

Compliance with International Fisheries Instruments

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Abstract

This report provides an assessment of the level of compliance with international fisheries instruments for countries bordering the North Atlantic. Fifteen instruments (conventions, treaties or agreements) were assessed for 17 countries. Overall the level of compliance is moderate to high for most instruments, and for most countries. There tends to be a latitudinal gradient of compliance, with the northern countries scoring higher than those to the south. The study revealed that few regional fishery bodies have a systematic program in place to monitor and assess compliance with their instruments. The most important result of this study, however, is that despite, at least moderate levels of compliance, most of the fisheries that are managed under these instruments are overexploited and at risk of collapse. In some cases, fisheries such as the cod in the western Atlantic are not showing signs of recovery after a 5-year moratorium on commercial fishing.

Introduction

Many fisheries cross national boundaries while others are focused in international waters. The management of these fisheries requires a multinational approach that is often undertaken through a range of international instruments such as conventions, treaties and agreements between countries. Such instruments have been used since 1351 (Committee on Fisheries 1999), but it was not until the ratification of UNCLOS, when nations began to declare their EEZs, that international instruments became common place. Until the introduction of the Bruntland Report and its concept of sustainable development as well as the Rio Declaration, many of these instruments were focused on the allocation of resources amongst member countries, with conservation or sustainable resource use a secondary purpose. However, the current purpose of these instruments is sustainable use, which is anticipated through the various provisions specified in the instruments. This has led to the assumption that if nations are complying with the provisions of these instruments then their fisheries will be sustainable. This assumption is the focus of this report, which investigates compliance with international in-

struments that are used to manage marine resources in the North Atlantic.

There are few published studies focused on compliance with international fisheries instruments (Anon. 2001, Honneland 2000, Lugten 1998, Ausubel and Victor 1992). The present study found that a lack of standardized methods, limited data and a reluctance of nations to provide information have contributed to the lack of assessments to date. This raises serious questions on the effectiveness of the instruments and the role of regional fisheries bodies (RFB). The FAO also recognizes the need for monitoring and evaluating instruments, RFBs and national compliance. In response to this need, the Second Meeting of FAO and Non-FAO Regional Fishery Bodies or Arrangements drafted performance indicators for the objectives (e.g. management, governance and benefit distribution) and functions (e.g. capacity development, training and information management) of RFBs and their members (Anon. 2001). The report suggests that national compliance be measured using a range of variables such as participation (e.g. meeting attendance, training), contributions (e.g. in-kind and financial support), information delivery and implementation (e.g. decision compliance, acceptance of dispute settlements). However, findings from this study indicates that few of these variables could be measured because the information is not publicly available, or RFBs and national governments are unwilling to provide the information. Nevertheless, this study was able to develop and implement a methodology based on existing information, and questioning of RFB to assess the compliance of 17 countries to 15 international instruments.

Methodology

Selection of Instruments

Treaties, conventions and agreements were identified using the FAO FARISIS database (Committee on Fisheries 1999), searches of internet sites specializing in ocean policy and law (e.g. <http://www.oceanlaw.net/texts/index.htm>) and literature searches. Any instrument that contained a fisheries, pollution, conservation or marine wildlife component was identified as a potential instrument for assessment. Instruments that were superceded or out of date were eliminated from the study. Bilateral agreements were also eliminated because they usually focused on countries providing access rights to fishing grounds and rarely contained provisions for managing fisheries.

Table 1. Summary of the Fisheries Instruments reviewed for the North Atlantic (acronyms are indicated in the brackets at the end of the title).

ASSESSED INSTRUMENTS	NOTES
UN Convention on Law of the Sea (UNCLOS)	-
Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNCLOS Fish Stocks)	Not in force, waiting for 3 signatures
Agreement to promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (UNCLOS Compliance Agreement)	Not in force, there are only 12 signatures out of the required 25
Convention for the International Council for the Exploration of the Sea (ICES)	Provides scientific advice to regional fisheries bodies in the NE Atlantic
International Convention for the Conservation of Atlantic Tunas (ICCAT)	Manages tuna and billfish in the entire Atlantic area
Convention on Biological Diversity (CBD)	The CBD includes the Jakarta Mandate which is addressing the issues of biodiversity in marine environments
Convention for the Conservation of Salmon in the North Atlantic Ocean (NASCO)	Management of salmonid fisheries throughout N Atlantic
Convention for the Protection of the Marine Environment of the North East Atlantic (OSPAR)	Addressing marine pollution in the NE Atlantic, in particular the North Sea
Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries (NAFO)	Management of mostly groundfish in the NW Atlantic
Convention on Future Multilateral Co-operation in Northeast Atlantic Fisheries (NEAFC)	Management of mostly pelagic fish in the NE Atlantic
Common Fisheries Policy (CFP)	Management of more than 100 species of fish within the EEZ's or Fishing Grounds of EU countries
Agreement Concerning Certain Aspects of Cooperation in the Area of Fisheries which also includes the following three agreements	This group of agreements address management of the major fisheries in the Barents Sea that are not encompassed in NEAFC or CFP
Agreement Concerning Cooperation in the Field of Fisheries Between Norway and the USSR (1975)	-
Agreement Concerning Mutual Fisheries Relations Between Norway and the USSR (1976)	-
The Grey Zone Agreement Between Norway and the USSR (1978)	-
Agreed Record of Conclusions of Fisheries Consultations on the Management of the Norwegian Spring Spawning Herring (Atlanto-Scandian Herring) Stock in the Northeast Atlantic for 1997 (Including Supplementary Agreements)	Management of Herring stock that is fished primarily in the Norwegian Sea
Negotiations on Allocating the Capelin Stock Between Norway, Iceland and Greenland	Management of capelin stock that is fished primarily in the Jan Mayan area
International Convention for the Regulation of Whaling (IWC)	-
Agreement on the Conservation of Small Cetaceans of the Baltic and North Seas (ASCOBANS)	-
Instruments of Limited Relevance	
Declarations from International Conferences on the Protection of the North Sea	Ministers from the North Sea reconfirmed their commitment to improving the resources of the North Sea through cooperation with existing structures. No actions or initiatives taken.
Convention on the Continental Shelf	Focused on sedentary species and the seabed
US Canada Agreement on Fisheries Enforcement	Mutual cooperation in setting enforcement standards, policies, strategies.
Convention on Conduct of Fishing Operations in the North Atlantic	Focused on gear and associated equipment, it is implemented by other agreements where gear or other equipment is specified
Agreement on Sealing and the Conservation of Seal Stocks in the Northwest Atlantic (amended 12-Dec-75)	Bilateral between Canada & Norway, does not appear to be used today by either party, each party sets own quota
Agreement on the Measures to Regulate Sealing and to Protect Seal Stocks in the Northeastern Part of the Atlantic Ocean	Bilateral between Norway & Russian Federation, appears to be used to set annual quota for harp and hooded seals.
Agreement on Cooperation in Research, Conservation and Management of Marine Mammals in the North Atlantic	Greenland; Iceland; Norway ;Faroe Islands
Convention on the International Maritime Organization	Conduct of vessel operations, no role in management
Agreement Concerning Cooperation in Marine Fishing	Signed in 1963 between Russia, Cuba, Poland and Bulgaria. Its currency is unknown. Focused on open seas and the development of new fisheries.
North American Agreement on Environmental Cooperation	It is between Canada and the USA; no commercially important marine fish are included
Regional Convention on Fisheries Cooperation Among African States Bordering the Atlantic Ocean	10 parties from African Nations, primarily dealing with fisheries in the mid to South Atlantic
Agreement on Fisheries Between Norway and the Faroes	Focused on giving mutual rights to fish in each country's EEZ, does not manage shared stocks
Convention on International Trade in Endangered Species of Wild Fauna and Flora	Does not include commercially important marine fish
Convention on the Conservation of Migratory Species of Wild Animals	Does not include commercially important marine fish
Convention on the Conservation of European Wildlife and Natural Habitats	Does not include commercially important marine fish

Table 1 continued. Instruments Superseded.

Convention on the Territorial Sea and the Contiguous Zone	Replaced by UNCLOS
Convention on Fishing and Conservation of the Living Resources of the High Seas	Replaced by UNCLOS
Convention on the High Seas	Replaced by UNCLOS
Convention for the Regulation of the Meshes of Fishing Nets and the Size Limits of Fish	Replaced by Northeast Atlantic Fisheries Convention
Fisheries Convention	Replaced by UNCLOS and CFP
Agreement on the regulation of North-East Atlantic Cod	Replaced by Cooperation in the Area of Fisheries
Reciprocal Fisheries Agreement	Replaced by NASCO on the east coast of North America, and Pacific Salmon in the west coast.
Agreement on the Regulation of Fishing of the Atlantic Scandinavian herring (1973)	Replaced by the 1980 Herring Agreement
Agreement on Fisheries and the Continental Shelf Between Norway and Iceland (1980)	Replaced by 1996 and 1997 Herring Agreement

If the instrument did not contain provisions for managing fisheries, marine wildlife, marine biodiversity or pollution it was also eliminated. This elimination process resulted in the preliminary assessment of 19 instruments (Table 1). The relationship between these instruments is illustrated in Figure 1.

Assessment Criteria

The assessment criteria for each instrument is focused on measuring either qualitatively or quantitatively the level of compliance with the various fisheries management provisions contained within an instrument. The provisions in each instrument were examined to identify the assessment criteria. Some instruments contained few provisions for management, in these cases the current management or work programs were used to develop the assessment criteria. The criteria were specified to ensure maximum differentiation between the levels within a criterion. Generally a range of scores between 0 and 3 was used for a criterion.

A specific set of criteria for each instrument was formulated since each instrument has specific provisions (Tables 3a to 3p: see at end of text). Where possible criteria were limited to approximately 6 per instrument. Some instruments such as the Fish Stocks Agreement had less than the 6 criteria due to their broad nature and application.

Scoring

Published reports from the various secretariats of the conventions, agreements and treaties as well as stock assessments from ICES were used to obtain information against which countries were scored for their compliance with the agreement. In some cases journals were also used to gather the necessary information. If information was not published, then officers for the instrument were contacted for the appropriate information. Only those countries where the instrument applied

were assessed, irrespective of whether they were party to the instrument or not.

Results

Fifteen of the 19 potential instruments were fully assessed (Table 2). In the North Atlantic, compliance varies considerably between countries and treaties. Overall the Convention for Multilateral Cooperation in the North East Atlantic had the highest level of compliance, with an average score of 81% based on five countries (the EU score was used to represent the respective scores). The Fisheries Compliance Agreement had the lowest level of compliance with an average score of 33% based on the 15 countries where it applies. There was a distinct difference in compliance with the Compliance Agreement; either countries have ratified the agreement and are actively implementing it or they have signed it but not ratified it. Morocco had the lowest level of compliance with a score of 27% based on the 5 instruments that apply, while the Faroe Islands, Norway and Greenland shared the highest average score (69%).

FISHERIES INSTRUMENTS

United Nations Convention on Law of the Sea (UNCLOS) Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (Fish Stocks Agreement) Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas (Compliance Agreement)

The level of compliance for these instruments ranged between 100% for the Fish Stocks Agreement and 0% for the Compliance Agreement (Tables 3a, 3b and 3c).

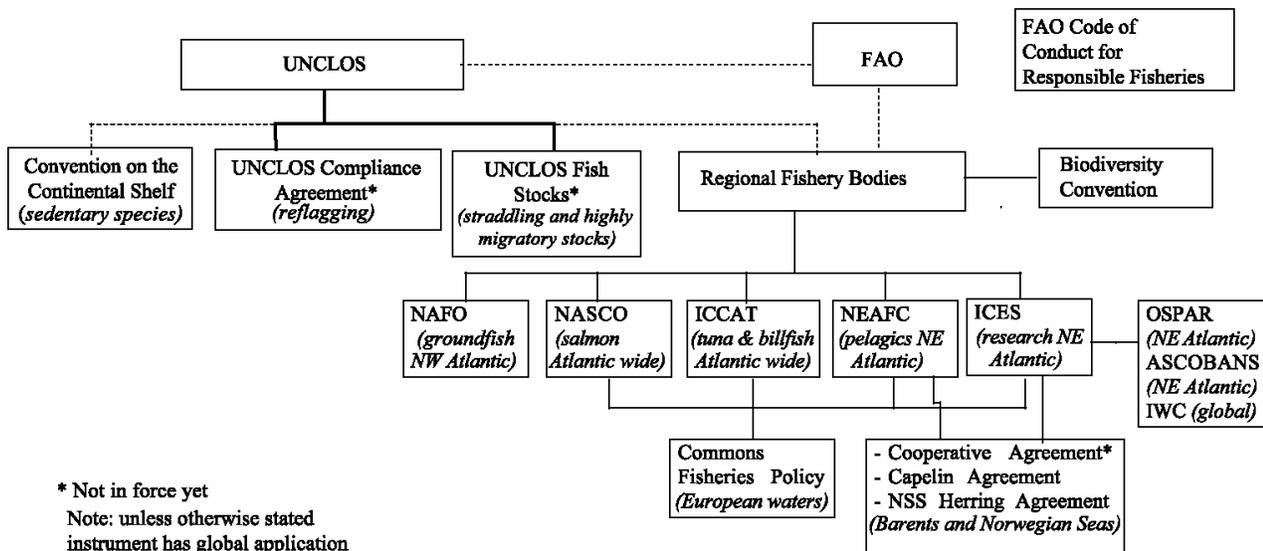


Fig. 1. Network of North Atlantic Fisheries International Instruments.

