Regionalization of International Whale Management: The Case of the North Atlantic Marine Mammals Commission ALF HÅKON HOEL¹

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ABSTRACT. This article reviews the evolution of the North Atlantic Marine Mammals Commission (NAMMCO) and considers its relations with the International Whaling Commission (IWC) and other international institutions concerned with marine resource management. Starting out in 1988 with a conference to address their common concerns, the four parties of the Faroe Islands, Greenland, Iceland and Norway in 1990 set up a North Atlantic Committee for Coordination of Marine Mammals Research (NAC), thereby institutionalizing the information function crucial to management. The regulation function was attended to when NAMMCO was established with a scientific committee and a council in 1992. With a management committee and the scientific committee being operative in 1993, the regime appears to have been steadily evolving towards a prominent role in North Atlantic marine mammals management. The preservationist inclination of most IWC members is identified as a major driving force, but also important are the development of a multispecies perspective in fisheries science and the coastal states' fear of creeping jurisdiction on the part of an international organization. Problems of compatibility with the IWC are found to be minor at this stage, while NAMMCO rests firmly on the legal bases provided by the 1982 Law of the Sea Convention and the Agenda 21 adopted by UNCED in 1992. The real threats to marine mammals are impacts from pollution, seismic survey shooting, and nuclear test explosions, rather than harvest. A relevant future policy area for the IWC is therefore the task of informing its member governments of the effects of environmental degradation on whales, while the management issues could be shifted to appropriate regional organizations that can manage whales on a sustainable basis in relation to their role in the ecosystem.

Key words: resource management, whales, regionalization, NAMMCO, IWC

RÉSUMÉ. Cet article passe en revue l'évolution de la North Atlantic Marine Mammals Commission (commission sur les mammifères marins de l'Atlantique Nord [NAMMCO]) et considère ses rapports avec la Commission baleinière internationale (CBI) et d'autres organismes internationaux concernés par la gestion des ressources marines. Suite à une conférence en 1988 pour traiter de leurs préoccupations communes, les quatre parties - îles Féroé, Groenland, Islande et Norvège - formèrent en 1990 le North Atlantic Committee for Coordination of Marine Mammals Research (comité nord-atlantique pour la coordination de la recherche sur les mammifères marins [NAC]), institutionalisant de ce fait la fonction d'information qui est indispensable à la gestion. La fonction de réglementation fut couverte quand la NAMMCO fut dotée d'un comité scientifique et d'un conseil en 1992. Avec la mise en marche d'un comité de gestion et du comité scientifique en 1993, la commission semble accroître son rôle de premier plan dans la gestion des mammifères marins de l'Atlantique Nord. On a identifié la tendance préservatrice de la plupart des membres de la CBI comme étant le principal moteur, mais on reconnaît aussi l'importance du développement d'une perspective polyvalente dans la science des pêcheries ainsi que la crainte des États côtiers de se voir imposer de plus en plus de règlements de la part des organismes internationaux. On a trouvé que les problèmes de compatibilité avec la CBI étaient mineurs à ce stade, alors que la NAMMCO repose sur les bases légales solides fournies par la Convention des Nations Unies sur le droit de la mer de 1982, et sur l'«Agenda 21» adopté par le Sommet de la Terre en 1992. Les véritables menaces pour les mammifères marins sont les retombées de la pollution, les tirs de prospection sismique et les essais d'explosions nucléaires, plutôt que les prises. Il serait donc plus pertinent à l'avenir que la CBI se concentre sur la tâche politique d'informer ses pays membres des effets de la dégradation de l'environnement sur les baleines, et qu'elle laisse les questions de gestion aux organismes régionaux appropriés, capables de gérer les baleines sur une base durable par rapport à leur place dans l'écosystème.

Mots clés: gestion des ressources, baleines, régionalisation, NAMMCO, CBI

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INTRODUCTION

The 1946 International Convention for the Regulation of Whaling (ICRW), with the International Whaling Commission (IWC) as its operative body, was established "to provide for the proper conservation of whale stocks and thus make possible the orderly development of the whaling industry" (Preamble, ICRW). While failing to achieve this goal during the first decades of its existence (Tønnesen, 1982), this regime was more successful from the late 1960s onwards, at least when compared to other international fisheries regimes (Gulland, 1988). The development of the IWC into a preservationist, rather than a conservationist, institution since the late 1970s (Hoel, 1985; D'Amato and Chopra, 1991) has, however, fractionalized the regime. As a consequence of this development within the IWC, new approaches in marine science, and eagerness on the part of coastal states to protect their rights to extended fisheries jurisdiction, the international management of whales and whaling appears to be in the process of being shifted from a global to a regional level.

One emerging regional whaling regime is the North Atlantic Marine Mammals Commission (NAMMCO), which was established in April 1992 to supersede the North Atlantic Committee on Cooperation in Research on Marine Mammals (NAC), established in 1990. This article reviews the evolution of NAMMCO and considers its relation to the IWC, other international institutions concerned with resource management, and the law of the sea in general.

