Here within are comments and suggested changes as tabled by Norway to Introduction and Part A: Fishery Resources, 7<sup>th</sup> of Feb 2013.

Part B: Marine Mammals and Seabirds is within the consolidated AOR report version  $8^{\rm th}$  of Feb 2013

# **Chapter 4: Marine Living Resources**

For many of the Arctic nations, marine living resources are an important food source, are economically important and contribute to cultural identity. The focus of this chapter is on marine living resources and their management and conservation, a discussion which implicates not only the interests of the peoples and cultures who use the resources, but the ecosystems of which they are part. This chapter thus intersects significantly with others in this Report, including Peoples and Cultures, Arctic Pollution, Ecosystem Based Management, Arctic Oil and Gas, Climate Change, Arctic Marine Shipping and Operations, and Arctic Marine Science. The first section of this chapter addresses Arctic fisheries, and the second addresses Arctic seabirds and marine mammals (seals, polar bears, walruses and cetaceans). As reflected in the Arctic Ocean Review Phase 1, there is a wide range of international and regional instruments, as well as domestic and bilateral agreements, that address the management and conservation of all of these resources.

With respect to fisheries, commercial fishing is still limited in Arctic marine regions, and most harvesting is confined to <u>sub-Arctic ocean areas</u>. <u>near shore or small scale activities</u>. A perceived "gap" in management in the region is often identified regarding potential fishing activity in the area of the central Arctic Ocean national exclusive economic zones where, it is argued, freedom of fishing is not as circumscribed as it is in other high seas areas. Opportunities are identified in this chapter to address this, and other, identified gaps in Arctic fisheries management and conservation. With respect to Arctic seabirds and marine mammals, <u>aThe</u> majority of the regulatory and policy work for management and conservation concerning fisheries. Arctic seabirds, and marine mammals, is currently being addressed through existing international and regional instruments or organizations and by Arctic Council states' domestic instruments and bilateral agreements. Opportunities exist, however, for the Council to be more proactive in addressing the most pressing conservation issues that face Arctic seabirds and marine mammals, which are identified towards the end of this chapter.

## 4.1 Part A: FISHERY RESOURCES

## 4.1 Introduction

## A. Scoping

For the purposes of Arctic fisheries, it is important to recognize certain spatial characterizations. The 2004 Arctic Climate Impact Assessment (ACIA) focused its attention on four areas: the Northeast Atlantic (Barents and Norwegian Seas); the central North Atlantic (waters adjacent to Iceland and eastern Greenland); northeast Canada (adjacent to

Newfoundland and Labrador) and the North Pacific (Bering Sea). The ACIA did not focus on the central Arctic Ocean defined for the purposes here as the ocean area north of Canada, Denmark (Greenland), Russia, Norway (Svalbard) and the United States. It is not the case that any of the above areas are independent or self-contained ecosystems. It is the case that within the four areas of focus in the ACIA tThere is significant commercial fishing activity driven by presence of fish stocks in turn a function of water temperature and food sourcesin **Comment [AE1]:** The amount of small scale activities is not bigger larger scale activities. Some of the world's biggest fisheries are in the Arctic

**Comment [AE2]:** More than half of the world's high seas is not covered by an RFMO. Given that all the coastal states surrounding the central Arctic Ocean are parties to UNFSA, and considering all the bilateral arrangements between the same coastal states, freedom of fishing is more circumscribed in the central Arctic Ocean than in most other high seas areas.

Comment [AE3]: Doesn't have to be in italics. Formatted: Font: Not Italic

the subarctic seas, based on abundant resources in the North Atlantic and the Bering Sea. In the area the ACIA did not focus on, the central Arctic Ocean, there is, as yet, minimal no commercial fishing activity.