Canada, Morocco and the United States have yet to fully ratify UNCLOS. The status of the Faroe Islands and Greenland with respect to these instruments is unclear, therefore they were not included in this part of the analysis.

The overall level of compliance with the Fish Stocks and Compliance Agreements is much less than for UNCLOS (Table 2). The European Union as an entity representing the countries in the Union has not ratified the Fish Stocks Agreement and therefore represents a major proportion of those countries in this study (11/15) exhibiting a poor level of compliance. Other countries such as Canada, Iceland, Norway and the United States have ratified the agreement and are actively im-

plementing it even though it is not in force. The agreement has 27 signatures and requires 30 to come into force. The extent of this agreement is shown in Figure 2a.

The Compliance Agreement has been accepted by many of the countries in the study with the exception of Morocco, Russia and Iceland. This agreement is also not in force yet because it has not reached the 25 signatures that required.

These instruments were difficult to assess because there is no single agency responsible for the implementation of any of UNCLOS instruments. Although the United Nations is the depository for these instruments, other conventions such as

Table 2: Summary of National Compliance (% scores).

	Belgium	Canada	Den-mark	Faroe Is' ds	Germany	France	Iceland	Greenland	Ireland	Morocco	Netherland	Norway	Portugal	Russia	Spain	UK	USA	EU	Mean
UNCLOS	90	50	90		90	90	80		90	45	90	90	90	80	90	90	25	-	79
Fish Stocks	25	100	25		25	25	100		25	25	25	100	25	50	25	25	100	-	47
Compliance	33	33	100		33	33	33		33	0	33	33	33	0	33	33	33	-	33
NAFO		80		69	46		73	77				64	75	79	75	44	68	-	68
NEAFC*	78		78		78	78	89	78	78		78	89	78	89	78	78		78	81
ICCAT		83				38			52	25			56		38	44	92	-	54
ICES**	0	90	60	60	50	30	60	60	10		70	90	40	0	40	70	100	-	52
CFP	47		40		60	45			55		55		59		35	45		-	49
Coop Agree												41		41				-	41
NSS Herring				75			75					86		75				100	78
Capelin							50	64				100						-	71
IWC	-	16	80	75	-	-	58	75	-	-	-	67	-	67	-	100	83	-	69
ASCOBANS	46		50		79	12.5					58	12.5				75		-	48
CBD	54	58	58	58	58	67	33	58	46	42	58	58	50	50	50	85	17	-	53
OSPAR	57		77	77	83	53	67	77	67	-	73	70	83		92	100		-	75
Average	47.8	63.8	65.8	69	60.2	47.2	65.3	69.9	50.7	27.4	60	69.3	58.9	53.1	55.6	65.8	65	-	58

* EU (European Union) countries treated as one. ** FI and GL as per Denmark

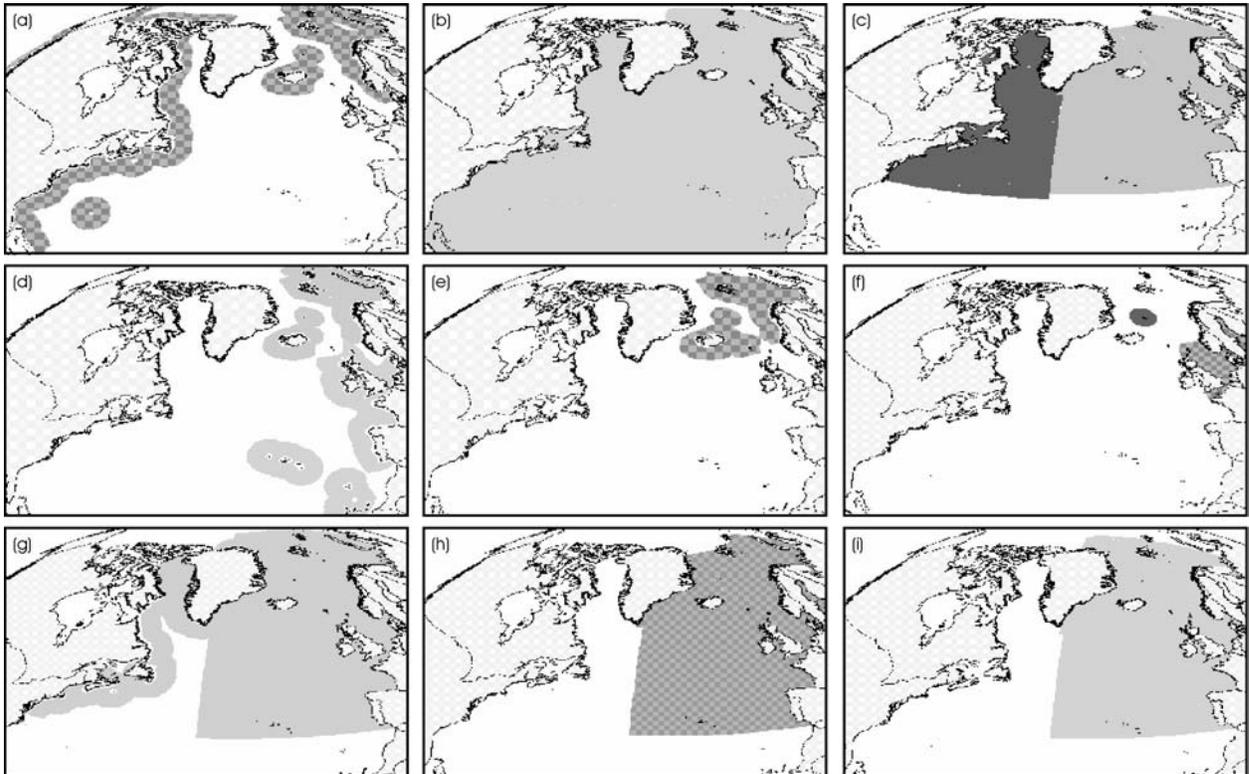


Fig. 2. Parts of the North Atlantic covered by various international instruments devoted to the management of North Atlantic resources. (a): Fish Stocks Agreement; (b): International Convention on the Conservation of Atlantic Tuna (ICCAT); (c): Conventions on Future Multilateral Cooperation in the North East Atlantic (light shading) and the North West Atlantic (dark shading). (d): Common Fisheries Policy (light shading) and Agreement Concerning Certain Aspects of Cooperation in the Area of Fisheries (around Iceland and Norway). (e): Norwegian Spring Spawning Herring Stocks Agreement; (f) Capelin Fishery in the Jan Mayen area (dark shading) and Agreement on the Conservation of Small Cetaceans in the Baltic and North Seas (chequered); (g): Convention for the Conservation of Salmon in the North Atlantic; (h): Convention for the Protection of the Marine Environment of the North East Atlantic (OSPAR); (i): International Council for the Exploration of the Sea (ICES) Convention.

North Atlantic Fisheries Organization (NAFO) have a secretariat that deals with the Convention on Future Multilateral Co-operation in Northwest Atlantic Fisheries on a day-to-day basis, however, there is no equivalent agency within the UN. UNCLOS is a highly complex instrument and is administered by the Division for Ocean Affairs and Law of the Sea within the United Nations Office of Legal Affairs. Through various articles such as 63 to 67, it is the Fish Stocks and Compliance Agreements that are used to implement those parts of UNCLOS that pertain to living resources.

Several difficulties were encountered in assessing these three instruments. Because of their broad nature and lack of specific provisions for fisheries management it was difficult to draft a comprehensive set of assessment criteria compared to other instruments such as ICCAT and NAFO (Tables 3d and 3f). A search of the literature also revealed little information on country-specific activities to implement these instruments. There was considerable literature, however, on the arguments used to debate whether the United

States should sign UNCLOS and the Compliance Agreement. Because there is no single agency devoted to the instruments, each country was contacted for the appropriate information. Few countries responded to our request for specific information and therefore the assessable criteria were reduced to just a few that could be assessed using existing information. The criteria and scores are detailed in Tables 3a, 3b and 3c.

International Convention on the Conservation of Atlantic Tuna (ICCAT)

The ICCAT only applied to 8 of the 17 countries in the study. Although many other countries which border on the Atlantic are also signatories to the convention but they are outside of the study area (Figure 2b). However, some countries in the study such as Denmark, Faroe Islands and Iceland are starting to target bluefin tuna in the Atlantic and there is increasing concern amongst member countries (NOAA 2001). The United States (91%) and Canada (83%) have a high level

of compliance, while countries such as Morocco (25%), Spain (37.5%) and France (37.5%) have a low level of compliance (Table 3d). Despite a reasonable level of compliance by many member countries that have ratified the convention, most tuna stocks in the North Atlantic are still considered to be over-exploited (DFO 1998).

Convention on Future Multilateral Cooperation in Northeast Atlantic Fisheries

This instrument (NEAFC) applies to those countries bordering the east Atlantic but not the Baltic (Figure 2c), Black or Mediterranean Seas. Management is focused on demersal fisheries such as blue whiting, oceanic redfish, herring mackerel and capelin. Highly migratory species such as tunas, and anadromous stocks such as salmon are dealt with in other instruments contained within this report. The Convention established the North-East Atlantic Fisheries Commission. Though the commission has the power to recommend a wide variety of conservation and management measures it generally only used a few measures such as setting TACs for the various stocks it manages.

The Commission would only provide compliance information at the European Union level and not on a country by country basis (Table 3e). Overall compliance is high for all countries that have signed the convention. However, the management provisions such as the use of logbooks and VMS are easy to comply with for these countries, while TACs are generally set by the consensus by member countries and do not necessarily reflect the catch levels needed to maintain the stocks or a precautionary approach to setting the TAC.

Convention on Future Multilateral Cooperation in Northwest Atlantic Fisheries

This instrument (NAFO) applies to those countries bordering the west Atlantic, primarily Canada, USA, Faroe Islands, Greenland and Iceland as well as Germany, Norway, Portugal, Russia, Spain and the United Kingdom due to their long history of fishing in the area (Figure 2c). There are several other countries outside of the North Atlantic who are signatories to the convention but they are outside of the SAU project study area. The convention applies to all fish stocks except anadromous fish such as salmon or highly migratory stocks such as tunas and cetacean stocks managed by the International Whaling Commission. Much of the focus is on groundfish stocks such as cod, redfish, flounder, capelin, shrimp

and Greenland halibut.

The commission sets quotas as well as time and spatial restrictions for the harvest of a range of species, and compliance is low to moderate among the North Atlantic countries that have ratified the agreement (Table 3f). Canada has a high level of compliance (80%) while the compliance levels of the UK and Germany's are low (44% and 46% respectively). Despite these levels of compliance, several stocks, especially cod, are still at critically low levels. The 2000 Annual Report noted that the Scientific Council had reviewed and assessed 19 fish stocks and concluded that groundfish abundances are still low and that "there should not be a direct fishery for those stocks in 2001" (NAFO 2000, pg. 9). Consequently in specific areas of the northwest Atlantic cod, redfish, American plaice, Witch flounder and capelin fisheries were closed for 2001.

Commons Fisheries Policy (CFP)

The CFP is the main instrument for managing fish stocks in European Union waters (Figure 2d), and has 4 main objectives that include maintaining sustainable fisheries. This objective is accomplished through the cooperation of member states, however, it appears that this policy is of limited effectiveness with 67% of stocks within EU waters overfished, 50% depleted and 37% overfished and depleted (Anon. 2000).

The CFP uses a range of measures to implement the sustainable fisheries objective: the Multi-Annual Guidance Program (MAGP) which is aimed at reducing the fleet size in each member country, TACs and quotas, VMS and logbooks. Although the MAGP has reduced fleet size, this was counterbalanced by increasing effort, so that the net effect has been an increase in fishing efficiency and catches. The EU is trying to address this problem, but has had limited success until now (Schorr 2000). There are 103 TACs and quotas set for fish stocks by the EU each year. Despite recommendations from ICES to further reduce quotas, member states are unwilling to reduce the quotas and continue to extract marine resources at unrealistic rates. In the area of enforcement and the use of logbooks, the effectiveness of these activities is highly questionable since the EU has only one vessel and few inspectors to oversee this component of the CFP (Long & Curran 2000).