REGIMES FOR INTERNATIONAL LIVING MARINE RESOURCES

In the case of living marine resources, failure to coordinate use may lead to wasteful competition and overexploitation of the resource in question (Gordon, 1954). Natural resource regimes are institutional responses to such problems of coordination (Young, 1989). Two important aspects of such regimes are their *functions*, what they do in order to realize their goals, and their *scope*, their extension with regard to geographical area, membership, and resources. Regimes for living marine resources have basically three management functions: *Information* gathering provides the data required for assessing the state of the resources, which in turn is the basis for deciding the type and number of *regulations* to be established. Usual types of regulations are restrictions on the quantity

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of the resource that may be taken, seasonal and temporal regulations, and gear restrictions. The *enforcement* function is aimed at controlling and ensuring that regulations are complied with. Due to the sensitivity of sovereignty issues, the implementation of regulations and enforcement is normally left to a regime's member states.

The geographical scope of resource regimes varies from a limited area, such as the Barents Sea, to a global reach, as in the case of the 1992 Convention to preserve biodiversity. In most cases, except for the global regimes, boundaries are set more on the basis of political realities than in regard to the ecological problems to be handled (Morgan, 1991; Hoel, 1991). Membership may range from two, as in the Barents Sea regime, to regimes comprising over 100 member states. Most living marine resource regimes are unidimensional in terms of resources covered. The Northeast Atlantic Fisheries Commission (NEAFC), for example, is concerned only with fisheries. Moreover, when comprising more than one species, current fisheries regimes are not directed at management on an ecosystemic basis, which would take into account the fact that use of living marine resources has ecosystemic repercussions. Major changes in the approaches of fisheries science involving "multispecies management" (Flaaten, 1988) have only to a very limited extent been reflected in operative regimes internationally.

Regionalism is generally increasing in marine resource management (Hoel, 1991). Following the nationalization phase after the establishment of the 200-mile economic zones from the late 1970s onwards, there has been a growing awareness that regional cooperation must also be strengthened, not least because many management problems by their very nature require cooperation between two or more states. Living marine resources migrate among various national zones and between these and international waters, and this necessitates coordination of management. This presupposes, however, a basic mutual recognition among the parties to the regime that the species/stock in question constitutes a resource and that management is needed.

International regimes for living marine resources are not a new invention; the first ones date back to the 19th century. For fisheries, a large number of regional organizations exist (Koers, 1973). For whales, the 1931 International Whaling Convention had a global scope, with eight member states in 1935. This treaty and subsequent protocols to it are the basis for the 1946 Whaling Convention. Arguing from scientific premises, it is, however, difficult to arrive at the conclusion that global regime whaling is needed. Cetaceans do not roam randomly around in the world's oceans but appear to follow migratory patterns confined to certain large marine regions. Several regional arrangements have emerged. Whales were incorporated in the 1952 Permanent Commission for the South Pacific, although the regulatory powers were weak (Hollick, 1954). The 1979 Bonn Convention for the protection of migratory species also envisaged regional regimes for the protection of cetaceans, as do the Inuit Circumpolar Conference 1992 initiative calling for an Inuit whaling commission and the IWC.

The IWC was probably conceived of by its drafters as a regional regime. The management problem at the time of the drafting of the 1946 Convention was regulating Antarctic whaling. The sensitivity of sovereignty issues in that area, however, induced the negotiators to omit references to specific geographical areas, stating vaguely that the Convention applies to "all waters in which whaling is prosecuted" (Article I). The Convention is open to any interested nation; there is no restriction on entry, which is extremely easy given the rather wide-ranging decision-making powers vested in the organization. The Convention does not define resource scope, but the intention of the drafters was obviously that the great whales then subject to exploitation should be included; 16 species are listed in an annex to the Convention. As to decision making, a three-quarters majority is required to adopt regulations (Article III, 2). As in most international fisheries agreements, there is also a provision for reservations for members who disagree with decisions taken (Article V, 3). The objecting member is then not bound by the decision in question. The 1946 Convention obliges the parties with regard to three management functions: 1) It places a duty upon the member states to submit various catch-related data to the Commission (Article VII). 2) It prescribes a wide range of regulatory measures, contained in a flexible Schedule (Article V,1) that may be changed from year to year. 3) There are also provisions for inspection (Schedule, paragraph 21), and since 1972 the Schedule includes an observer scheme for supervision of whaling operations. Both regulation and enforcement rely on the adoption of national measures.

The development of international whale management after the Second World War occurred in three phases (Hoel, 1985). First, an overexploitative phase lasted until the latter half of the 1960s, mainly in the Antarctic. A second, conservationist phase, where most members viewed whales as a natural resource to be managed and utilized, lasted till the late 1970s. From the late 1970s, however, preservationist interests have increasingly dominated the Commission. Preservationists stand in opposition to conservationists in that they do not regard whales as a resource that may be exploited and managed as other living resources, but say rather that they should be accorded a special status similar to that of human beings (D'Amato and Chopra, 1991). The premise that whales in general are especially intelligent is, however, questionable (Klinowska, 1988).

