatory process. Such investigations often involve, or at least are open to, scientists from all member states. We have seen that both stakeholder involvement and mobilization of scienitific authority are prominent features of the Barents Sea regime.

For their part, coercive compliance activities comprise surveillance, detention, and legal prosecution. There is little doubt that domestic enforcement institutions would have existed even in the absence of the international regime: they are set up primarily to meet domestic needs. As shown above, however, an important outcome facilitated by the regime is that the *geographic coverage* of inspections includes the disputed area of the Barents Sea, since the specifics of the Grey Zone Agreement serve to decouple such practices from the competing territorial claims. While for each party, the regime solves only half of the problem of conducting management in disputed waters, as it allows enforcement only for vessels

[32] Sigmund Engesæter, 'Scientific Input to International Fishery Agreements', *International Challenges,* 13 (1993).

[33] Engesæter, 'Scientific Input'.

licensed by itself and gives no access to the enforcement behaviour of the other party, it has been instrumental in meeting part of the enforcement requirements in the disputed area.

The Barents Sea fisheries regime has also served to *draw political attention* toward inadequate implementation and enforcement practices, thus adding embarrassment. In general, by ensuring a regular and publicly available set of standards, both scientific recommendations and administrative rules, by which behavior can be evaluated, the regime serves to increase the general exposure of fisheries management to criticism and political pressure. The regime's bilateral character has rendered it harder for the coastal states to ascribe inadequate management performance to general collective action problems inherent in large-number management systems: while they can still blame the other member, the regime has boosted the accountability of the fisheries authorities in the two states. The embarrassment pathway was clearly relevant in a case involving an increasingly deficient Russian compliance control system following the liberalization of foreign trade. The Soviet compliance system had been based on comparison of catch reports by vessels with delivery reports by processors. From the early 1990s, most of the Russian harvest was delivered in Western ports, especially Norway, which created an enforcement deficit in waters where Russian-licenced vessels could not be inspected by the Norwegian Coast Guard. According to ICES, as much as a quarter of the harvest in 1992 was taken in excess of allocated quotas and went unreported, the lion's share taken by Russian vessels. The Norwegian harvesting sector and fisheries press were highly critical of the way Russian quota commitments were implemented, and Norway raised the issue with reference to the third country quota agreed to in the annual negotiations and the need for adequate control measures.[34] Norwegian concern grew further when Faroese vessels were allowed to buy parts of the already substantially overfished Russian quotas and operate, virtually uncontrolled, in large parts of the Barents Sea. While the initial Russia response was that Russian authorities had no evidence of illegal operations, a few weeks later the Faroese were thrown out of the Russian zone despite the fact that in the meantime they had bought additional quotas from Russian companies. Moreover, a whole menu of Norwegian proposals to enhance the transparency of Russian operations in its own waters were accepted by Moscow, including routinized exchange of information on landings and inspection reports, direct lines of communication between inspection vessels of the two states, and collaboration on the development of a positional tracking system for the entire Barents Sea.

5 Conclusions

Has the Barents Sea fisheries regime been effective in helping its members to meet the internal and external challenges to effective management in the region? (1) The problem of getting a fisheries management system up and running in the *disputed parts* of the Barents Sea without jeopardizing competing claims to sovereignty has been largely solved. The regime itself, particularly the Grey Zone Agreement, has played an important part by blurring

[34] Director General and Norwegian representative in the Joint Commission, Gunnar Kjønnøy in the Norwegian Ministry of Fisheries to *Fiskaren*, 12 August 1992.

the relationship between necessary regulatory and compliance control activities in the disputed area and the substantiation of sovereignty claims. (2) In contrast, the bilateral regime has had only moderate impact on efforts to cope with the *external challenge* to coastal state authority in the high-seas Loophole area. The regime helped to harmonize coastal state measures on the issue, the most powerful of which was regulation of access to national waters and ports. Except with regard to the disputed area, however, both the allocation of quotas to those who would follow the coastal state rules and the blacklisting of vessels that engaged in unregulated Loophole harvesting would have been perfectly feasible even without the Norwegian-Russian Fisheries Commission. As to interplay between regional and global high-seas fisheries law, the Loophole challenge galvanized Norway's and Russia's allegiance with the coastal state bloc in the negotiation of the United Nations Fish Stocks Agreement, whereas Iceland's engagement in this fishery motivated it to move from active participation in the coastal state core group to a more mixed position.

Three other sets of challenges revolve around proper use of the resource over time. As to (3) *scientific* investigations, some level of cooperation would have been realized anyway through ICES, but there is little doubt that the regime has enhanced the generation of scientific knowledge about stock dynamics in the Barents Sea as well as the imputation of such knowledge into the management process. (4) As to conversion of such knowledge to adequate *regulation* of harvesting, the bilateral regime has promoted more rational employment of fishing effort by reducing fears that reciprocal fishing may lead to political incidents or undermine coastal state authority. Arrangements for mutual access in national zones has also facilitated an advantageous quota exchange among the coastal states. The bilateral regime has moreover developed ways to depoliticize conflictual allocative issues, as shown especially by the fixed keys on the initial quota division of shared stocks. Concerning (5) *compliance control*, the regime has been partly successful. It has improved, as noted, the geographic coverage of such activities by ensuring that licencing and inspection in the disputed part of the Barents Sea can occur in a way which touches only lightly on the sovereignty issue. Moreover, the regularity of Commission meetings, involving largely the same key people from one year to another, has made it more embarrassing for compliance control laggards, such as Russia in the early 1990s, to continue lenient enforcement of commitments taken on under the regime.