Compliance with the CFP is low to moderate among member states (Table 3g) due to the continued high levels of exploitation that some countries continue to practice. Countries such as Germany and the Netherlands scored higher than

50% because of their commitment to meet the MAGP targets, while Ireland and Portugal scored above 50% due to their limited fishing activities in the areas where stocks are under threat of overfishing (Table 3g). The remaining North Atlantic EU members scored below 50% the lowest score being recorded by Spain (35%) with one of the highest levels of violations recorded, as well as one of the highest levels of quota hopping of member states (Long & Curran 2000).

Agreement Concerning Certain Aspects of Cooperation in the Area of Fisheries

This agreement is specific to managing fish stocks shared by Russia, Iceland and Norway in the Barents Sea (Figure 2d). The agreement facilitates the use of a TAC to manage cod, capelin, haddock, tusk, ling and blue ling and the bycatch associated with these fisheries. The Agreement allows Iceland to access these stocks in the EEZ of Norway and Russia in exchange for ceasing to fish in the Barents High Sea area ("Loop Hole" or "Grey Zone"). This agreement allows Norway and Russia to also manage other countries who want to access fish stocks in the Barents Sea (Table 3h).

The Agreement will soon come into force once all three parties have finalized their domestic arrangements to accommodate the agreement. The scoring criteria developed for this instrument can also be applied to previous instruments, and this was done for the above countries based on their performance under the previous agreement. The compliance scores for Norway and Russia were low because both countries exceeded their TAC and lacked observers (Table 3h). Information on Iceland's activities in relation to this agreement could not be found and requests for information to the Icelandic Fisheries Department did not yield any results.

Norwegian Spring Spawning Herring Stocks Agreement

Five countries (Table 3i) are party to this agreement which manages the Norwegian spring spawning herring in the Norwegian Sea (Figure 2e). The stock is managed using a TAC and quotas across the five contracting parties. Protocols formulated in 1996 and 1997 are used to implement the agreement. There is no organization that oversees this agreement, the TAC and quotas are based on advice from ICES and set at an annual meeting of all parties.

Country compliance for this agreement is based on three criteria; the national quota, logbook system and vessel inspection levels. Using these three criteria there is a high level of compliance among the five contracting parties (Table 3i). The

EU scored the highest (100%) while Iceland and Russia scored the lowest (75%).

Agreement between Iceland, Denmark (with respect to Greenland) and Norway about Capelin in Jan Mayen

This instrument attempts to address the problem of overlapping EEZ's between Norway and Iceland (Figure 2f). Three criteria were used for this instrument: the quota, logbook system and vessel inspection levels (Table 3j). The level of compliance for the three countries varied between 50% (Iceland) and 100% (Norway) with Greenland having a compliance level of 65% (Table 3j).

Convention for the Conservation of Salmon in the North Atlantic (NASCO)

As the name implies this instrument is focused on the management of salmon stocks throughout the North Atlantic (Figure 2g). There are a number of countries who are contracting parties, however, when the secretary of this convention was approached for information to make an assessment, he advised that such information was not available and that activities regarding the precautionary approach were still in the initial stages (Table 3k). Consequently, it was not possible to assess this instrument. Nevertheless, the consensus among scientists indicates that salmon stocks throughout the North Atlantic are at critically low levels, suggesting that either the management measures taken under this instrument have not been effective or the level of compliance with measures taken under this instrument is low.

MARINE WILDLIFE INSTRUMENTS

There are two primary instruments used to manage marine wildlife in the North Atlantic that were assessed as part of this study: the Whaling Convention and ASCOBANS. Canada and Norway have a bilateral agreement in place to set the annual quota for harp and hooded seals, but this does not appear to be actively used since each country sets its quotas independently. There is also a bilateral agreement between Norway and Russia on setting the annual quota of harp and hooded seals, however, little information could be found on the current level of activity within this agreement.

International Whaling Convention (IWC)

Many countries within the study area are signatories to this instrument. The notable exceptions is Canada. Canada left the Convention in 1982 and Iceland left in 1992 but returned in 2001. Overall

compliance was found to be moderate to high among contracting parties with a history of whaling (Table 3l). The UK had the highest compliance level (100%) while Canada was the lowest with 16%. All other countries in the study had compliance levels above 58%. This relatively high level of compliance was also noted by Ausubal and Victor (1992) in their assessment of international environmental instruments.

Agreement on the Conservation of Small Cetaceans in the Baltic and North Seas (ASCOBANS)

This relatively new instrument which was signed in 1992 has been very active in addressing its objective of conserving small cetaceans in the defined area (Figure 2f). Norway and France are the only remaining countries bordering the agreement that have not ratified the agreement. The level of compliance among contracting parties ranged between 46% (Belgium) and 79% (Germany) (Table 3m).

POLLUTION AND BIODIVERSITY

Only two instruments, The Convention for the Protection of Marine Environments of the North Atlantic (OSPAR) and the Convention on Biological Diversity, were identified as having any significant relevance to the *Sea Around Us* project and the North Atlantic (Table 3m and 3n).

Convention on Biological Diversity (CBD)

This global convention has been ratified by all the countries in this study, however, not all countries have ratified the Cartagena Protocol (Table 3n). The Jakarta Mandate within the CBD is the framework for marine and coastal biodiversity conservation to be implemented within each contracting party. The level of implementation of the Jakarta Mandate has been low for the countries in this study (Table 3n). Some countries have submitted their second report to the secretariat for the convention and in this report they indicated that implementation of the work program for marine biodiversity is a medium to high priority but also that resources to implement the work program were limited (see CBD web site for national reports).

Protection of Marine Environments of the North Atlantic (OSPAR)

Although this instrument is focused on the prevention and elimination of pollution in the area of the convention (Figure 2f), Annex V emphasizes the need to conserve and protect ecosystem and biological diversity of marine areas, and is therefore of interest to the SAUP. The convention has

signed a memorandum of understanding with ICES based on their concern over the state of fish stocks in the North Atlantic. The convention has a well defined monitoring and evaluation system in place to assess country compliance with the conventions decisions and recommendations (Table 3o). The level of compliance by contracting parties was high overall with 5 of 11 countries having a score of more than 75%. The lowest compliance score was by France (53%).

OTHER

International Council for the Exploration of the Sea Convention (ICES)

ICES is the oldest recorded regional fishery body and dates back to 1902 (Maguire, *this volume*). It is an intergovernmental marine organisation that undertakes scientific study of the sea (Figure 2i) and its resources and provides management advice as requested by various international commissions, the European Union and national governments. The Council is primarily an advisory body and does not implement any management recommendations. The convention requires each contracting party to provide the Council with information as requested and to assist in carrying out the research programs coordinated by the Council. Recently, the Council has been encouraging contracting parties to take a precautionary approach to fisheries management, and to assist these parties, the Council has attempted to incorporate precautionary principles in both its technical and advisory roles.

According to the Council, compliance with the major provisions of the Convention such as financial contributions is high. Other compliance information, such as timeliness and quality of the information provided, however, was difficult to obtain from the Council and was not published in any of the reports of the Council. The reports of the Council did provide an indication of which countries are active participants in the organization through hosting of meetings, chairing committees etc.

Consequently, the assessment of countries compliance with this instrument was based primarily on a country's level of participation in ICES and its application of the precautionary approach in accordance with ICES CM1997/Assess 7 (Table 3p). Based on these criteria compliance ranged from 0% for Russia to 100% for the United States. The average level of national compliance was 50% (Table 3p).

Discussion

The most startling fact revealed by this study is that high compliance does not necessarily equate

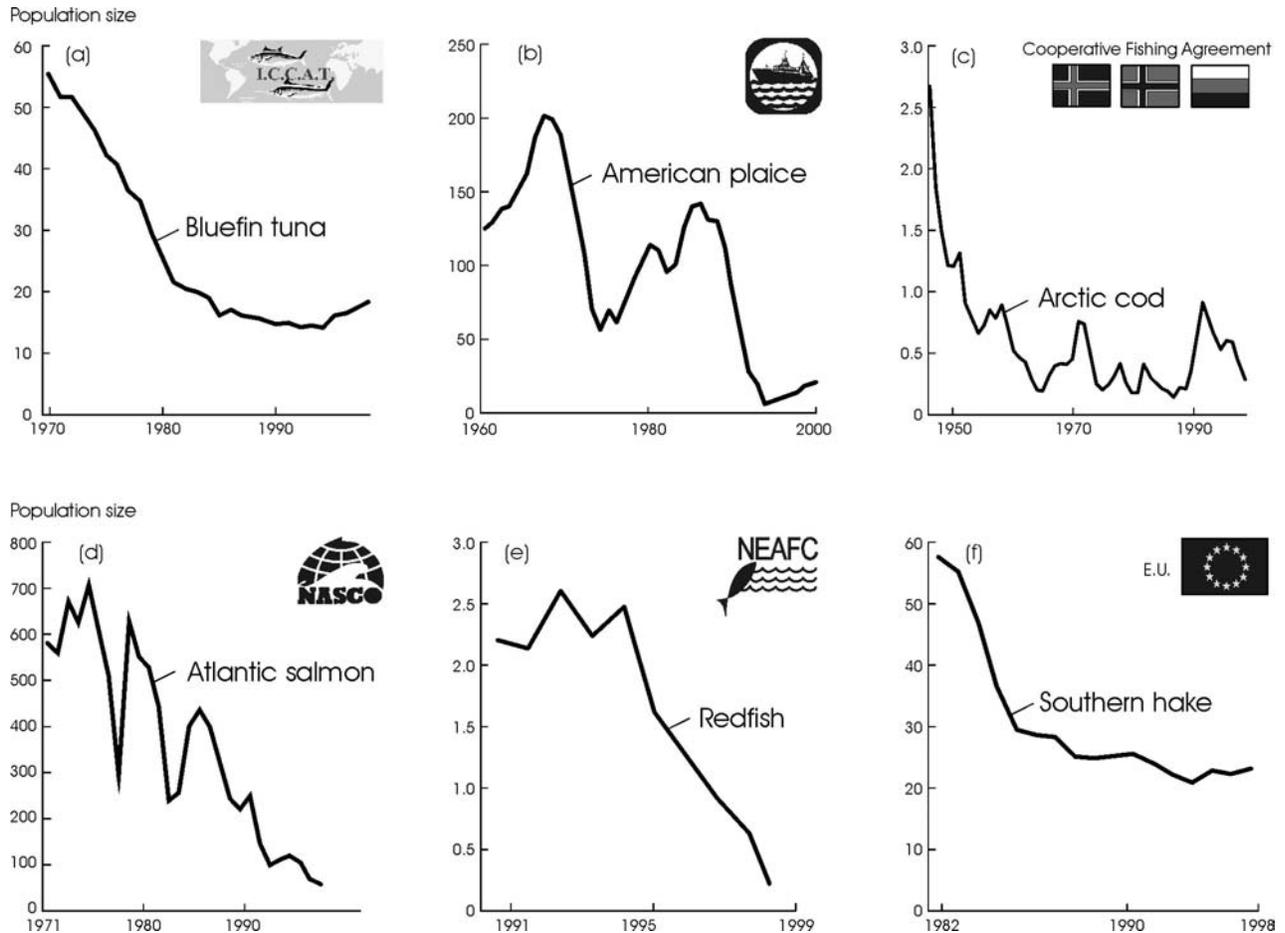


Fig. 3. Time series of the abundance of some species under the care of six international bodies tasked with managing North Atlantic fisheries: (a) Western Atlantic Bluefin tuna (*Thynnus thunnus*), managed under the International Commission for the Conservation of Atlantic Tuna (ICCAT); (b) American plaice (*Hippoglossoides platessoides*) in Division 3LNO of the North Atlantic Fisheries Organization (NAFO); (c) Arctic cod (*Boreogadus saida*), managed under a 'Cooperative Fishing Agreement' between Iceland, Norway and Russia; (d) Atlantic salmon (*Salmo salar*) in areas 1SW & 2SW of the North Atlantic Salmon Conservation Organisation (NASCO); (e) Atlantic red fish (*Sebastes mentella*), managed under the North East Atlantic Fisheries Commission (NEAFC); (f) Southern hake (*Merluccius merluccius*) in Divisions VII & IXa of the International Council for the Exploration of the Sea (ICES), and managed under the Common Fisheries Policy of the European Union.

to sustainable fisheries management. Many of the stocks that are managed under the various instruments assessed are still overexploited, considered under threat or collapsed despite high compliance levels (Figures 3a to 3f). The status of many of the tuna stocks (Figure 3a) in the North Atlantic along with cod stocks (Figure 3c) and salmon stocks (Figure 3d) are a clear contrast to the compliance levels that this study has described. There are a number of reasons for this contrast: countries are reluctant to reduce their share of the resource, lack of reliable information, considerable uncertainty associated with the information that is currently available, and limits in the methods used in stock assessments and catch allocations. Many conventions are heeding the advice of ICES and conservation groups in a precautionary approach; however, it appears that an even more conservative, more cautious, approach is needed for most stocks in the North At-

lantic.