A moratorium on commercial whaling was adopted in 1982 in the form of zero quotas to be in force from 1985/86 until 1990. Implicit in the moratorium decision was the idea that a revised management procedure should be worked out to protect whale stocks from overexploitation. It became increasingly clear in the years following the moratorium decision that the real intention of a majority in the Commission was not to allow a resumption of commercial whaling (Hoel, 1990). This was not so much due to any genuine concern for whale stocks, as the work of the Scientific Committee to an increasing extent has demonstrated that many whale stocks can sustain exploitation. Rather, for a number of governments, the whaling issue is a tradeable asset, where a preservationist position in the IWC is an absolution for sins committed in other environmental policy areas. Some hypothesize that this development in the IWC is a reflection of a change in the world community's conception of whales (e.g., D'Amato and Chopra, 1991), but it is difficult to see such an argument carrying much weight as long as the very same nations that are eager to "protect" whales in the IWC are most instrumental in committing the real threat to all marine life: pollution.

The very basis for a global regime for managing whaling thus appears to have eroded away: the negotiation of the ICRW would have been impossible today, as there is no consensus on problem definition. The emergence of a new role for actors to play in the IWC — that of "preserver" as opposed to "conserver" — has seriously upset the relationship between the traditional roles of users and managers. As noted above, the foundation for any regime is a joint interest among actors to coordinate actions in a given issue area. In the case of the IWC, the basis for this is weak, since some parties do not, in practice, respect the 1946 Convention as an agreement on the management of natural resources. The whaling nations and preservationist groups have no common ground, and this begs the question of alternative or supplementary fora for management of whales and whaling.

THE EVOLVING NORTH ATLANTIC REGIME

The developments in the IWC during the first half of the 1980s laid the basis for informal discussions among Icelandic and Norwegian delegation members to the IWC in 1986. The IWC was seen as problematical not only on a practical level (no quotas), but perhaps more so at a principled level: who was to decide on a coastal state's utilization of the resources in its exclusive economic zone? It was felt that there was not sufficient cooperation among the conservationist nations and that cooperation on a more sustained basis was required, for example, to coordinate research efforts. These informal discussions continued at the 1987 annual meeting of the IWC, where Greenland was also drawn into the deliberations.

In 1988 Iceland took the initiative to the First International Conference on Management and Rational Utilization of Marine Mammals, held in Reykjavik 21-22 January. Japan participated, along with the North Atlantic nations of Canada, the Faroe Islands, Iceland, Norway, and the former U.S.S.R. Greenland attended the conference with observer status. The conference was convened for the whaling nations to take a more active approach to informing the international public of the need for comprehensive management of marine living resources. The agenda had three items: present management of marine mammals and other options for this, scientific research, and public information. Under the first item global and regional approaches to marine mammal management were considered, and the possibility of developing supplementary fora for cooperation in this field was discussed. Under the second item the participants' marine mammal research programs were presented, and the role of organizations such as the International Council for the Exploration of the Sea (ICES) was explored.

The second International Conference on Management and Rational Utilization of Marine Mammals was held in Thorshavn in the Faroe Islands 18-19 April 1989, with the same nations participating and observing as in the previous year. This conference focused on multispecies management of living marine resources, including the state of knowledge on multispecies management, the role of marine mammals in the ecosystem, and management issues. The latter issue was the major one, with Iceland arguing for the establishment of a regional mechanism for cooperation on management of marine mammals. This proposal was supported by the Faroe Islands, which argued for multispecies management of marine mammals and fish in regional organizations organized along the lines of the North Atlantic Salmon Commission (NASCO), involving an umbrella council for the North Atlantic with several regional management committees. Others envisaged a less ambitious scheme, with emphasis on collection and dissemination of information, rather than management functions. Norway offered to establish an office at the University of Tromsø to that end. Iceland also presented a draft final act suggesting a mechanism for cooperation on marine mammal research in the North

Atlantic. There was universal agreement that this mechanism was not intended to replace any existing organization, but rather supplement it.

The 1990 conference was hosted by Norway in Tromsø. Greenland had changed its status to full participant, not least because it had been pressed by animal welfare groups over its earlier association with the conference. Rather than scaring Greenland away from its earlier association with the conference, this pressure made Greenland associate itself closer with the other Nordic nations. The Nordic Council of Ministers attended the conference as observer, while the U.S.S.R. did not participate because of administrative complications. The Nordic nations were all represented at a political level, adding emphasis to the conference. The major event at this meeting was the signing of a memorandum of understanding (MOU) establishing the North Atlantic Committee for Cooperation on Research on Marine Mammals (NAC). The preamble of the MOU identifies the need for conservation and management of marine mammals in the North Atlantic and the need to do this by a multispecies approach. It further recognizes the special needs of aboriginal communities and the need to consider the relevant components of the law of the sea. Based on these points, the function of NAC is to enhance cooperation in research on marine mammals and their role in the ecosystem. The MOU also stated that the parties shall work further towards the development of mechanisms to ensure the conservation and joint management of shared stocks.

In addition to the establishment of NAC, with one representative from each country, a secretariat was set up at the University of Tromsø and steps were taken to establish a "working relationship" with the ICES. The MOU was to be open for signature in Oslo by other governments. Karsten Klepsvik, of the Norwegian Ministry of Fisheries, was elected the first chairman. As to the relationship to the ICES, the meeting pointed out areas of joint interest to ICES and NAC: the role of marine mammals in the ecosystem and the management of marine mammals in a multispecies context. National research programs to this end needed coordination, and the ICES was seen as the appropriate body for this, due to its central role as purveyor of scientific advice in North Atlantic fisheries management and the fact that the NAC nations are major contributors and actors within the ICES system.