The legal/political spatial characterization is also important. As a result of the international law of the sea (According to the 1982 U.N. Convention on the Law of the Sea), coastal <u>s</u>States have <u>sovereign rightsan entitlement to exercise jurisdiction</u> over all fisheries resources located within 200 nm of their coasts and sedentary species on their continental shelf <u>also</u> beyond 200 nm. All of the Arctic Council States have, in different ways, enacted detailed legislation and implemented complex fisheries management <u>regimes</u>, apparatuses respecting marine living resources in national waters. The national fisheries management frameworks are structured differently in the various States as a result of constitutional and legal tradition differences, yet each of the relevant States attempts to manage the fishery resources in their waters in a manner consistent with local conditions, sustainable development, the ecosystem

approach and other goals including their international law.

In international law a on the high seas beyond seas)coastal states EEZs, international law. Where areas, states will regional fisheries "If fisheries extend to the central Arctic Ocean it will be first principally in coastal areas (within 200 nm) and only at a later stage, if at all, to the central Arctic Ocean area beyond 200 nm." fisheries management obligations under

freedom to fish exists 200 nm (the high subject to limitations in fisheries occur in such normally establish management

arrangements. This means that, fishers from any State can harvest fisheries resources on the high seas subject to international obligations and agreements to be noted below,. While the four regions studied in the ACIA contain areas beyond 200 nm and fishing activity exists there, for the most part the freedom to fish in these high seas areas has been circumscribed. A perceived "gap" often identified is regarding potential fishing activity in the area of the central Arctic Ocean beyond 200 nm where, it is argued, freedom of fishing is not as circumscribed as it is respecting other areas beyond 200 nm.

#### B. The Resources

At present, no significant commercial fishing takes place with the central Arctic Ocean either within or beyond 200 nm. Little is known about the existence of fish stocks or the potential for the existence of fisheries resources in large parts of the central Arctic Ocean both within and beyond 200 nm. In a<u>A</u>n effort to review and assess the existing scientific data respecting living marine-fishery-resources in the high Arctic, took place in a meeting of scientific experts on fish stocks in the Arctic Ocean hosted by the United States hosted the Arctic Coastal States Arctic Fisheries Workshop in June 2011. There are Some of the commercial fish stocks in the Barents Sea, the Bering Sea and other areas that border the central Arctic Ocean have the potential of a northward expansion, which has given rise to the possibility of an expansion of such stocks northward. If fisheries extend to the central Arctic Ocean it will be first principally in coastal areas (within 200 nm) and only at a later stage, if at all, to the central Arctic Ocean high seas area beyond 200 nm. Further studies concludes that because of high vertical stratification, the primary production of the Central Arctic Ocean will remain too low to support commercial fisheries (Termblay et al, 2012). And in a recent assessment of the probability that todays sub-Arctic species will move into the Central Arctic Ocean, it is asserted that only six stocks are likely to establish viable resident populations in the region (Hollowed et al, in press). Of the six species identified, only two have the physiological traits needed to live in the high seas areas (the Greenland shark and Polar cod), and their

**Comment [AE4]:** More than half of the world's high seas is not covered by an RFMO. Given that all the coastal states surrounding the central Arctic Ocean are parties to UNFSA, and considering all the bilateral arrangments between the same coastal states, freedom of fishing is more circumscribed in the central Arctic Ocean than in most other high seas areas.

Comment [AE5]: Tremblay et al. concludes that primary production in the Arctic Ocean will be low, and commercial fishing is unlikely. For example, regarding the Canadian Arctic it is stated that: " If there is a place in the western Canadian Arctic where fisheries have the slightest chance to be established it would be the Mackenzie shelf where upwelling events are most common". Regarding the central Arctic Ocean in general it is concluded/predicted that: "While enhanced primary production resulting from upwelling or mixing in ice-free areas

could result in increased fish and marine mammal harvest for Northerners, predictions from a global primary production-fisheries yield relationship suggest that current primary production levels would need to increase by two orders of magnitude to sustain a large-scale commercial fishery (Nixon and Thomas 2001). Such an increase presently appears unlikely in the High Arctic given the nutritive and energetic constraints imposed by the polar night and by nitrogen availability during the growth season."