The scores also reveal a North-South gradient of compliance, with countries in the north generally exhibiting a higher level of compliance than those in the south for the different instruments and well as the national average. The northern countries of Faroe Islands, Norway and Greenland had the highest overall scores (69%), they were followed by Canada, Denmark, Germany, Iceland, Netherlands, the United Kingdom and the United States with average scores of above 60%. Spain, Portugal, Ireland and Russia had average scores between 50% and 60%, and Belgium (48%) and Morocco (27%) were below the 50% mark (Table 2).

Spain is often given as an example of a country that does not respect, or abuses, international fishing agreements, and for a number of instruments in this study Spain's level of compliance is

relatively low. However, it should be noted that countries such as France and Portugal can be just as reluctant to comply. Often these countries scored low because they fail to provide the necessary information needed for management rather than exceed the quotas that had been set. This may be due to the structures, with the national fisheries agencies not efficient or effective in collecting and disseminating catch and effort information. There is a perceived lack of understanding amongst fisheries managers on the importance of forwarding this information or there is a reluctance to collect this information for fear of it being used to further reduce access to the resources. Nevertheless, it is important that the information collection and dissemination components of these instruments be strengthened for a number of instruments.

This study involved a thorough search and review of a number of instruments, reports on the Common Fisheries Policy raise serious concerns about the effectiveness of this policy. One report indicated that several stocks are either depleted, overfished or both (Anon. 2000), and several reports indicate that countries are reluctant to reduce their quota and therefore their share of the resource, despite calls by ICES and conservation groups to do so. Considerable research and debate amongst managers occurs before the final decision is made. The consistent disregard of the advice combined with limited enforcement of the policy makes the CFP of limited effectiveness. The Common Fisheries Policy is scheduled for review in 2002 and this presents an opportune time for conservation groups to lobby for more realistic quotas and in some cases moratoriums to be set for the survival of many fish stocks in the North Atlantic.

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Tables 3a to 3p follow.

Table 3a. Features, Scoring Criteria and Scores for the Instrument: **United Nations Convention on Law of the Sea.**
Acronym: LOSC Signed: 10th December, 1982. Ratified: 16th November, 1994.

Description	The codification of a universally accepted regime for fisheries regulation as a part of the codification of the law of the sea. The Convention deals with a comprehensive range of subjects contained in 320 articles and nine annexes. Specifically with regard to marine capture fisheries, the Convention deals with the exclusive economic zone (EEZ), the rights and jurisdiction of the coastal state, conservation and management of the living resources of the high seas, maximum sustainable yield (MSY), optimum utilization, and the establishment of regional fishery bodies (RFBs) for transboundary and highly migratory stocks.
Relevance SAUP	The 1982 Convention remains the parent Convention of all International Fishery Instruments. The core provisions of the fisheries regime are contained in its Part V provisions dealing with the Exclusive Economic Zone (i.e. Articles 55-75). In addition, Article 87 recognises freedom of high seas fishing and Articles 116-120 describe the status of high seas fisheries. Articles 61 and 119 of the Convention provide for cooperation in fisheries management through competent sub-regional, regional or global organisations. To that extent, the SAUP Evaluation of North Atlantic Marine Ecosystems complies with regional cooperation requirements.
Major Provisions	In exercising EEZ rights and duties, state parties shall have due regard to the rights and duties of other states. (Article 56) Coastal state is responsible for determining allowable catch of living resources within its EEZ in accordance with “proper conservation and management measures.” (Article 62) Coastal state shall promote the objective of optimum utilization of living resources within the EEZ. (Article 62) Coastal state and states fishing for trans-boundary stocks are required to seek to agree upon measures necessary for conservation of stocks in the EEZ adjacent area. (Article 63) Coastal state shall cooperate to ensure conservation and optimum utilization of highly migratory stocks “throughout the region, both within and beyond the exclusive economic zone.” (Article 64) States to cooperate with a view to the conservation of marine mammals within the EEZ and in the high seas, and in the case of cetaceans, to work through appropriate international organisations for their conservation, management and study. (Article 65 and 120) All states have the duty to take, or to cooperate with other States in taking, such measures for their respective nationals as may be necessary for the conservation of the living resources of the high seas. (Articles 117 and 118) In determining the high seas allowable catch, and for establishing conservation measures, states shall take measures designed on the best scientific evidence available, to maintain or restore populations of harvested species at levels which can produce the MSY, as qualified by environmental and economic factors. States shall also take into consideration the effects on species associated with or dependent upon harvested species. Available scientific information, catch and effort statistics, and other data relevant to the conservation of fish stocks, shall be contributed and exchanged on a regular basis through competent fishery organisations. (Article 119)
Significant Programs, Decisions and Recommendations	Since the ratification of the LOSC two subsequent and significant agreements have been introduced: the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and the; Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas. These two documents are the mechanisms for implementing the major fisheries articles (Articles 61 to 65, and 116 to 120) contained within LOSC.

Criteria	Provision/Decision/Program	Criteria	Max. Score
1	Signature/Ratification including declarations made at signing or ratification	0 not signed; 1 has signed with Declaration; 2 has signed without Declaration; 3 has ratified with Declaration; 4 has ratified without Declaration	4
2	Implementation of Convention Requirements	0 no activity; 1 partial activity; 2 full activity	2
3	Implementation of Part XI of the Convention	0 not signed; 1 has signed with Declaration; 2 has signed without Declaration; 3 has ratified with Declaration; 4 has ratified without Declaration	4
TOTAL			10

Criteria	BEL	CAN	DMK*	FGR	FRA	ICE	IRE	MOR	NED	NOR	RUS	POR	SPA	UK	USA	EC
1	3	2	2	3	3	3	3	2	3	3	3	3	3	3	0	3
2	2	1	2	2	2	1	2	.5	2	2	1	2	2	2	.5	2
3	4	2	2	4	4	4	4	2	4	4	4	4	4	4	2	4
Total	9	5	5	9	9	9	9	4.5	9	9	8	9	9	9	2.5	9
%Score	90	50	60	90	90	80	90	45	90	90	80	90	90	90	25	90

* Greenland and Faroe Islands under Denmark

Table 3b. Features, Scoring Criteria and Scores for the Instrument: Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas.Acronym: Compliance Agreement. Signed: 24th November, 1993. Ratified: 18 states out of 25.

Description	An international agreement arising out of Declaration of Cancun (1992), and Agenda 21 of UNCED (1992) for states to take effective action, consistent with international law, to deter the practice of reflagging of vessels as a means of avoiding compliance with applicable conservation and management rules for fishing activities on the high seas. Accordingly, the Compliance Agreement was negotiated under the FAO Constitution, and adopted by the FAO Conference on 24th November, 1993. The Compliance Agreement will enter into force when 25 instruments of acceptance have been deposited with FAO.
Relevance SAUP	The international legal regime for marine fisheries cannot operate effectively if fishing vessels are permitted to reflag to a flag state of convenience to escape the applicable conservation and management measures of high seas fishing.
Major Provisions	Flag States to take the necessary measures to ensure that fishing vessels entitled to fly its flag do not engage in any activity that undermines the effectiveness of international conservation and management measures.(Article III) Parties to maintain a record of fishing vessels. (Article IV) Exchange of information with FAO. (Article VI) Parties shall cooperate with Developing Countries at global, regional, sub-regional, or bilateral levels. (Article VII)
Significant Programs, Decisions and Recommendations	This agreement has not been ratified yet, however, countries and regional fisheries bodies recognise the agreement. These countries and RFB are incorporating the provisions of the agreement in their operations (see current NEAFC Scheme and “Agreed Record of Conclusions of Fisheries Consultations on the Management of Norwegian Spring Spawning Herring (Atlanto Scandian Herring) Stock in the Northeast Atlantic for 1997”)

Criteria	Provision/Decision/Program	Criteria	Max.Score
1	Instrument of Acceptance	0 Not Lodged;	1
		1 Lodged	
2	Implementation of the Agreement	0 No Implementation / No response;	2
		1 Partial Implementation;	
		2 Full Implementation	
TOTAL			3

Criteria	BEL	CAN	DMK	FGR	FRA	ICE	IRE	MOR	NED	NOR	POR	RUS	SPA	UK	USA
1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1
2	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0
Total	1	1	3	1	1	1	1	0	1	3	1	0	1	1	1
%Score	33	33	100	33	33	33	33	0	33	33	33	0	33	33	33

Table 3c. Features, Scoring Criteria and Scores for the Instrument: **Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks.**

Acronym: Fish Stocks Agreement. Signed: 4th December, 1995. Ratified: 30 days after the 30th instrument of ratification or accession deposited. At March 2001, 27 instruments ratified.

Description	An intergovernmental agreement called for at the United Nations Conference on Environment and Development to elaborate on, and provide guidance for, the implementation of the LOSC fisheries regime for straddling fish stocks and highly migratory fish stocks.
Relevance SAUP	Despite the LOSC's central principle of conservation, by the time the Convention came into force in 1994, over 70% of the world's marine capture fisheries were fully exploited, over-exploited or in a state of recovery. The over-fishing crisis is particularly problematic with regard to high seas fish stocks, straddling fish stocks, and highly migratory fish stocks where the LOSC provides an inadequate legal and management regime. The Fish Stocks Agreement is an intergovernmental legal agreement constructed under UN auspices and subsidiary to its parent treaty – the LOSC. It represents the most significant development in international fisheries law since the creation of the LOSC.
Major Provisions	<ul style="list-style-type: none"> • Provides the first treaty definition of the terms “conservation and management” as meaning “measures to conserve and manage one or more species of living marine resources that are adopted and applied consistent with the relevant rules of international law as reflected in the Convention and this Agreement.” • A mandate for coastal states and distant water fishing states to cooperate to achieve compatibility of conservation and management, including a framework on how this is best to be achieved. (Article 7) • Describes a number of specific ways by which the “duty to cooperate” can be effectuated. (Article 5) • Endorses the Precautionary Approach and provides examples on how it can be applied. (Article 6) represents a significant departure from the LOSC recognition of maximum sustainable yield. • Provides measures to be taken by coastal states and states which fish the high seas to facilitate cooperation between the parties including the establishment of regional fishery bodies and arrangements. Where a competent regional fishery body exists, States should either become members of the body, or they should agree to apply the relevant RFBs conservation and management measures. In recognition of the Northwest Atlantic Fisheries Organization (NAFO) that had effectively closed membership to new entrants, the Agreement includes the provision that membership of relevant RFBs was open to States having a “real interest” in the fisheries concerned. The term “real interest” is not defined.(Article 8) • Strengthens arrangements for sharing of information and cooperation in scientific research. (Article 14) • Provides for the peaceful settlement of disputes and makes them apply mutatis mutandis with respect to any dispute between States Parties to the Agreement, whether they are parties to the LOSC or not. (Part VIII) • States are not permitted to authorise the use of their flag to vessels fishing on the high seas unless they are able to effectively exercise responsibility over such vessels for the purpose of the LOSC and the Fish Stocks Agreement. (Article 18) • The flag state must ensure compliance by its vessels with regional conservation and management measures. (Article 19) • A state that is party to the Agreement, and a member of a relevant regional fishery body, has the right to board and inspect fishing vessels of another state party in order to ensure compliance with conservation and management measures, even where the flag state is not a member of the regional fishery body. (Article 21) • When a fishing vessel is voluntarily in a port, the port state may inspect documents, fishing gear, and any catch on board the vessel in order to ensure compliance with subregional, regional and global conservation and management measures. (Article 23)
Significant Programs, Decisions and Recommendations	This agreement has not been ratified yet, however, some countries that have signed up and other regional fisheries bodies recognise the agreement. These countries and RFB are incorporating provisions such as developing agreements for fishing straddling stocks (see “Agreement Concerning Certain Aspects of Cooperation in the Area of Fisheries”), using the precautionary approach and developing monitoring, control and surveillance systems to ensure compliance by vessels under their flag.