An informal meeting of NAC was held on 4 July 1990 at the annual meeting of the IWC in Nordwijk, Netherlands. The four signatory states, plus Canada, Japan, and the U.S.S.R. in the capacity of observers, participated. The major issue was the relationship with ICES. The general secretary of ICES had responded to NAC that ICES was the appropriate institution to coordinate research and, at some later stage, provide scientific advice for conserving and managing marine mammals in an ecological context in the North Atlantic. The question of small cetaceans was also discussed and a future role for NAC was envisaged here. The parties agreed that this was no issue for the IWC to engage in, since this could be seen as creeping jurisdiction on the part of an international organization.

Due to the establishment of NAC in 1990, two meetings were held consecutively in Reykjavik 16-17 April 1991: the second NAC meeting and the Fourth Conference on Management and Rational Utilization of Marine Mammals. At the NAC meeting the four signatories to the MOU participated, with Alaska, Canada, the U.S.S.R., and Japan as observers. At the fourth conference, Alaska and Canada held observer status, while the others were full participants. The conference's agenda addressed five issues. First, the completion of the revised management procedure in the IWC was discussed. All parties wanted to see it operative as soon as possible, but none saw the IWC politically able to adopt a procedure allowing for catch quotas at that stage. Second, in connection with the 1992 United Nations Conference on Environment and Development (UNCED), the issue of marine mammals had been raised. The participants were rather wary of this, bearing in mind the 1972 United Nations Conference on the Human Environment, which first called for a moratorium on commercial whaling. Third, the issue of small cetaceans was becoming a major item on the IWC's agenda, and again there was wide agreement that the IWC was not the right forum for handling this. Instead, regional approaches were to be favoured. Fourth, as a consequence of this, the participants discussed NAC as a possible regulatory body for sealing and whaling in the North Atlantic. Several participants emphasized that this was not an alternative body to the IWC as far as large cetaceans were concerned. It was agreed that an ecosystem approach was to be favoured for the North Atlantic regime. The U.S.S.R. argued for a revision of the 1946 Convention on the basis of the 1982 Law of the Sea Convention.

The meeting included an elaborate discussion of a regional management scheme, and in particular a mechanism for conservation and management of shared stocks. Greenland presented a paper on marine mammals of joint interest, comprising 17 whale species and several seal species, and argued for expanding NAC's functions to also include management of shared stocks of seals and small cetaceans. A regional council with several subregional management committees was envisaged. To varying degrees, the parties were favourably inclined to this initiative, but a more elaborate proposal was asked for. The question of what a "working relationship" with ICES should mean had now become urgent. The council of ICES had been somewhat reluctant to take upon it the tasks requested by NAC, and the participants were somewhat surprised at this, as there was no precedent in the organization for declining such requests, not even in politically sensitive situations. The resistance in the ICES council to engage in these matters was voiced primarily by the United Kingdom and the Netherlands. ICES had, however, established a study group for pilot whales, one of the species potentially under the purview of a North Atlantic marine mammals regime. As for more administrative matters, it was decided that NAC should be represented at meetings in relevant international organizations, and E. Lemche (Greenland) was elected chairman. Canada gave notice that it would not sign the MOU at this stage, while the U.S.S.R. stated that it would take some time to consider a signature. In the case of Canada, fear of becoming too closely associated with commercial whaling nations probably is decisive here, while the Soviet reluctance had more to do with a generally confused state of affairs in the country's marine resource management system.

THE ESTABLISHMENT OF A NORTH ATLANTIC MARINE MAMMALS COMMISSION

On 28-29 January 1992 the parties met in Copenhagen for the third NAC meeting to work out a draft agreement on a marine mammals organization to also include management functions, based on the 1991 proposal from Greenland. As noted, the 1990 MOU obliged the parties to take such a step. In addition to the four parties, Japan and the Nordic Council of Ministers participated in observer capacity. The parties were now eager to boost the functional competence of NAC. The developments at the 1991 IWC meeting in Reykjavik, where the majority refused to follow the recommendation of the Scientific Committee on a revised management procedure and instead filibustered its eventual adoption, had particularly instigated Norway. Denmark had also voiced serious objections to the way the IWC operated at this meeting. Iceland had given notice of its withdrawal from the IWC effective 30 June 1992 and was now eager to see a supplementary agreement in place. The deliberations over the form and content of a new and more ambitious text included discussions of legal form, stocks to be covered, relevant parties, organizational structure, decision making, and relations to other management bodies. Basically it was decided to set up a North Atlantic Marine Mammals Commission (NAMMCO), with a council as its supreme body. A scientific committee was also to be established, along with subregional management committees.

The fourth meeting of NAC and the fifth International Conference on Management and Rational Utilization of Marine Mammals were held in Nuuk, Greenland, on 7-9 April 1992. The meeting was a high-level one, with the four parties' ministers of fisheries attending. In addition, Canada and Japan were present in observer capacity. The most important event at the meeting was the ministers' signing the NAMMCO agreement drafted in Copenhagen. Since the Copenhagen meeting, some adjustments in the draft had been undertaken, as explicit provisions had been made for the date on which the agreement would enter into force as well as relations to other international organizations. The agreement was signed by the four signatory nations on 9 April 1992 and entered into force on 9 July. Other issues discussed at the meeting related particularly to research. ICES now had two groups doing work relevant for NAC: a working group on harp and hooded seals and a study group on pilot whales, the latter set up on request by NAC. The study group is regarded as a pilot project to see if ICES is able to give advice on marine mammals management. Greenland raised the issue of whether ICES should be asked to provide consideration of bioaccumulation of radionucleides and toxic waste in marine mammals, which the other parties agreed to. National scientific progress reports on marine mammals research were presented by Denmark (covering the Faroe Islands and Greenland), Iceland, and Norway. Furthermore, it was decided that NAC/NAMMCO should be represented at the meeting of other international marine resource management bodies, and observers to ICES, IWC, and NEAFC were appointed.