commercial value is very limited. It has been explained that: "because of the complex processes and interactions [involved] ..., there is currently no simple way to predict whether fish productivity will increase or decrease in a warming Arctic and whether new potential habitats will be successfully occupied." (Hollowed et al., undated). Nevertheless, it has been concluded that six stocks (polar cod, snow crab, Bering flounder, Greenland shark, Arctic skate, and beaked redfish) are "highly likely" to expand in such a manner as to be of sufficient quantity to support commercial fishing in the central Arctic Ocean (defined as both within and beyond 200 nm) (ibid.). At present, no significant commercial fishing takes place with the central Arctic Ocean either within or beyond 200 nm.

An<u>sometime</u> overlooked aspect of fishing resources in the central Arctic Ocean is what is required to physically access any potential stocks. While it remains uncertain whether fishing vessels will be included in the scope of the Polar Code applicable to vessels navigating in the Arctic Ocean being prepared within the International Maritime Organization (IMO), it is clear that cCommercial vessels will be subject to significant challenges regarding vessel construction, design, equipment, and training in waters where sea ice may be encountered. Even with the predicted reduction in ice presence in the central Arctic Ocean, the variability of ice conditions, especially on the high seas, may require uniquely outfitted fishing vessels to be able to engage in sustained commercial fishing and this may act as a deterrent to such activity.

## 4.2 Reviewing the Major Relevant International Treaties and Instruments

The UN Convention on the Law of the Sea, which is often referred to as the "constitution of the oceans," applies to the Arctic Ocean in the same manner as it applies to other oceans.<sup>27</sup> thus ensuring that the Arctic Ocean is an area of global engagement. The Convention recognizes or allows for the creation of: areas of national jurisdiction (200 nm zones) for the purposes, inter alia, of fisheries management; high seas beyond 200 nm, where all States have certain freedoms related to the water column; exclusive national authority over the resources of the seafloor continental shelf both inside within and beyond 200 nm, where the physical features of the seafloor and the relevant provisions of the Convention prohibits fishing on the high seas for anadromous species (e.g., salmon), subject to a limited exception. The 1995 UN Fish Stocks Agreement strenghtens the provisions of the Convention regarding principles for fisheries management, regional cooperation, enforcement of management measures and dispute resolution.

The principal approach to circumscribing high seas fishing rights for non-anadromous species has been is through the creation of regional fisheries management organizations, which (RFMOs) and, in some cases, bilateral fisheries agreements where an area in question is small, supported by the 1995 UN Straddling and Highly Migratory Fish Stocks Agreement (1995 Fish Stocks Agreement). RFMOs generally seek to-manage fishing activity beyond 200 nm for stocks that "straddle" the 200 nm limit (stocks that exist within and beyond 200 nm) or for the entire range of stocks both inside and outside 200 nm that are "highly migratory" (e.g., tuna). It is worth noting that the RFMOs that deal with straddling stocks and those that deal with highly migratory species are structured and operate differently and have within them different political tensions. In the case of RFMOs focused upon straddling stocks, the tension is inevitably between the coastal State(s) across whose 200 nm zone the stocks straddling and the non-coastal States (referred to as distant water fishing States) who harvest the straddling stocks on the high seas adjacent to the 200 nm. RFMOs only apply to their member States, although States that are party to the 1995 Fish Stocks Agreement are

**Comment [AE6]:** This seems to be a misreading of Hollowed et al., which anticipates that "... only six stocks have a high probability of establishing <u>viable resident populations in the region". Their commercial potential is not analysed. Of the six species identified, only two have the physiological traits needed to live in the high seas areas: the Greenland shark and Polar cod - the commercial value of the mentioned species must be next to nil. We suggest to delete.</u>

**Comment [AE7]:** This last sentence is moved to the beginning of the pharagraph.

**Comment [AE8]:** This seems irrelevant in this context. Suggest deleting.

**Comment [AE9]:** Covered above, and there are already fishing vessels equipped to handle areas with sea ice.

**Comment [AE10]:** The deleted text seems a bit irrelevant. The added information on UNFSA seems more appropriate in this context.