Criteria	Provision/Decision/Program	Criteria	Max. Score
1	Status of Signature/Ratification	0 has not signed; 1 has signed; 2 has ratified	2
2	Implementation of Convention Provisions	0 no activity / no response to questionnaire; 1 partial activity; 2 full activity	2
TOTAL			4

Criteria	BEL	CAN	DMK	FGR	FRA	ICE	IRE	MOR	NED	NOR	POR	RUS	SPA	UK	USA
1	1	2	1	1	1	2	1	1	1	2	1	2	1	1	2
2	0	2	0	0	0	2	0	0	0	2	0	0	0	0	2
Total	1	4	1	1	1	4	1	1	1	4	1	2	1	1	4
%Score	25	100	25	25	25	25	25	25	25	100	25	50	25	25	100

Denmark has concluded the internal ratification process, but as a member of the European Union (EU) Denmark will deposit the ratification instrument simultaneously with the EU as the competence of the agreement is mixed between the EU and its member states.

Table 3d. Features, Scoring Criteria and Scores for the Instrument: International Convention for the Conservation of Atlantic Tunas

Acronym: ICCAT Signed: 14-May-66 Ratified: 21-Mar-69.

Description	The Convention objectives are to maintain or restore populations of tuna in the Atlantic Ocean. The Convention also undertakes research in tuna and tuna-like fishes (the Scombriformes with the exception of the families Trichiuridae and Gempylidae and the genus Scomber) and other species of fishes exploited in tuna fishing in the Convention area as are not under investigation by another international fishery organization.
Relevance SAUP	The ICCAT Commission has the authority to recommend management actions to sustain or restore populations. These recommendations are binding for all members of the Convention. There is a Compliance Committee that monitors compliance with recommendations by member states. Current recommended management measures are primarily geographically based quotas for each species and minimum size limits for tunas and tuna-like species. Recent actions by the Commission to encourage members and nonmember to comply with these measures include the boycotting of tuna products from countries that disregard the Commission's recommendations. This Commission has the potential to effectively manage a number of fisheries in international waters of the North Atlantic.
Major Provisions	<ul style="list-style-type: none"> • The Contracting Parties hereby agree to establish and maintain a Commission to be known as the International Commission for the Conservation of Atlantic Tunas. • The Contracting Parties agree to take all action necessary to ensure the enforcement of this Convention and to transmit to the Commission, biennially or as required, a statement of the action taken by it for these purposes. • Each recommendation made by the Commission shall become effective for all Contracting Parties six months after the date of notification. • The Contracting Parties will provide any available statistical, biological and other scientific information the Commission may need for the purposes of the Convention. • Contracting Parties are to collaborate with each other implement effective measures to ensure the Convention is implemented and in particular to set up a system of international enforcement in the Convention area except the territorial sea and other waters of a State is entitled under international law to exercise jurisdiction over fisheries. • Each Contracting Party shall contribute annually to the budget of the Commission.
Significant Programs, Decisions and Recommendations	<p>Madrid Protocol was introduced in 1992 to reduce the financial burden on less developed countries. This protocol requires additional signatures before it can be ratified.</p> <p>A number of recommendations are current within the Convention, the most recent that are of interest to the SAUP are:</p> <ul style="list-style-type: none"> • 98-16 Bigeye Rebuilding Plan ; 98-4 Closures for North and South Atlantic Swordfish to be identified by 2002; 98-2 Rebuilding of North Atlantic Swordfish by setting a TAC for 2000, 2001 and 2002 that would reduce individual quotas for each Contracting Party; 98-7 Establish Rebuilding Program for Western Atlantic Bluefin with current TAC (including discards) used for the next 10 years or until scientific evidence indicates otherwise. A size restriction of 30 kg or 115 cm will also be imposed; 98-5 Catch Limits in East Atlantic and Mediterrean Bluefin set for TAC for 2000; 98-4 Amending 2 Bluefin minimum size of 3.2 kg; 98-10 Catch Limits for Year 2000 set at 1999 level for blue and white marlin. • 97-6 Supplemental Catch Quota for North Atlantic Swordfish set the quota for 1998 and 1999; 97-2 Under-sized Bluefin limit of 1.8 kg. • 96-3 Minimum Size Bluefin limit of 1.8 kg. • Possible Management Measaures for North Atlantic Albacore focusing on reducing fishing capacity.

Criteria	Provision/Decision/Program	Criteria	Max. Score
1	Vessel Monitoring	0 none or no information provided; 1 partial; 2 full	2
2	Observer Program (Bigeye and Yellowfin)	0 none; 1 partial; 2 full	2
3	Catch Limits Exceeded in North Atlantic for 1998	0 more than 1% of quota or no information provided; 1 less than 1% of the quota; 2 met quota; 3 below by more than 1% of quota	3
4	1998 Catch Limits Exceeded for E. Bluefin or W. Bluefin (single score for EU given therefore all EU countries score the same)	0 more than 1% of quota or no information provided; 1 less than 1% of the quota; 2 met quota; 3 below by more than 1% of quota	3
5	Compliance with minimum size (based on average score for relevant species and Raymakers & Lynham 1999 report)	0 exceeded or no data provided; 1 not exceeded but no data provided; 2 not exceeded and data provided	2

Criteria	CAN	FR	IRE	MOR	POR	SPA	UK	USA
1	2.0	1.0	1.0	0.0	1.0	1.0	1.0	1.5
2	2.0	0.5	1.0	0.0	0.5	0.5	1.0	2.0
3	3.0	0.0	1.0	3.0	2.0	0.0	0.0	3.0
4	2.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0
5	1.0	0.0	0.3	0.0	0.3	0.0	0.3	1.5
Total	10.0	4.5	6.3	3.0	6.8	4.5	5.3	11.0
%Score	83.3	37.5	52.1	25.0	56.3	37.5	43.8	91.7

Table 3e: Features, Scoring Criteria and Scores for the Instrument: Convention on Future Multilateral Co-operation in North-east Atlantic Fisheries *. Acronym: NEAFC Signed: 18 November 1980. Ratified: 17 March 1982

Description	The Convention applies to all fishery resources of the Northeast Atlantic, except marine mammals, sedentary species and, insofar as they are dealt with by other international agreements, highly migratory species and anadromous stocks. The Convention established the North-East Atlantic Fisheries Commission, which is charged with performing its functions "in the interests of the conservation and optimum utilization of the fishery resources of the Convention area. The Convention applies to the Northeast Atlantic, including dependent seas, but not the Baltic Sea and the Belts or the Mediterranean Sea and its dependent seas
Relevance to SAUP	NEAFC is the primary fisheries treaty for the region. There are specific conservation and management measures for key species: Blue Whiting, Oceanic-type Redfish, Norwegian Spring Spawning (Atlanto-Scandian) Herring and Mackerel.
Major Provisions	<ul style="list-style-type: none"> • The North-East Atlantic Fisheries Commission may adopt recommendations concerning measures of control and providing for the collection of information relating to fisheries conducted beyond the national jurisdiction of member countries. The Commission may also adopt recommendations concerning fisheries conducted within the national jurisdiction of a contracting party, but only if the contracting party in question specifically requests and approves the recommendation. • Any Contracting Party can object to recommendations made by the Commission. In doing so, the Contracting Party is not bound to that recommendation. • In exercising its power, the Commission must ensure consistency between: (a) any recommendation that applies to a stock or group of stocks occurring both within the national jurisdiction of a contracting party and beyond, or any recommendation that would have an effect, because of species interrelationship, on a stock or group of stocks occurring in whole or in part within national jurisdiction of a contracting party; and (b) any measures or decisions by such contracting party for the management and conservation of that stock or group of stocks concerning fisheries conducted within the Party's national jurisdiction. • NEAFC is empowered to recommend a wide variety of conservation and management measures, although it has yet to: <ul style="list-style-type: none"> (a) regulation of fishing gear and appliances, including the size of mesh of fishing nets; (b) regulation of the size limits of fish that may be retained on board vessels, or landed or exposed or offered for sale; (c) establishment of closed seasons and of closed areas; (d) improvement and increase of fishery resources, which may include artificial propagation, the transplantation of organisms and the transplantation of young. • Recently it has: <ul style="list-style-type: none"> (a) establishment of total allowable catches and their allocation to Parties; and (b) regulation of the amount of fishing effort and its allocation to Parties. • The responsibility for enforcing management measures adopted under NEAFC rests with the Parties, which are required to take such action, including the imposition of adequate sanctions for infractions, as may be necessary to implement any recommendations adopted by the Commission. In 1999, however, a Scheme of Joint International Inspection and Surveillance was adopted, which closely followed the models provided by the UN Fish Stocks Agreement and NAFO.
Significant Programs, Decisions and Recommendations	There are two major schemes: Control and enforcement in respect of fishing vessels fishing in areas beyond the limits of national fisheries jurisdiction in the convention area (which came into force 1 July 1999) Scheme promote compliance by non-contracting party vessels with recommendations established by NEAFC Since 1998 NEAFC has produced annual reports on the implementation of these Schemas.

Criteria	Provision/Decision/Program	Criteria	Max. Score
1	Information on Vessels Entering/Exiting Regulatory Area Received?	0=never; 1=irregular; 2=fully automated	2
2	Information on Vessels Position on Regulatory Area Received?	0=never; 1>manual; 2=fully automated	2
3	Logbook System 0= no logbook system.	0=no system; 1=NEAFC standards met	1
4	VMS system?	0=only has manual system; 1=not all boats automated; 2=fully automated	2
5	TAC of Redfish, Norwegian Spring Spawning herring, Blue Whiting, Mackerel exceed?	0=quota exceeded for any of the above; 1=quota met for all of the above or objected to quota of any of the above; 2=catch below quota for all 4 fish	2
TOTAL			9

Criteria	EC	FI	GL	ICE	NOR	RUS	
1	1	2	1	2	2	2	*Assessment of this treaty has proven difficult. It has been hard to obtain meaningful information from the Convention's internet site, and lack of response to email requests to its Secretariat ¹¹ . When emails have been followed up, limited information has been provided by the Secretariat. In addition, the Commission's annual reports do not make country by country evaluations of contributions to the Convention and the Secretariat refused to give information on EU countries on a country by country basis.
2	2	2	2	2	2	2	
3	1	1	1	1	1	1	
4	2	2	2	2	2	2	
5	1	1	1	1	1	1	
Total	7	8	7	8	8	8	
%Score	78	89	78	89	89	89	

¹¹ North East Atlantic Fisheries Commission (NEAFC); 22 Berners Street, London W1P 4DY UK; Tel: +44 (0)20 7631 0016 Fax: +44

Table 3f. Features, Scoring Criteria and Scores for the Instrument: Convention on Future Multilateral Co-operation in Northwest Atlantic Fisheries. Acronym: NAFO. Signed: 24 Oct 1978. Ratified: 1 Jan 1979

Description	<p>This Convention, establishing the Northwest Atlantic Fisheries Organization (NAFO), replaced the 1949 International Convention for the Northwest Atlantic Fisheries and the International Commission for the Northwest Atlantic Fisheries (ICNAF). The prime objective of NAFO is to contribute through consultation and cooperation to the optimum utilization, rational management and conservation of the fishery resources of the Convention Area. NAFO promotes contemporary ideas for international collaboration in the high seas based on the scientific research fundamentals. NAFO is an international organization whose object shall be to contribute through consultation and cooperation to the optimum utilization, rational management and conservation of the fishery resources of the Convention Area. NAFO consists of: a General Council, a Scientific Council, a Fisheries Commission and a Secretariat. The Convention applies to all fishery resources of the Convention Area, with the following exceptions: salmon, tunas and marlins, cetacean stocks managed by the International Whaling Commission or any successor organization, and sedentary species of the Continental Shelf, i.e., organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil. In addition to fisheries management issues of the Parties, a NAFO Standing Committee: Fishing Activities on non-Contracting Parties in the Regulatory Area (STACFAC):</p> <p>a) obtains and compiles all available information on fishing activities of non-Contracting Parties in the Regulatory Area;</p> <p>b) obtains and compiles all available information on landings, and transshipments of fish caught in the Regulatory Area by non-Contracting Parties;</p> <p>c) examines and assesses all options open to NAFO Contracting Parties including measures to control imports of fish caught by non-members and to prevent reflagging of fishing vessels to fish under flags on non-Contracting Parties; and</p> <p>d) recommends measures to resolve the problem</p>
Relevance to SAUP	<p>NAFO is the primary fisheries treaty for the Regulatory Area, it is used to manage many of the ground fisheries in that area. The Organisation also coordinates with adjacent states in the management of shared stocks.</p>
Major Provisions	<p>The convention applies to all fishery resources in the regulatory area excluding salmon, tunas, marlin, cetacean stocks managed by the International Whaling Commission and sedentary species. Currently 25 fish stocks are managed by the convention.</p> <p>The international organization Northwest Atlantic Fisheries Organization is established to implement the convention and to coordinate actions by the contracting party in implementing the convention and its recommendations as well as establishing a Scientific Council.</p> <p>The Scientific Council undertakes stock assessments, coordinates research and communicates the research results to the Convention. The Scientific Council has a similar role to ICES in the Northeast Atlantic.</p> <p>Each Contracting Party is to provide statistical and scientific advice as requested by the General Council.</p> <p>Any country can object to a proposal or recommendation and therefore not be bound to that recommendation.</p>
Significant Programs, Decisions and Recommendations	<p>The current scheme includes a comprehensive monitoring, control and surveillance that includes the use of VMS, logbooks, hailing, onboard and port inspections and air surveillance.</p> <p>Each year stocks are reviewed and quotas are set for the various stocks.</p> <p>The precautionary Approach is in the development stage within the Convention with three stocks currently used as case studies.</p> <p>Quotas can also be further controlled by gear restrictions and minimum size requirements for specific species.</p> <p>The Convention has a program to address the problem of Non Contracting Parties fishing in the Regulatory area which includes onboard and port inspections, and landing and transshipment restrictions if NCP have breached NAFO recommendations and rules. Diplomatic demarches have already been written to Belize, Honduras, Sao Trome and Sierra Leone protesting ships fishing in the Regulatory Area.</p>