The fifth conference was attended by the Faroe Islands, Greenland, Iceland, Japan, and Norway, while Canada held observer status. The conference's agenda spanned a wider range of issues than before, including attitudes in Western industrial nations to marine mammal exploitation, the effects of pollution on marine mammals, research on killing methods of marine mammals, utilization of various seal products, approaches to information dissemination, and developments at Prepcom IV before the United Nations Conference on Environment and Development (UNCED) in June 1992.

The fifth and last NAC meeting was held in Glasgow, Scotland, on 30 June to 1 July 1992, at the same time as the forty-fourth annual meeting of the IWC. A major point on the agenda was transitional arrangements for the period up to the inaugural meeting of NAMMCO, to be held in the Faroe Islands

in September 1992. The existing arrangements for secretary and chairman were to be postponed until then. The secretary of ICES had welcomed the establishment of NAMCCO, granted it observer status in ICES, and asked for further information on the relationship between the two bodies. It was agreed that NAMMCO would not ask the ICES to formulate scientific advice. Rather, the role of the ICES would be to conduct the basic scientific research. The provision of scientific advice would be undertaken by the NAMMCO scientific committee, on the basis of ICES assessments at working group level. Questions related to the ongoing IWC meeting were also considered. The IWC meeting was highly conflictual, not least due to Iceland's withdrawal from the organization and Norway's announcement that it would resume commercial whaling in 1993. The Norwegian decision was prompted not least by its feeling that a number of the IWC members over several years had not been negotiating in good faith to reach a conclusion on the issue of management procedures. Moreover, the IWC Scientific Committee had in 1991 recommended a revised management procedure and had at its 1992 meeting given a unanimous assessment of the Northeast Atlantic minke whale stock of 86 700 animals. Discussions on the revised management procedure, on which fruitful work had been done at a special meeting of the Scientific Committee in Copenhagen in March, did, however, not produce much substance at the forty-fourth meeting. A majority in the Commission passed a resolution on a revised procedure (IWC, 1993:44/22) that added some new elements to it, such as the development of data standards and survey techniques. This served to postpone the eventual adoption of a revised management procedure, thereby lending support to a hypothesis that the majority in the IWC did not want to see such a procedure passed in a form that allows whaling. Another major concern at the NAC meeting was the apparently growing ambition of a large number of IWC members to expand the organization's competence over small cetaceans. A separate resolution was passed on the pilot whale hunt in the Faroe Islands (IWC, 1993:44/29), a matter over which the NAC parties considered the IWC to have no competence.

The setting before the inaugural meeting of NAMMCO, held in Thorshavn 10-11 September 1992, was thus one of a rather tense relationship to the IWC. Much international attention was directed at NAMMCO, as witnessed by the presence of several representatives of international media at the meeting. Attending the meeting were the delegations from Norway, Iceland, the Faroe Islands, and Greenland, the governments of Canada, Japan, and Russia in the capacity of observers, the Nordic Council of Ministers, representatives of a number of nongovernmental organizations, and an observer from the IWC. Kjartan Høydal, of the Faroe Islands, was elected chairman for a two-year period. The meeting had three substantive agenda items: administrative and financial affairs, the question of scientific advice, and external relations. On the administrative side, a budget in the order of US\$330 000 was agreed to for 1993, and it was decided to establish a secretariat in Tromsø, Norway, with a staff of 2-3 persons for the first years. This would basically constitute an expansion of the NAC secretariat, which had been run from Tromsø on a part-time basis.

Much time was devoted to the organization of a scientific committee. A working group, convened by Johán Sigurjónsson, of the Marine Research Institute in Iceland, was appointed to produce a preliminary report as a basis for further discussions. It was decided that each contracting party was to have 3 members on the scientific committee, for a total of 12 members, selected so as to provide coverage of relevant scientific aspects. The principal task of the committee is to provide scientific advice to the council, based on the best scientific findings available. As its first tasks, the committee was asked to review a previously assembled list of marine mammal stocks in the North Atlantic and update profiles for each species and stock, to develop the assessments necessary to provide the scientific foundation for conservation of the stocks relevant for management under NAMMCO, and to review its data needs.

As to NAMMCO's external relations, cooperation with ICES was again addressed and it was decided that requests should be directed to the working group level in ICES. NAMMCO presently has six requests pending in the ICES system. These include an overview of the state of knowledge of interrelationships among marine mammals and fish and shrimp stocks, a consideration of whether multispecies management models can be established for the North Atlantic ecosystems, and an assessment of the status of pilot whales in the North Atlantic. For two international organizations, ICES and IWC, NAMMCO had already established reciprocal observer status. It was agreed to establish the same system with organizations such as the North Atlantic Fisheries Organization (NAFO), the Northeast Atlantic Fisheries Commission (NEAFC), the Convention on International Trade in Endangered Species (CITES), and the United Nations Food and Agriculture Organization (FAO). The question of information strategies was discussed and the Faroe Islands presented the idea of setting up an information fund to provide long-term work in this area.