Comment [AE11]: Not correct.

also to respect the regulatory authority of RFMOs within their area of competence even if those States are not members of the RFMO.

In the Arctic, several regional fisheries bodies exist for the high seas areas: the North Atlantic Fisheries Organization (NAFO), the Bering Sea Agreement, and Tthe North-East Atlantic Fisheries Commission (NEAFC), to which Denmark (Faroe Islands and Greenland), the European Union, Iceland, Norway and Russia are members, has <u>NEAFC</u> has regulatory areas in the Norwegian Sea, the Barents Sea and parts of the central Arctic Ocean. regulatory authority, subject to certain exceptions, for its members fishery activities respecting straddling stocks in areas of the northeast Atlantic beyond the 200 nm zones of the coastal States of the region. According to its treaty, the NEAFC regulatory area includes an area of water in the central Arctic Ocean, <u>A</u>although no management measures have been adopted that specifically deals with the central Arctic Ocean this area, all general management measures in NEAFC also applies in its northern most regulatory area.

Fishing activity on the high seas respecting:

- ✓ stocks not covered by an RFMO (or an equivalent arrangement); or
- ✓ stocks covered by an RFMO to which the flag State of the vessel engaged in the fishing activity is not internationally obligated to adhere; or
- "discrete" stocks (stocks primarily located in a high seas area that are not straddling or highly migratory stocks)

are subject to minimal obligations under Articles 63-64 and 118-119 of the Law of the Sea Convention respecting conservation of stocks. States that are party to the 1993 FAO Compliance Agreement are to require all their fishing vessels to have licences/permits for fishing on the high seas and to ensure that their vessels "do not engage in any activity that undermines the effectiveness of international conservation and management measures."

Of particular note respecting the high seas of the central Arctic Ocean is Article 6(6) of the 1995 Fish Stocks Agreement, which directs that:

For new or exploratory fisheries, States shall adopt as soon as possible cautious conservation and management measures, including, inter alia, catch limits and effort limits. Such measures shall remain in force until there are sufficient data to allow assessment of the impact of the fisheries on the long-term sustainability of the stocks, whereupon conservation and management measures based on that assessment shall be implemented. The latter measures shall, if appropriate, allow for the gradual development of the fisheries.

While the application of the Fish Stocks Agreement is beyond 200 nm, it is argued that Article 6, which deals generally with precaution, may have application within 200 nm.

Other relevant international instruments include several FAO agreements. While not an international treaty, an important international instrument is the <u>1995 FAO Code of Conduct</u> for Responsible Fisheries. The Code has a number of international action plans, among them the 2001 FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA – IUU). "Unregulated fishing," as defined in the 2001 IPOA-IUU, does not mean all fishing activity on the high seas where no RFMO or other management arrangement exists. "Unregulated fishing," which States undertake to deter, is defined as that done in areas or for fish stocks for which there are no applicable conservation or management measures "and where the activities are conducted in a manner inconsistent with State responsibilities for the conservation of living marine resources under international law" (FAO 2001, para. 3.3.2 and see para. 3.3.3.).

**Comment [AE12]:** Seems strange to list the members for NEAFC when this is not done with regard to the other bodies.

Also under FAO auspices, tThe 2009 FAO Port State Measures Agreement, when it comes into force, will require its Parties to deny the opportunity to a vessel to land or tranship fish in its ports where the fish has been harvested through IUU fishing<sub>17</sub>. The 1993 Compliance Agreement is a legally binding instrument requiring its parties to establish mechanisms to ensure the compliance of vessels flying their flag with relevant management measures.

Many fish stocks in the Arctic are shared between countries, requiring bilateral cooperation for their management. A large number of such bilateral arrangements exists. which includes the above noted definition of "unregulated fishing" from the 2001 IPOA IUU. As a matter of international law and subject to trade law and other obligations, States have this authority. The purpose of the FAO Port State Measures Agreement is to increase the number of States who will use this authority.