Criteria	Provision/Decision/Program	Criteria	Max. Score
1	Submission of information to assist in stock assessments etc.	0=never ; 1=irregular or incomplete; 2=regular and complete	2
2	Commission receives monthly data reports?	0=no reporting; 1=irregular or ad hoc reporting; 2=full reporting	2
3	The level of implementation of a VMS system.	0=not established; 1=partly established; 2=fully operational with all appropriate vessels fitted with equipment	2
4	Surveillance & inspections activities	0=no activity; 1=less than 1% of vessel trips observed or inspected; 2=more than 1% but less than 5%; 3=more than 5%	3
5	Compliance with quotas for Redfish, Yellowtail Flounder, Shrimp and Greenland Halibut	0=quota exceeded or no information provided; 1=quota met for 4 fisheries; 2=catch below quota for all 4 fisheries	2
TOTAL			11

Criteria	CAN	DMK (FI)	DMK (GL)	FGR	ICE	NOR	POR	RUS	SPA	UK	USA
1	2	1	2	1	2	1	2	2	2	1	1.5*
2	2	2	2	0	2	2	2	2	2	0	2
3	1	1	1	1	1	1	1	1	1	1	1
4	2	2	2	2	2	2	2	2	2	2	2
5	1.75	1.5	1.5	1	1	1	1.25	1.7	1.25	NA	1
Total	8.75	7.5	8.5	5	8	7	8.25	8.7	8.25	4	7.5
%Score	80	69	77	46	73	64	75	79	75	44	68

* adjusted based on NAFO annual financial and administration report (see Statistical Section)

Table 3g. Features, Scoring Criteria and Scores for the Instrument t: **Common Fisheries Policy**
Acronym: CFP Initiated: 1970. Full Agreement (re stock conservation): 1982

Description	The CFP provides common system for management of fish stocks in EC waters through the cooperation of Member states. The 1992 CFP 10 year-review resulted in the formulation of 4 long term objectives: Sustainable fishing; Avoidance of undesirable side effects on fishing communities that rely on fishing; Stable supplies at reasonable prices Contribution to economic and social cohesion in the context of the single European market; And three short-term objectives: Reduce fishing levels to be consistent with sustainability Reduce fleet sizes to be consistent with those permissible by the requirement of sustainability Reduced employment in the fishing sector and to provide alternative work in areas dependent on fishing (Rodgers and Valatin 1997); The CFP appears to be of limited effectiveness with approximately 67% of their stocks overfished, 50% depleted, and 37% overfished and depleted (CEC 2000). The CFP is scheduled for a major review in 2002; current objectives and programs may change to halt this deterioration of fish resources.
Relevance SAUP	The CFP is the primary instrument for managing fisheries within each Member State's waters, especially inshore fisheries and on the continental shelves. The CFP considers the EEZ as a unified one, it also allows Member States to fish in each others territorial waters either through historical access rights or through fishing licences. The CFP sets a TAC for the major species which is then distributed in the form of a quota to each Member State. Access with the territorial limits (6 or 12 miles) is reserved for fishers of the coastal state or those who have historical access rights. The coastal state can also use national legislation to conserve and manage stocks in addition to EC measures, however, the measures only apply to fishers of the member states. Outside this limit Member States have access based on the TAC and quotas.
Major Provisions	There are four major components or provisions that are used to meet its objectives: Structures – initially to strengthen the fishing capacity of Member States, now a Multi Annual Guidance Program is used to reduce the fleet size and effort to conserve stocks; Markets – to provide a system of market support including subsidies for products, both import and export; External fisheries – to negotiate on behalf of Member States for access rights for EC vessel to fish in the waters of non-EC countries; Conservation – to introduce measures, primarily TAC and quota management system, to conserve and rebuild fish stocks in EC waters. These components are implemented through legislation and regulation, financial assistance, observer programs, monitoring (on and off-shore).
Significant Programs, Decisions and Regulations	MAGP4 – this the fourth program. MGP3 was aimed at reducing the fleet size in each country, the size of the fleets were reduced, however, there was very little reduction in effort and in some cases fishing efficiency increased (technical creep (WWF 2001)). The current MAGP seeks to do both reduce the size of the fleet and effort. The EC has established the PESCA fund to assist in retraining and re-employment of labour displaced by the fleet reduction program. TAC & quota – the TACs among member states is allocated by historic exploitation rates. Each year 103 TACs with sufficient data for only 39 are set. These 39 are 'analytical' TACs and the remainder are 'precautionary' TACs (Karagiannakos 1996). Despite call from ICES to further reduce the quotas, member states are unwilling to reduce the quota and continue to extract fisheries resources. Therefore countries that fish at high levels (i.e. high catch rates) negligent in their responsibility to sustainably use the resources. Those that fish over their quota are negligent and not complying with this component of the CFP. Market Policy seeks to stabilise the market and supplies for fish as well as keeping process reasonable (Rodgers and Valatin 1997). Subsidies are included in this policy, however, they are not a major component of the subsidies provided by the EC. Subsidies – the EC subsidies to the fishing industry was US\$1.4 billion (OECD 2000 in Coffey and Cator 2000). The subsidies include structural adjustments to the fishing fleet, marketing and processing. The subsidies are funded through the EC budget, national budgets and private funding. The largest current single subsidies are to the Spanish Fleet that had access to fisheries in Moroccan waters but lost that right recently and cannot fish in EU waters. VMS and logbooks - these measures were introduced recently for some fisheries to reduce overfishing and fraud violations. Vessels over 24 m must carry a vessel monitoring system (VMS), vessels over 10 m must record all fishing operations in a logbook and species landed in a landing declaration. There are EU inspectors who monitor surveillance and enforcement activities of member states, however this is limited since there is one vessel and few inspectors (Long & Curran 2000). The system, however, effectiveness and fairness in applying EC regulations is not consistent throughout the Community (National Strategy Review Group on Commons Fisheries Policy 2000).

Criteria	Provision/Decision/Program	Criteria	Max.Score
1	Contribution of activity reduction to the overall targets of the MAGP4, average of capacity and activity (CEC 2000)	0 no contribution; 1 less than 5%; 2 5 to 10%; 3 greater than 10%	3
2a	Level of adjusted catches in North Sea, Skagerrak and Kattegat (based on Watson & Pauly 2001) < if stocks in this area are so depleted then countries that take a considerable share of the catch are not contributing to sustainability of the stocks which is a major objective of the CFP irrespective of the TAC and quota >	0 greater than 1 million (metric ton); 1 100,000 to 1 million; 2 10,000 to 100,000; 3 less than 10,000	3
2b	Level of adjusted catches in Norwegian Sea (based on Watson & Pauly 2001)	0 greater than 1 million (metric ton); 1 100,000 to 1 million; 2 10,000 to 100,000; 3 less than 10,000	3
2c	Level of adjusted catches in Community western waters (based on Watson & Pauly 2001)	0 greater than 100,00 (metric ton); 1 10,000 to 100,000; 2 less than 10,000	2
3	Problematic in over-quoting (based on pers comm. EC officer) waiting for further details to provide better differentiation	0 problematic; 1 no problems	1
4	Subsidies to the fishing sector as a % of the total landed value (Sumaila and Monroe 2001)	0 greater than 25%; 1 11 to 25%; 2 1 to 10 %; 3 0%	3
5	Level of violations 1990 to 1996 (based on Long & Curran 2000)	0 more than 10 ; 1 less than 10; 2 less than 5; 3 no violations	3
6	Quota Hopping (based on Long & Curran 2000)	0 more than 100 vessels; 1 less than 100 vessels; 2 no vessels	2
TOTAL			20

Criteria	BEL	DMK	FGR	FR	IRE	NL	POR	SP	UK
1	0	1	3	1	2	3	1	1	2
2a	2	0	1	2	3	1	N/A	N/A	1
2b	N/A	1	1	2	2	1	2	2	1
2c	2	2	2	1	1	1	3	1	1
3	0	0	1	0	0	0	0	0	0
4	2	1	0	1	0	2	1	2	1
5	2	1	2	0	1	2	1	0	1
6	2	2	2	2	2	1	2	0	2
Possible	17	20	20	20	20	20	17	17	20
Total	8	8	12	9	11	11	10	6	9
% Score	47	40	60	45	55	55	59	35	45

Table 3h. Features, Scoring Criteria and Scores for the Instrument: Agreement Concerning Certain Aspects of Cooperation in the Area of Fisheries.

Acronym: Fishing Coop. Signed: 15-May-99. Ratified: Not Yet Ratified

Description	<p>This Agreement specifies the exchange of quotas between Iceland, Norway and Russia. The Agreement places a TAC for cod, capelin, haddock, tusk, ling and blue ling and restricts the bycatch associated with these fisheries. In particular the bycatch for halibut, Greenland halibut and deep sea redfish are specified. Reflagging of vessels in order to avoid the measures contained in the Agreement is considered. Iceland is allowed access to some of the above stocks in the EEZ of Norway and the Russian Federation in exchange for ceasing to fish in the high seas area of the Barents Sea (known as the "Loop Hole" or Grey Zone).</p> <p>This agreement extends three previous agreements between Norway and Russia concerning fisheries in the Barents Sea. These agreements set the yearly TAC for cod, haddock and capelin and regulate the fishing activities of third countries. Under the agreement the cod and haddock TAC is distributed equally (50:50) while capelin is distributed in Norway's favour (60:40).</p> <ul style="list-style-type: none"> • Agreement Concerning Cooperation in the Field of Fisheries Between Norway and USSR (1975), set up the Joint Norwegian-Russian Fisheries Commission and agreed to share responsibility for fish stocks and to cooperate in the management of these stocks. • Agreement Concerning Mutual Fisheries Relations Between Norway and the USSR (1976), recognized each others EEZ; provided for mutual access outside the 12 nautical mile boundary; and set mutual quotas. This agreement is considered more of a political gesture than a management gesture (Floistad, 1991). • The Grey Zone Agreement Between Norway and the USSR (1978), this agreement sought to clarify the ambiguities of the 1975 and 1976 agreements and to introduce regulations regarding the operation of third country vessels that were taking advantage of the disputed "Grey Zone" and thereby fishing outside of the Commissions TAC. Third country vessels were now required to be licensed and to report on their catch on a weekly basis.
Relevance to SAUP	<p>This Agreement has the potential to sustainably manage a number of important fish stocks in one of the most productive marine areas in the North Atlantic. In particular it will assist in managing the fisheries within the Grey Zone which has been out of the Commissions TAC since 1978.</p>
Major Provisions	-
Significant Programs, Decisions and Recommendations	<p>The Agreement Concerning Certain Aspects of Cooperation in the Area of Fisheries will not come into force until all three parties have notified the depositary that their internal arrangements to accommodate the agreement have been made. The criteria has been developed so that once the agreement is in force it can be evaluated. The score for the countries is based on their performance under the previous agreements since most criteria can be applied.</p>
* Notes	<p>The setting of the TAC and other recommendations has been focused on short-term single species decision-making. Multispecies interactions have been discussed with minimal impact on the decisions made (Jakobsen 1999). According to Jakobsen (1991) the Commission will make severe cuts in the TACs to maintain fish stocks.</p>

Criteria	Provision/Decision/Program	Criteria	Max.Score
1	Cod Quota exceeded	0 exceeded quota; 1 met quota; 2 below quota	2
2	Haddock quota exceeded	0 exceeded quota; 1 met quota; 2 below quota	2
3	Capelin quota exceeded	0 exceeded quota; 1 met quota; 2 below quota	2
4	Level of reporting	0 no reporting; 1 ad-hoc or irregular reporting; 2 regular reporting	2
5	Level of observers	0 no observers; 1 low level; 2 med; 3 high level	3
TOTAL			11

Criteria	NOR	RUS
1	2.5	0.5
2	0	1
3	0	1
4	2	2
5	0	0
Total	4.5	4.5
%Score	41	41

Table 3i. Features, Scoring Criteria and Scores for the Instrument: **Agreed Record of Conclusions of Fisheries Consultations on the Management of the Norwegian Spring Spawning Herring (Altanto-Scandian Herring) Stock in the Northeast Atlantic for 1997 (including supplementary agreements).**
Acronym: NSS Herring, Signed and Agreed: 14-Dec-1996

Description	This Agreement is used to manage the Norwegian spring spawning herring in the Norwegian Sea using a TAC and quotas for the 5 countries that are party to the agreement. Iceland, Faroe Islands, European Community, Norway and The Russian Federation have signed the agreement. There is no specific organization to oversee the agreement, meetings are used to negotiate the TAC and quotas based on scientific advice from ICES.
Relevance to SAUP	This Agreement has the potential to sustainably manage herring in the Norwegian Sea one of the most productive marine areas in the North Atlantic.
Major Provisions	The 1997 and 1996 Protocols have a number of provisions that outline how the stock will be managed. These include: <ul style="list-style-type: none"> • Setting the TAC and each country's quota • Specifying areas where each country can fish the quota • Cooperate in inspection and control to ensure compliance with conservation measures • Controlling the reflagging of vessels
Significant Programs, Decisions and Recommendations	1997 and 1996 Protocols that specify how the quota will be distributed between the five Contracting Parties.