On 19-20 January 1993 NAMMCO met in Tromsø for its second meeting. Participating were delegations from the four parties (32 persons) and observers from four countries (Canada, Denmark, Japan, Russia), three intergovernmental organizations and six non-governmental organizations. The major agenda items were budgetary and administrative matters, the scientific work of NAMMCO, and the establishment of management committees. As to administration and finance, the Norwegian Ministry of Finance had refused to allow NAMMCO tax exemption. The budgetary shortfall thereby created was compensated for by an additional contribution from Norway. Three positions were to be filled in the secretariat. The scientific committee was formally established, with Johán Sigurjónsson as chairman. The parties commented upon the committee's draft rules of procedure and noted that the 12-member committee was now operative, with a management procedures subcommittee also established. It was also agreed, as a preliminary institutional move, to establish a general management committee, which held its first meeting during the proceedings in Tromsø. The role of the management committees is to define needs for scientific assessments, which the council forwards to the scientific committee, and to formulate actual management measures on the basis of council decisions. Requests for assessments and management advice presented at the meeting included impacts of marine mammals on the ecosystem, pilot whales, northern bottlenose whales, harp and hooded seals, killer whales, and Atlantic walruses. In addition to these items, hunting methods and environmental issues (oil and radioactive pollution) were addressed.

NAMMCO'S LEGAL BASIS AND ORGANIZATIONAL STRUCTURE

A basic question in regime analysis is why regimes arise (Krasner, 1983). The foregoing discussion suggests at least five different motive forces for the establishment of NAMMCO. First of all, the evolution of the IWC towards preservationism induced the whaling nations to consider setting up a more management-oriented organization. Second, fisheries science has developed towards multispecies fisheries management, as it has become clear that it is necessary to view the management of marine mammals and fish in a multispecies context (Flaaten, 1988). The NAMMCO parties, all being heavily dependent upon fisheries, have to an increasing extent emphasized this aspect of their organization. Third, the IWC is not considered a useful mechanism for managing small cetaceans, while the management need for these species is increasing. This is related to a fourth concern, that of creeping jurisdiction on the part of an international organization. As a matter of principle it is seen as an abrogation of coastal states' rights when an international organization attempts to expand its sphere of influence, as witnessed in the IWC in the case of small cetaceans. A final driving force is a generally recognized need for dissemination of information on various aspects of marine mammals affairs. While the first, no doubt, instigated NAC, the latter four motive forces have become more important over time.

NAMMCO is legally institutionalized as an "agreement," rather than an MOU. This was done in order to ensure that NAMMCO would qualify under the Law of the Sea Convention's Article 65 as one of several "appropriate international organizations" for the conservation, management, and study of marine mammals. The agreement is between the ministries of fisheries rather than the governments, due to the subordinate constitutional position of the Faroe Islands and Greenland relative to Denmark. The agreement is in the form of a general framework, and information, regulative, and control functions remain to be more clearly defined. As to the information function, the draft rules of procedure of the scientific committee provide a framework for this, defining terms of reference, membership, organization, and data availability. The regulative function (quotas, etc.) will be left for the management committees to provide for, while the control function is most likely to remain in the hands of the member nations, at least for the foreseeable future.

The preamble of the NAMMCO 1992 agreement refers to the 1990 MOU objectives, the parties' common concern for the rational management and optimum utilization of living marine resources as reflected in the 1982 Law of the Sea Convention, and their desire to engage in research on marine mammals in a multispecies context. The objective of NAMMCO shall be to "contribute through regional consultation and cooperation to the conservation, rational management and study of marine mammals" (Article 2). The basis for NAMMCO's management policies will thus be the relevant provisions of the United Nations Law of the Sea Convention (discussed below) and regional cooperation in this respect. The NAMMCO parties cooperate regularly in fisheries matters at the Nordic ministerial level as well, where marine mammals management is a central issue (Nordic Council of Ministers, 1992).

The geographical scope of the organization is delimited vaguely to "the North Atlantic" (Article 2). The regime's geographical scope was at an early stage conceived of as global, but here the ambitions have been considerably lowered as it has been realized that there is no scientific basis for establishing a global alternative to the IWC. Instead, what is needed for management purposes are regional bodies. At the Copenhagen meeting in January 1992 it was agreed that the species scope in principle include all marine mammals in the North Atlantic, except polar bears, which are covered by a separate regional arrangement (1973 Agreement on Polar Bears). Thus stocks occurring within the waters of one of the parties are of "joint interest" to the organization. It will, however, be up to the council to decide which stocks require management action. In terms of species covered, the issue is not settled yet. The list of 17 species forwarded by Greenland has not received final treatment but will probably do so in 1993. Small cetaceans and seals are the areas of active involvement in the near future.