Of final note is the FAO Code of Conduct for Responsible Fisheries which, while not a legally binding document, creates certain benchmarks for fisheries behaviour both within and beyond 200 nm.

As outlined above, States have obligations and responsibilities respecting fishery activities and resources in the central Arctic Ocean beyond 200 nm, however, the international legal regime applicable is hobbled to a certain extent by not all States being a party to the relevant international treaties.

### 4.3 Challenges

With respect to fisheries resources in the central Arctic Ocean and other Arctic areas both within and beyond 200 nm, the challenges are several fold. there is a

First, the need exists for more scientific information (including ongoing monitoring) on the presence of fish stocks. Baseline data providing a base against which to measure change is particularly important. The meeting of scientific experts on fish stocks in the Arctic Ocean in June 2011 reviewed on-going and planned research activitites and identified a number of priorities for future research. The priorities identified included improved monitoring, improved understanding of productivity of key species, improved understanding of life stage and habitat linkages, and development of ecological models to predict changes in fish populations. and information respecting the potential for fish stocks to appear in the various areas of the central Arctic Ocean and other Arctic areas both within and beyond 200 nm.

Second, <u>challenges states</u> face <u>challenges in</u> <u>States within 200 nm where they have fisheries</u> jurisdiction to evaluatinge scientific information, to monitoring the domestic commercial fishing activity that does or may take place, to assess the impact of commercial fishing activity on the indigenous peoples of the region, to consider and in adopting as necessary management measures concerning commercial fishing activity that are respectful of the needs and desire of indigenous people in balance with environmental protection and economic development. An additional concern for coastal States is the safety of fishing vessels and the possibility of marine environmental pollution in uncertain and changing ice conditions.

Third, the challenges that exist respecting fisheries in the central Arctic Ocean beyond 200 nm are ones of balance, timing and nuance.

- ✓ When, if ever, might there be an abundance of fishery resources to allow for a viable commercial fishery beyond 200 nm in the central Arctic Ocean?
- ✓ What is the best approach to ensure that future possible commercial fishing activity is undertaken in manner that is consistent with the international legal regime of the law of the sea, the interests of conservation, environmental protection, economic development and global food needs?

**Comment [AE13]:** Covered in suggested added text above.

**Comment [AE14]:** Not correct as a general statement.

**Comment [AE15]:** This is more of a problem for the flag state than the coastal state.

4- Who are or should be the principal States (players) in considering the timing for or the design of an approach for dealing with future possible commercial fishing activity in the central Arctic Ocean area beyond 200 nm?

In respect of this last point, it is noteworthy that nNot all of the State participants in the Arctic Council have coastal State interests respecting in the central Arctic Ocean and some States which may have a fishing interest in the Arctic are not participants in the Arctic Council.

## 4.4 Opportunities

Arctic Council States recognize the need to move with great care regarding exploratory and commercial fishing activities in Arctic marine areas. However, t<sup>T</sup>he Arctic Council is not a body that regulates, manages or directs its participating States to undertake particular actions or to adopt particular policies respecting fisheries. However, Arctic Council States recognize the need to move with great care regarding exploratory and commercial fishing activities in Arctic marine areas.

The global framework of fisheries instruments mandate that regional fisheries bodies and bilateral fisheries arrangements play a critical role in the management of transboundary fish stocks. All States with coasts on the central Arctic Ocean have laws and policies that apply to fishery resources and their national fishing vessels. A number of fora therefore exist where States (and others) with interests in Arctic fisheries meet. All of the States with coasts on the central Arctic Ocean have laws and policies that apply to fishery resources and their national fishing vessels. At this time no regular fora exist where States (and others) with clear interests in the Arctic Ocean or, more specifically, fisheries in the central Arctic Ocean, meet to adopt or issue formal declarations or statements. Therefore, attention is given here to potential opportunities for the Arctic Council respecting the conservation and management of fishery resources in Arctic marine areas.