Criteria	Provision/Decision/Program	Criteria	Max. Score
1	Herring Quota exceeded	0 exceeded quota; 1 met quota; 2 below quota	2
2	Level of logbook reporting (if it applies)	0 no reporting; 1 ad-hoc or irregular reporting; 2 regular reporting	2
3	Level of inspections of vessels or catches (if it applies)	0 no observers or inspections; 1 low level; 2 med; 3 high level – 5% or more of the vessel trips are either inspected or have observers on board	3
TOTAL			7

Criteria	ICE	FI	EU	NOR	RUS
1	1	1	2	1	1
2	2	2	2	2	2
3	N/A	N/A	N/A	3	N/A
Total	3	3	4	6	3
%Score	75	75	100	86	75

Table 3j. Features, Scoring Criteria and Scores for the Instrument: **Agreement between Iceland, Greenland/Denmark and Norway about the capelin stock in the area between Greenland, Iceland and Jan Mayen.**

Acronym: Capelin Signed: 18-Jun-1998

Description	This Agreement was intended to address the problem of overlapping EEZ's between Norway and Iceland. specifies the allocation of the capelin TAC that is caught in the area of Jan Mayen. The original TAC was allocated with 78% to Iceland and 11% to each of Norway and Greenland. The current allocation of the TAC is 81% to Iceland, 11% to Greenland and 8% to Norway The current agreement is the result of a number of previous agreements (1980 and 1989) that divided the capelin between these countries.
Relevance to SAUP	This Agreement has the potential to sustainably manage capelin fish in one of the most productive marine areas in the North Atlantic.
Major Provisions	Agreement only around Jan Mayen. Excludes Norwegian fishers from exploiting other stocks in Iceland's EEZ
Significant Programs, Decisions and Recommendations	The TAC for capelin is set each year based on advice from ICES.

Criteria	Provision/Decision/Program	Criteria	Max.Score
1	Capelin Quota exceeded	0 exceeded quota; 1 met quota; 2 below quota	2
2	Level of logbook reporting	0 no reporting; 1 ad-hoc or irregular reporting; 2 regular reporting	2
3	Level of observers	0 no observers; 1 low level; 2 med; 3 high level	3
TOTAL			7

Criteria	ICE	GL	NOR
1	0.5*	1.5**	2***
2	2	2	2
3	1	1	3
Total	3.5	4.5	7
% Score	50	64	100

* exceeded quota by 3%; ** quota not reached by 2.5%; *** well below quota 5.4%

Table 3k. Features, Scoring Criteria and Scores for the Instrument: Convention for the Conservation of Salmon in the North Atlantic Ocean

Acronym: NASCO. Signed: 2-Mar-82. Ratified: 1-Oct-83

Description	NASCO aims to promote the conservation, restoration and enhancement and rational management of salmon stocks in the North Atlantic Ocean (north of 36°N) throughout their migratory range through international cooperation. NASCO also promotes the acquisition, analysis and dissemination of scientific information pertaining to salmon stocks in the convention's region.
Relevance to SAUP	NASCO is a region-specific single purpose treaty. As such, its implementation is of interest for the development of similar targeted international instruments.
Major Provisions	Regulatory measures for salmon fisheries under the jurisdiction of Parties are proposed and reported on. Salmon fishing is banned beyond areas of fisheries jurisdiction of Parties, and beyond 12 nautical miles from coastal baselines. Regional Commission areas are established with additional salmon fishery restrictions. Scientific research proposals are development.
Significant Programs, Decisions and Recommendations	Key NASCO Resolutions and Guidelines are: <ul style="list-style-type: none"> • Resolution to Minimise Impacts from Salmon Aquaculture on the Wild Salmon Stocks; (the Oslo Resolution) • Agreement on Implementation of the Oslo Resolution • Agreement on Adoption of a Precautionary Approach • Resolution on Fishing for Salmon on the High Seas • Resolution Concerning Scientific Research Fishing • Minimum Standard for Catch Statistics • Guidelines for Action on Transgenic Salmon

Criteria	Provision/Decision/Program	Criteria	Max.Score
1	Status of ratification	0 not signed; 1 has signed; 2 partially ratified; 3 fully ratified	3
2	Participation in Convention Activities (e.g. leading a study etc.) <based on available annual reports, meeting reports and other recent documents>	0 no activity; 1 attends meeting; 2 lead role	2
3	Degree to which Parties are implementing Article 7 of the Agreement on Adoption of a Precautionary Approach (adopted June 1998)	0 not implementing any measures; 1 implemented 1-4 measures; 2 implemented 4-6 measures; 3 fully implementing all measures	3
4	Parties meet reporting requirements for Minimum standard for catch statistics Adopted June 1993	0 not met; 1 partially met; 2 fully met	2

Following consultation with the Secretary of NASCO it is considered premature to apply relative country ratings to Parties at this stage. There are two linked initiatives planned for June-July 2001 which should allow such rating. First, in the words of the NASCO Secretary¹²:

With regard to the Agreement on Adoption of a Precautionary Approach, it has been used as a basis to develop a decision structure for the management of salmon fisheries and the Parties will be reporting back to the Commissions on actions taken in June and to the Council in June 2002. We have also developed recommendations on application of a Precautionary Approach to salmon habitat protection and restoration which will be considered by the Council in June. Again it is likely that there will in future be reporting by the Parties on actions taken and these reports might then be used as a basis for assessing each Parties commitments.

Once these reporting procedures are in place it might be possible to use the information to assess relative commitment although this would inevitably be subjective and a balanced assessment would require considerable background knowledge of the situation in each country. (email dated 7 March 2001)

¹² Malcolm Windsor, Secretary NASCO, 11 Rutland Square, Edinburgh EH1 2AS, Scotland, UK Telephone : + 44 131 228 2551, Facsimile : + 44 131 228 4384, URL : www.nasco.int, email: hq@nasco.int

Table 31. Features, Scoring Criteria and Scores for the Instrument: **International Whaling Convention**

Acronym: IWC Signed: 12 Dec 1946

Description	The convention aims to conserve whale stocks by setting limits on the species, number and size of animals that can be taken. The convention also prohibits the capture of whales with calves.
Relevance to SAUP	Whales are a major component of the North Atlantic ecosystem and therefore their populations should be conserved through international efforts.
Major Provisions	In 1977 commercial hunting of all whale species was stopped to allow stocks to recover. Any Contracting Party can object to IWC recommendations which does not bind them to that recommendation. There are provisions in the convention to allow aboriginal groups to hunt whales, these hunts are usually managed through a quota system that is closely monitored.
Significant Programs, Decisions and Recommendations	<ul style="list-style-type: none"> The last IWC meeting in 2000 was very controversial with nations divided between allowing commercial hunting of certain species to be resumed and those nations wanting to maintain the current hunting moratorium. Aboriginal hunting is conducted in the Canadian Arctic, Greenland, Faroe Islands, Pacific Northwest in the USA, and the north Pacific in Russia. Scientific hunting is undertaken by Japan, this activity is highly controversial since the meat from animals hunted for scientific purposes are sold to the restaurant market.

Criteria	Provision/Decision/Program	Criteria	Max.Score
1	Signature	0 not signed or left the convention; 1 not ratified; 2 ratified without reservation	2
2	Financial contribution	0 no contribution; 1 required contribution; 2 above required contribution	2
3	Hunting	0 commercial hunting ; 1 aboriginal hunting or no hunting	1
4	Permits – accurate and timely records of animals hunted sent to IWC	0 no information provided; 1 information provided as required	1
TOTAL			6

Criteria	CAN	DEN	FI	GL	ICE	NOR	RUS	UK	USA
1	0	2	2	2	1.5	1	2	2	2
2	0	1	1	1	0	2	.5	2	1
3	1	1	N/A	1	1	0	1	1	1
4	0	N/A	N/A	.5	0	1	.5	N/A	1
Total	1	4	3	4.5	1	4	4	5	5
%Score	16	80	75	75	58	67	67	100	83

Table 3m. Features, Scoring Criteria and Scores for the Instrument: **Agreement on the Conservation of Small Cetaceans in the Baltic and North Seas.**

Acronym: ASCOBANS Signed: 1992

Description	This agreement is specific to the conservation of small cetaceans in the Baltic and North Seas. The agreement is an extension of the Convention on the Conservation of Migratory Species of Wild Animals (Bonn 1979) which encourages agreements on wild animals that cross national jurisdictional boundaries. Although “cetaceans” are not specified in the International Whaling Convention, the small cetaceans encompassed in this agreement are usually not the subject of the IWC. The Annex to this agreement sets the agenda which is currently focused on reducing cetaceans caught as by-catch in commercial fishing operations and reducing pollution levels which are thought to affect the health and longevity of cetaceans.
Relevance to SAUP	The agreement, through its Annex, also addresses the issue of by-catch which is considered to be a significant issue in the sustainability of fisheries in the North Atlantic.
Major Provisions	The agreement requires each contracting party to submit an annual report on progress made and difficulties encountered in implementing the agreement The agreement makes provisions for organizations qualified in cetacean conservation and management to have observer status at meetings. Contracting parties are to contribute to the cost of the budget for the Agreement.
Significant Programs, Decisions and Recommendations	The Annex outlines the following measures that contracting parties should be applying in their countries: <ul style="list-style-type: none"> • Develop a system for the reporting of animals caught in by-catch and stranded animals • Passing of legislation that prohibits the intentional taking or killing of small cetaceans, if it does not already exist • Pollution prevention to reduce the threat to the health of animals • Development and modifications to gear to reduce by-catch in fishing operations • Establishment of protected areas for breeding, feeding and migration • Prevent other disturbances to the animals especially acoustic disturbances • Parties should coordinate in assessing the stock of the animals

Criteria	Provision/Decision/Program	Criteria	Max Score
1	Signature	0 not signed ; 1 signed but not ratified; 2 ratified without reservation	2
2	Financial contribution	0 no contribution; 1 required contribution; 2 above required contribution	2
3	Legislation changed	0 legislation does not protect ; 1 legislation introduced; 2 legislation passed or already existed	2
4	System to monitor cetaceans that are caught as by catch	0 no system; 1 fishers self-report catches of cetaceans; 2 fishers self-report as well as an observer program	2
5	System for reporting strandings	0 no system; 1 partial system; 2 full system	2
6	MPA established for protection and conservation of small cetaceans	0 no MPA; 1 proposed at least one MPA; 2 at least one MPA established	2
TOTAL			12

Criteria	BEL	DMK	FGR	FR	NL	NOR	UK
1	2	2	2	0	2	0	2
2	1	1	2	0	1	0	2
3	0	0	2	0	2	0	2
4	.5	1	0.5	.5	.5	.5	1
5	2	1	1	1	.5	1	1.5
6	0	1	2	0	1	0	0.5
Total	5.5	6	9.5	1.5	7	1.5	9
%Score	46	50	79	12.5	58	12.5	75

Table 3n: Features, Scoring Criteria and Scores for the Instrument: **Convention on Biological Diversity**

Acronym: CBD Signed: 5-Jun-92. Ratified: 20-Dec-93

Description	The Convention provides for the management of biodiversity including marine biodiversity through the Jakarta Mandate.
Relevance to SAUP	Coastal states are required to take action to protect components of marine biodiversity within its national jurisdiction. Article 22.2 provides that the Convention shall be implemented consistent with rights and obligations under UNCLOS. The Convention also requires Parties to cooperate to achieve sustainable use of biodiversity outside national jurisdictions, as well as on other matters of mutual interest.
Major Provisions	The convention establishes an overall umbrella of generic obligations that Parties are to detail at the national level. The majority of provisions allow flexibility in implementation, recognizing that biodiversity conservation and loss may vary widely. The Convention also establishes a new international system for the transfer of 'genetic resources'. The COP identified marine and coastal biological diversity as an early priority the result being the Jakarta Mandate on Marine and Coastal Biological Diversity. Five key thematic issues were identified in the Jakarta Mandate: <i>1. Integrated marine and coastal area management (IMCAM); 2. Marine and coastal living resources; 3. Marine and coastal protected areas; 4. Mariculture; 5. Alien species and genotypes</i>
Significant Programs, Decisions and Recommendations	Parties must: create national plans, strategies or programs for conservation and sustainable use; inventory and monitor the biodiversity within their own territories; identify and regulate destructive activities; and, integrate consideration of biodiversity into national decision making. Parties must also take additional steps to protect customary resource uses and local and indigenous communities' traditional knowledge, innovations and practices, where they carry on sustainable traditions. There is an overarching administrative structure to support national implementation including: a permanent Secretariat; a Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), and a Clearing House Mechanism. (CHM) to support scientific and technical cooperation. Also Parties shall undertake their obligation to cooperate through other international organisations where appropriate. Each of the five thematic issues in the Jakarta Mandate have an associate work programme, which sets out specific activities and timeframes for the achievement of operational objectives established for each theme.