The participating group has been fairly stable, increasing to eight parties at the 1991 conference. The core is, however, the four Nordic members that are signatories to the NAMMCO agreement. Some of the actors in NAMMCO (and the conference) are somewhat special in that the Faroe Islands and Greenland are not sovereign states. Control over foreign policy is left to Denmark. In fisheries matters these members do, however, have some freedom of action also in the foreign policy area, which has been actively exploited. Additional parties to NAMMCO can be admitted provided they demonstrate genuine interest in conservation and utilization of joint stocks. It is by no means unusual to set such entry requirements in international organizations: in the Antarctic Treaty System, for example, participation at a consultative level is delimited to those parties actively engaged in research. In NAMMCO the agreement may be entered into by other parties subject to the consent of the existing signatories (Article 10.2). Open channels to other interested (i.e., conservationist) nations are also maintained by retaining the conference institution, which has no regional connotations.

The commission that is established (Article 3) consists of the council, regional management committees, the scientific committee, and the secretariat, and withdrawal can be effectuated with 6 months' notice. Each party has one council member, and the council's function is to "provide a forum for the study, analysis and exchange of information" concerning marine mammals (Article 4.2a). The council shall also establish guidelines for and coordinate the management committees, the functions of which are to propose regulatory measures to the members and make recommendations to the council concerning scientific research (Article 5.1a,b). The management functions thus appear to be split between two bodies. The council has the final say in these matters, however. This NASCO-type structure, where the actual management decisions are taken by ecosystembased subunits (the management committees), claims wide support, not only among NAMMCO signatories. At the Nordic level, all Nordic countries, Sweden and Finland included, have supported this as the general principle in setting the jurisdictional levels for living marine resource regimes (NEFDOK, 1991). The council is also responsible for setting up working arrangements with ICES and "other appropriate organizations" (Article 4.2d) and establishing cooperation with states not parties to the NAMMCO agreement. Apparent "other appropriate organizations" are the IWC, the various multi- and bilateral North Atlantic fisheries commissions, and the Greenland-Canada committee on narwhal and beluga. The most relevant additional member states are Canada, which has joint seal and whale stocks with Greenland, and Russia, which shares joint marine mammal

stocks with Norway. Decision making in the council is by unanimous vote of the members present (Article 4.3). The same applies to its management committees (Article 5.2). It was agreed not to establish an objection procedure, which was seen as unneccessary given the requirement for unanimous decisions. Council meetings are open to observers when the council agrees to admission (Article 8). It has been agreed that the council is to have an open policy towards media and observers.

The scientific committee is to consist of experts appointed by the members, and other experts may be invited by the committee to attend its meetings. The "invited participant" institution is seen as particularly valuable, as it serves to secure the quality of scientific work and enhance its legitimacy. The scientific committee shall provide scientific advice in response to requests from the council, utilizing to the extent possible existing information (Article 6.1-3). The committee is thus to draw on work done in national research institutions, in the IWC Scientific Committee, as well as in ICES. The committee may also initiate research by bringing to the council's attention tasks to be considered for future work. The council secretariat (Article 7) is to perform the functions the council may determine. Tasks currently under consideration for the secretariat include secretarial work, information dissemination, data management, and coordination of scientific work.

RELATION TO IWC, OTHER REGIMES, AND INTERNATIONAL LAW

The NAMMCO treaty is entered into "without prejudice to obligations of the Parties under other international agreements" (Article 9). As no large whales are to be managed by NAMMCO in the immediate future, no major compatibility problem exists relative to the IWC for the time being. As to smaller cetaceans, it is also difficult to see compatibility problems, as the IWC does not have the competence to regulate their use, and NAMMCO already has taken definite steps in that direction, based on ICES work. The Faroe Islands and Greenland would be the NAMMCO parties affected by eventual problems here. The Faroe Islands has, however, recently stated its intention to leave the IWC because of the organization's aspirations regarding small cetaceans. In that case it would, of course, not be bound by IWC rules, but it remains to be seen whether the Faroe Islands actually leaves the IWC. Moreover, as far as seals are concerned, only uni- or bilateral arrangements are currently in place, and NAMMCO would serve to improve the management of these in that an international management framework with highly qualified scientists will provide the basis for management.

A more difficult situation could arise, however, should NAMMCO at some stage decide to manage larger cetaceans, such as the North Atlantic minke whales. Then IWC parties also party to NAMMCO would have an obligation to adhere to IWC rules. Iceland has no such obligations, however, as it is not a party to the ICRW anymore. The same applies to Norway, which has reserved its position under ICRW Article V(3) on the 1982 IWC moratorium on commercial whaling as well as the 1985 protection of Northeast Atlantic minke whales and is not bound by these decisions. Greenland's hunt of large whale species is carried out according to IWC rules set under special provisions for aboriginal whaling.

As to the relationship between NAMMCO and other regional management bodies, there are a number of relevant institutions in the North Atlantic. The ICES will, as mentioned, be crucial in assembling and analyzing basic data, not least given the

multispecies management perspective built into NAMMCO. As the NAMMCO nations are major contributors to research carried out under ICES auspices as well as major users of this knowledge, it has been noted with concern that several ICES council members have had their hands tied by their governments on this issue. The ability of ICES to engage scientifically in multispecies management appears to be hampered. ICES provides advice on the management of most fish stocks in the North Atlantic area and is thereby in a position to apply a multispecies perspective to actual fisheries management. To date, there are only a few examples of the actual implementation of such models, however. In a multispecies perspective, multilateral fisheries management organizations such as NAFO and NEAFC are likely to be affected by NAMMCO's management policies, as will be the bilateral arrangements in the area, e.g., the Joint Norwegian-Russian Fisheries Commission. In the latter case, harp and hooded seal stocks may be subjected to NAMMCO management measures.