As stated at the beginning of this chapter, certain spatial considerations are important to recognize in relation to Arctic fisheries. Opportunities relevant to fisheries within national jurisdiction can be distinguished from opportunities in relation to potential fishery resources in the central Arctic Ocean beyond national jurisdiction. Currently there are no known fish stocks of significant-commercial interest in the central Arctic Ocean in areas beyond national jurisdiction. Scientific research to date indicates that factors such as low primary production, habitat limitations and depth make it unlikely that commercial stocks exist in this area. However, in sub-Arctic seas surrounding the Arctic Ocean there are significant commercial fisheries.

The Council has been the catalyst for the 2011 Arctic Search and Rescue Agreement and the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic that will be presented for signature at the 2013 Arctic Council Ministerial. Similarly, there are opportunities for the Arctic Council to act as a catalyst to promote sound conservation and management of Arctic fisheries resources. Through declarations, statements, resolutions, and so on, the Council could communicate shared intentions, desires, goals, political commitments and calls for action respecting Arctic fisheries.

There are many different options for the content and "modes of delivery" of any such declarations, statements and resolutions. The Arctic Council Ministerial Meetings have regularly adopted Declarations and could do so as regards fisheries within and/or beyond areas of national jurisdiction in the central Arctic Ocean. While the nomenclature of an instrument has some significance, what is of more relevance is the State grouping that adopts,

**Comment [AE16]:** Moved to beginning of pharagraph.

Comment [AE17]: The two

agreements mentioned corresponds with previous work of the Council and active working groups of the council to a much larger extent than what is the case for fisheries.

approves or issues such an instrument. It is noteworthy that the Arctic Council operates under the consensus rule.

Given the intention, expressed in the Declaration Establishing the Arctic Council, to provide for the active participation and full consultation of the Permanent Participants, development of any such instrument should involve the Permanent Participants and should receive their support.

The possibility of a treaty on Arctic fisheries also exists. Issues of concern for a treaty approach would be which States (or State grouping) would negotiate such a treaty and which States could or would become a party to such a treaty.

**Zones within National Jurisdiction** 

#### [Note the need to clarify if intent is to include territorial seas]

<u>Numerous-There are</u> opportunities for cooperation in respect of marine living resources-exist for the Arctic States with exclusive economic zones in the Arctic.

States collectively or bilaterally could engage in cooperative research and scientific study and exchanges of information. Arctic states already promote scientific cooperation and eould encourage that any fishing activities must be based on <u>the best adequate</u> scientific knowledge available. The meeting of scientific experts on fish stocks in the Arctic Ocean reviewed current information and data on fish stocks, their ecosystems and patterns of migrations, reviewed ongoing and planned scientific activites, and identified research priorities. The research priorities included improvements in monitoring, understanding of fish populations, and modeling. In the European sector of the Arctic, the International Council for the Exploration of the Sea plays an important role in coordinating sciene and providing scientific advice to governments and regional bodies. In the North Pacific, the Pacific International Council for the Exploration of the Sea plays a similar role, but does not have a formal role in the provision of scientific advice.

For example, in 2009, the United States closed its fishing zone (beyond 3 nm) in the Chukchi and Beaufort Seas to commercial fishing until sufficient information is available to support the sustainable management of a commercial fishery.

Where the possibility exists of tTransboundary stocks of living marine resources are in most cases managed by regional and bilateral bodies. The performance of such bodies should be measured against internationally recognognized performance criteria, cfr recent performance reviews of i.a. NEAFC. (stocks which occur within the 200 nm zone of two or more coastal States) the Arctic States could consider, commit to, or work towards achieving coordinated, cooperative or joint management of such stocks as contemplated in Article 63(1) of the LOS Convention.

In 2008, for example, the U.S. Congress directed that the United States "should initiate international discussions" to negotiate with other Arctic nations agreements for managing migratory, transboundary, and straddling stocks in the Arctic Ocean and to establish "a new international fisheries management organization ... for the region" (United States 2008, sec. 1). Pending the completion of such agreements, "the United States should support international efforts to halt expansion of commercial fishing activities in the high seas of the Arctic Ocean" (*ibid.*, sec. 4). The United States "is encouraging other Arctic coastal States to take comparable steps for managing fisheries within Arctic waters under their respective jurisdiction" (United States, undated, para. 7). Of final note, "The United States is also considering whether it would be desirable for a group of States with interests in present and future Arctic fisheries to adopt some form of general statement or declaration" (*ibid.*, para. 8).

**Comment [AE18]:** "Mode of delivery" is something that would apply to all chapters and it's opportunities. Seems a bit imbalanced to only highlight it here.

Comment [AE19]: Covered below.

**Comment [AE20]:** This text is too detailed to be in the opportunities section given that we will not be able to agree on such measures in this report.

It is to be noted that the establishment of institutional structures for the coordination, cooperation and management of transboundary stocks is often difficult because of differing national fisheries management structures.

As indicated above, pre-emptive closure of some fisheries is also an option. Several alternatives exist for States to manage the access to high seas where no fishery management arrangement exists. While the United States has adopted a closure of commercial fishing in waters adjacent to northern Alaska, Canada, having a differently constituted national fishery regime, has issued no permits or licenses for commercial fishing in its central Arctic Ocean within 200 nm. It is prohibited for Norwegian flagged fishing vessels to engage in fishing in unregulated areas outside national jurisdiction. The reduction of fishing capacity is critical to the long term sustainability of fish stocks. Relevant measures include various forms of areabased regulations (closures), temporary restrictions, and limitations on amount that can be caught. Several alternatives exist for each State, individually or collectively, to consider or agree to implement or maintain a no access policy to these waters for commercial fishing: for a set period (e.g., five years); until further research on the resource is undertaken and assessed and both the economic benefits of a commercial fishery and/or the impact of such activity on indigenous fishing interests are assessed; or indefinitely. In this context, the relevant Arctic States could consider, agree on, or commit towards achieving conditions or principles under which exploratory fishing could take place and commercial fisheries could be developed.

#### **Central Arctic Ocean High Seas Areas**

Considerable international attention has been centered on this geographic area if for no other reason than the water column and the fisheries therein are beyond coastal State jurisdiction and thus open to non Arctic State engagement. Irrespective of this potential non Arctic State involvement on the high seas of the central Arctic Ocean, the littoral States of the Arctic Ocean (and the populations of the High Arctic) are the ones with the primary interest in the region as they will be the most affected by actions and activities on the high seas.

Despite the absence of evidence of the existence of straddling or highly migratory fish stocks in the central Arctic Ocean high seas area, there have been calls for a regional fisheries management organization (RFMO) to become involved in this area. The suggestions have been for the creation of a new RFMO dedicated to the central Arctic Ocean or for an existing RFMO, such as the NEAFC, to extend its geographic reach to cover the central Arctic Ocean high seas area. The arguments that favour this development are that having an RFMO in place prior to any possible fishing activity decreases the risk of illicit fishing activity taking place and increases the possibility of the development of a well managed fishery. The arguments against near term RFMO establishment or extension is that without a knowledge of the nature of the fishery involved crafting the most effective RFMO is difficult and that in the absence of activities to regulate, it is a waste of resources and could lead to "mission ereep" by an RFMO into other subject areas. As noted above, membership in RFMOs can be a contentious issue where those States with the most direct interest may be overwhelmed by States with a differing interest. The design of a RFMO can sometimes take this into account, but this depends upon the States engaged in the negotiation of the RFMO constitutive document

If <u>anthe</u> immediate establishment or extension of an RFMO is not deemed timely, this does not preclude the desirability of RFMO engagement at a future point.

**Comment [AE21]:** It might be that Russia has the same prohibition. This could be checked with Russian representatives.