Another problem of incompatibility may arise should the draft Agreement on Conservation of Small Cetaceans under the 1979 Bonn Convention enter into force. The Bonn Convention essentially envisages a protected status for all cetaceans in the North Sea, which implies no catch. The draft framework for cooperation for the North Sea also prohibits killing of cetaceans for research purposes. Several stocks of marine mammals are "transboundary" here, in the sense that they migrate between the North Sea and the northern Atlantic. But there is also a potential for cooperation in research, not least with regard to the environmental threats marine mammals are especially exposed to in this region due to the release of pollutants into the sea in lower latitudes. NAMMCO would also have to clarify its relations to the Inuit Circumpolar Conference, which during the summer of 1992 adopted a resolution establishing an Inuit whaling commission. In this case, though, there is a joint interest in management.

The relevance of the 1982 United Nations Law of the Sea Convention (UN LOSC, 1982) in this context lies in the fisheries regime it establishes in Part V. In Article 65, coastal states are exempted from the duty to ensure optimum utilization of living marine resources as laid down in Article 62 - that is, the catch of marine mammals may be regulated more strictly than fishing, but marine mammals are still regarded as natural resources to be exploited for commercial and subsistence purposes. Moreover, in the case of whales, states shall "work through the appropriate international organizations for their conservation, management and study" (Article 65). Two points are of interest in relation to NAMMCO here. First, "organizations" are referred to in the plural; no mention is made of the IWC, nor is it envisaged that states should stick to only one international organization for whale management. Second, the term "appropriate" relates to whether the international body is engaged in "conservation, management and study." It is difficult to see how the IWC by these standards today is a more appropriate organization for international whale management than NAMMCO, as the IWC appears to be reluctant to engage in actual resource management. The 1982 LOSC has not yet entered into force, as 60 ratifications are required, while some 50 states have ratified thus far. Iceland is the only NAMMCO signatory that has ratified the convention and is thereby bound by its provisions, including the duty to cooperate within international organizations. Article 65 by itself can probably not be said to constitute customary international law, as there appears

to be broad agreement among international legal scholars that only the broad outline of the LOSC's Part V constitutes customary international law (Hoel, 1991).

In addition to the LOSC, the provisions laid down in the environmental action plan (Agenda 21) adopted by the United Nations Conference on the Environment and Development in Rio in June 1992 are of relevance here. A basic premise in Agenda 21's chapter on marine affairs is that the UN LOSC 'provides the international basis upon which to pursue the protection and sustainable development of the marine and coastal environment and its resources" (Article 17.1). It is also explicitly stated that "States commit themselves to the conservation and sustainable use of marine living resources" (Article 17.46). This applies to areas under national jurisdiction as well as the high seas. It is therefore a premise here that all living marine resources can be subjected to exploitation, provided this is done in a sustainable manner and on the basis of the LOSC's provisions. For marine mammals the content of Article 65 of the LOSC is rephrased (Articles 17.47/17.76), and what is said above on Article 65 also applies here. Moreover, it is also stated (with identical wording for national zones and high seas), that states recognize the responsibility of the IWC as well as the work of other international organizations in the conservation, management, and study of cetaceans (Articles 17.62/17.90). The UNCED document thus underscores an obligation to act on the basis of the LOSC's provisions and obliges states to manage the resources in a sustainable manner and to recognize both the IWC and other international organizations in the management of marine mammals. There can be no doubt that NAMMCO has a firm basis in Agenda 21, not least by contributing to fulfill the duty that "States should cooperate for the conservation, management and study of cetaceans" (Articles 17.63/17.91), in that stocks not currently managed come under a management regime.

CONCLUSION

The question has been raised whether the establishment of NAMMCO and other regional fora constitute a threat to the IWC. The lack of agreement on problem definition in the IWC - resource management or preservation - may in fact lead to the demolition of the IWC. While conservationists (in particular Russia) have argued for the need to bring the ICRW in line with recent developments in international ocean law (chairman's report of the 42nd meeting of the IWC - IWC, 1990:2), preservationist actors (e.g., New Zealand) want to negotiate a new convention based on the idea that marine mammals in general and whales in particular stand over and above other animals and therefore require special treatment (as New Zealand argued during the UNCED Prepcom III). Any threat to the IWC is more likely to come from these efforts to open up the ICRW for renegotiation rather than from the ambitions of NAMMCO with regard to geographical and species scope. Such an experiment is likely to come to naught if it is accepted that all interested actors should be parties to the regime, while at the same time clarifying the lack of common ground to the extent that parties may have no choice but to leave the organization.

The major problem in international whale management is now, as it was ten years ago, that the real threat to marine mammals is not harvest, but the impacts from pollution, bycatch in fisheries, seismic survey shooting, nuclear test explosions, and the like. A relevant future policy area for the IWC is therefore the formidable task of informing its member governments of the effects of such activities on whales, while the management issues could be shifted to appropriate regional organizations that can manage whales on a sustainable basis in relation to their role in the ecosystem.

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