**Comment [AE22]:** Could we include a map of existing RFMOs?

Another institutional option is the establishment of a treaty-based body focusing on the promotion and cooperation of high seas fisheries research (and perhaps also within areas of national jurisdiction) similar to PICES (created by the 1992 Convention for a North Pacific Marine Science Organization) or ICES (created by the 1964 Convention for the International Council for the Exploration of the Sea). An even less formal structure for the same purpose could be the establishment of a scientific committee perhaps modeled on the International Scientific Committee (ISC) for Tuna and Tuna-like Species in the North Pacific (initialized in 1995). A specific purpose of the ISC is to "establish the scientific groundwork" for a possible tuna-based RFMO in the North Pacific Ocean. In contrast to the central Arctic Ocean, at the time PICES and ICES were created, there was and continues to be significant active research in those regions. Thus, as with RFMOs, questions of timeliness and effectiveness exist respecting the establishment of a multilateral scientific body.

<u>As noted earlier in this chapter, it is important to distinguish fishery resources within the national jurisdictions of the Arctic Council States with coasts on the central Arctic Ocean, from the fishery resources in the Central Arctic Ocean High Seas Area that are not under the exclusive jurisdiction of any State. This might affect the nature and content of any Arctic Council declarations, statements, resolutions or other actions.</u>

[BF question: does AOR II want to direct recommendations at subsets of Arctic states such as "Arctic Council States with coasts on the central Arctic Ocean", or is the intention to make recommendations that the Arctic Council as a whole would adopt?]

## \_National Zones within 200nm

[BF comment: recommend deleting headings here depending on answer to above question]

The Arctic Council States with coasts on the central Arctic Ocean should move with great care regarding exploratory and commercialmanage fishing activities, in accordance with the standards in the law of the sea and relevant fisheries agreementsparticular, also being mindful of the rights and interests of the indigenous peoples of the Arctic. Moreover, <u>Management</u> decisions on encouraging or permitting commercial fishing activities mustshould be based on an adequate the best scientific basis advice available.

## <u>+2</u>

2 The Arctic Council States with coasts on the central Arctic Ocean should monitor the science and fishing activity respecting transboundary stocks and, as appropriate, <u>changes</u> in important characteristics of fish stocks, ensure that scientific understanding is enhanced and that scientific cooperation is further developed. <u>ecooperation to ensure that adequate management measures are adopted to assure effective joint management of transboundary stocks.</u>

3 Central Arctic Ocean High Seas Area

[BF comment: recommend deleting headings here depending on answer to above question]

- 1 The Arctic Council States should commit to preventing all commercial fishing activity under its control from taking place on the high seas of the central Arctic Ocean until such time that there is scientific evidence supporting the sustainability of a commercial fishery.
- 2 The Arctic Council States should request that all other States with fishers that may have an interest in central Arctic Ocean high seas area to respect the above commitment of the Arctic Council States and prevent commercial fishing activity

**Comment [AE23]:** We don't really see the need for a new body, but can accept the text anyway as long as it will not be included in the final recommendations.

**Comment [AE24]:** I don't know what happened here, but I couldn't manage to get the "2" where I wanted it to be.. It is meant to be an option 1 and option 2 here. In addition, if you show the text without track changes, options number two is being merged with the heading of part B on marine mammals and seabirds....

**Comment [AE25]:** This reaches too far into management issues. In addition, a process dealing with this matter has already been established. The recommendations must therefore be of a general kind to ensure that they will not be incompatible with the outcome of the mentioned process.

under their control until such time that there is scientific evidence supporting the sustainability of a commercial fishery.

- 3 The Arctic Council States either collectively through a working group or committee or individually should undertake and share studies that examine the current and potential existence of fish stocks in the high seas of the central Arctic Ocean.
- 4 The Arctic Council States either collectively or individually should, to extent possible, monitor fishing activity that takes place in the high seas of the central Arctic Ocean.