Criteria	Provision/Decision/Program	Criteria	Max. Score
1	Status of ratification	0 not signed; 1 has signed; 2 partially ratified (approved, accepted or accession); 3 ratified Convention; 4 ratified Convention and Cartagena Protocol	4
2	National reporting	0 No First National Report; 1 First National Report produced; 2 First National Report and Thematic Report on Alien Species produced	2
3	Contribution to Trust Funds <ul style="list-style-type: none"> General Trust Fund for the Convention on Biological Diversity (BY) Additional contributions to the General Trust Fund for the Convention on Biological Diversity (BY) Trust Fund for Additional Voluntary Contributions in Support of Approved Activities under the Convention on Biological Diversity (BE) Trust Fund for Additional Voluntary Contributions to Facilitate the Participation of Parties in the Process of the Convention on Biological Diversity (BZ) 	0 No minimum/additional contribution to BY, BE, BZ 0.5 Partial minimum contribution to BY with outstanding debts 1 Minimum contribution to BY; no additional contributions to BY; BE or BZ 1.5 Minimum contribution to BY (but outstanding debts); no additional contributions to BY; BE or BZ 2 Minimum contribution to BY and additional contribution to BY; no contribution to BE or BZ 3 Minimum contribution to BY and additional contribution to BY; contribution to BE no contribution to BZ 4 Minimum contribution to BY and additional contribution to BY; contribution to BE and BZ	4
4	Address 5 thematic issues in the Jakarta Mandate: <i>4.1. Integrated marine and coastal area management; 4.2. Marine and coastal living resources; 4.3. Marine and coastal protected areas; 4.4. Mariculture; 4.5. Alien species and genotypes</i>	0 Not addressing the issues 1 Partially addressing the issues 2 Fully addressing the issues	2

TOTAL

12

Criteria	BEL	CAN	DMK	FGR	FR	ICE	IRE	MOR	NL	NOR	POR	RUS	SP	UK	USA
1	4	3	4	4	4	3	4	4	4	4	4	3	4	4	1
2	1	1	1	2	1	0	1	0	2	2	1	2	1	2	0
3	1.5	2	2	1	3	1	0.5	1	1	1	1	1	1	3	1
4.1		1												1	
4.2		1												1	
4.3		1												1	
4.4		1												2	
4.5		1												1	
4 Average	0	1	0	0	0	0	0	0	0	0	0	0	0	1.2	0
Total	6.5	7	7	7	8	4	5.5	5	7	7	6	6	6	10.2	2
% Score	54	58	58	58	67	33	46	42	58	58	50	50	50	85	17

Table 30. Features, Scoring Criteria and Scores for the Instrument: **Convention for the Protection of the Marine Environment of the North East Atlantic (replacing Oslo and Paris Conventions)**

Acronym: OSPAR Signed: 22-Sep-92 Paris. Ratified: 25-Mar-98

Description	The Convention is focused on the prevention and elimination of pollution from the OSPAR area which encompasses much of the northeast Atlantic. It also seeks to protect marine areas from human activities and where practicable restore affected marine areas. Contracting parties are obliged to adopt programmes and measures made under the conventions as well as to harmonise national policies and strategies.
Relevance SAUP	Initially the focus of the convention was on specific pollution issues which in the long term will compliment direct fisheries management measures. However, recently Annex V (Protection and Conservation of the Ecosystem and Biological Diversity of the Maritime Area) was opened in 1998 for ratification of the Contracting Parties. This has resulted in the convention taking a broader look at marine management issues, in particular the development of a strategy for the Protection....., the development of Ecological Quality Objectives (currently for seabirds and sea mammals), the issue of deep sea fisheries and the signing of an memorandum of understanding with ICES. This convention, therefore, has the potential to affect fisheries management in the OSPAR area.
Major Provisions	Contracting shall <ul style="list-style-type: none"> take all possible steps to prevent and eliminate pollution and shall take the necessary measures to protect the maritime area against the adverse effects of human activities so as to safeguard human health and to conserve marine ecosystems and, when practicable, restore marine areas which have been adversely affected. individually and jointly, adopt programmes and measures and shall harmonise their policies and strategies. adopt programmes and measures which contain, where appropriate, time-limits for their completion and which take full account of the use of the latest technological developments and practices designed to prevent and eliminate pollution fully. apply the measures they adopt in such a way as to prevent an increase in pollution of the sea outside the maritime area or in other parts of the environment. report regularly on compliance with decisions Note many of the above provisions are implemented through programs, decisions and recommendations made by various working groups within OSPAR
Significant Programs, Decisions Recommendations	<ul style="list-style-type: none"> Recommendation 89/4 on a Coordinated Programme for the Reduction of Nutrients Recommendation 92/7 on the Reduction of Nutrient Inputs from Agriculture into Areas where these Inputs are Likely, Directly or Indirectly, to Cause Pollution Recommendation 94/6 on Best Environmental Practice for the Reduction of Inputs of Potentially Toxic Chemicals from Aquaculture Use OSPAR Action Plan 1998 – 2003 – two of the 4 main areas are relevant to the SAUP, the protection and conservation of ecosystems and biological diversity, eutrophication. In the area of protection and conservation of ecosystems and biological diversity much of the work is preliminary with no recommendations or decisions made by the convention have been published.

Criteria	Provision/Decision/Program	Criteria	Max. Score
1	Status of ratification	0 not signed but within the OSPAR operating area; 1 has signed; 2 partially ratified; 3 fully ratified (signed for Annex V)	3
2	Participation in Convention Activities (e.g. leading a study etc.) Based on available annual reports, meeting reports and other recent documents	0 no activity; 1 attends meeting; 2 lead role	2
3	Implementation of PARCOM Recommendation 94/6 on Best Environmental Practice for the Reduction of Inputs of Potentially Toxic Chemicals from Aquaculture Use	0 Reservation; 1 Intention but no report submitted; 2 agreement/admin action; 3 legislation introduced or pre-existing	3
4	Recommendation 92/7 on the Reduction of Nutrient Inputs from Agriculture into Areas where these Inputs are Likely, Directly or Indirectly, to Cause Pollution	0 Reservation; 1 Intention but no report submitted; 2 agreement/admin action; 3 legislation introduced or pre-existing	3
5	Recommendation 89/4 on a Coordinated Programme for the Reduction of Nutrients	0 Reservation/no action; 1 reduction target not met; 2 target met	2
6	Implementation of OSPAR Action Plan 1998-2003 - Guidelines for Artificial Reefs in Relation to Living Resources	1 reservation/guidelines not accepted; 2 guidelines accepted	2
TOTAL			15

Criteria	BEL	DMK	FGR	FR	ICE	IRE	NL	NO	POR	SP	UK
1	2	3	2	2	2	2	2	2	2	3	3
2	1	2	2	2	1	1	2	2	1	2	2
3	0	1	3	1	1	1	N/A	2	3	2	3
4	2	2	2	1	N/A	N/A	2	2	N/A	N/A	N/A
5	1.5	1.5	1.5	0	2	2	1.5	1.5	2	2	2
6	2	2	2	2	2	2	2	1	2	2	2
Total	8.5	11.5	12.5	8	8	8	9.5	10.5	10	11	12
% Score*	57	77	83	53	67	67	73	70	83	92	100

* adjusted for N/A

Table 3p. Features, Scoring Criteria and Scores for the Instrument: International Council for the Exploration of the Sea Convention.

Acronym: ICES. Signed: 12th September, 1964. Ratified: 31st December, 1964.

Description	ICES constitutes the oldest recorded regional fishery body and dates from 1902. It was created in response to nineteenth century fish stock shortages in the North Sea as an intergovernmental marine organisation for scientific study of the sea and its resources. The 1964 ICES Convention identifies the Council's principal functions as: <ul style="list-style-type: none"> To promote and encourage research and investigations for the study of the sea particularly related to the living resources thereof, To draw up programs required for this purpose and to organise, in agreement with the Contracting Parties, such research and investigations as may appear necessary; and To publish and otherwise disseminate the results of research and investigations carried out under its auspices or to encourage the publication thereof. (Article 1)
Relevance SAUP	Since the 1970s a further major task of ICES has been the provision of scientific information and advice to intergovernmental regulatory commissions (including the North-east Atlantic Fisheries Commission, the International Baltic Sea Fishery Commission, and the North Atlantic Salmon Conservation Organisation, plus the European Commission, the governments of ICES Member countries, and to the Faroes and Greenland which are not member countries in their own rights, for the purposes of fishery conservation and the protection of the marine environment. The geographic area of competence of ICES is the Atlantic Ocean and surrounding seas, with particular reference to the North Atlantic. (Article 4)
Major Provisions	Each contracting party undertakes to furnish to the Council information that will contribute to the purposes of the Convention and can reasonably be made available, and, wherever possible, to assist in carrying out the programs of research co-ordinated by the Council. (Article 5)
Significant Programs, Decisions and Recommendations	In 1978 ICES established an Advisory Committee on Fishery Management (ACFM), which is comprised of experts from each of the ICES Member Countries, together with the chairperson of the Standing Committees that deal with Pelagic, Demersal and Baltic fish respectively. Advice is provided in response to requests from members, but the ACFM is also empowered to provide unsolicited advice if the Committee believes it to be required. ICES CM 1997/Assess:7 Report of the Study Group on the Precautionary approach to Fisheries Management examines the implications for ICES at both the technical and advisory level of implementing the precautionary approach to marine capture fisheries. The Report concludes the need for contracting parties to utilise the precautionary approach as it is defined in international instruments. A large scale fisheries sampling program investigating the problems of by-catch and discards has led to data being analysed for use in future ICES models. <ul style="list-style-type: none"> Promotion of Integrated Coastal Zone Management Monitoring marine habitats using biological and contaminant methodologies Develop tools to assess marine habitat quality Develop and improve fisheries assessment tools that utilise environmental information, consider biological interactions, and address issues of uncertainty, risk and sustainability Improve the accuracy and precision of abundance survey methods Develop improved technical measures for fishery management

Criteria	Provision/Decision/Program	Criteria	Max.Score
1	Participation in ICES meetings, workshops etc.	0 = little participation; 1 = basically attends meetings and nothing more; 2 = attends meetings as well as leading committees; 3 = attends meetings, leads committees and hosts meetings	3
2	Utilisation of the Precautionary Approach to Marine Capture Fisheries in Accordance with ICES CM 1997/Assess 7.	0 no application; 1 partial application; 2 full application	2
TOTAL			5

Criteria	BEL	CAN	DEN	FRA	GER	ICE	IRE	NETH	NOR	POR	RUS	SPA	UK	US
1	0	3	2	1	2	1.5	0	3	3	1.5	0	1.5	3	3
2	0	1.5	1	.5	.5	1.5	.5	.5	1.5	.5	0	.5	.5	2
Total	0	4.5	3	1.5	2.5	3	.5	3.5	4.5	2	0	2	3.5	5
%Score	0	90	60	30	50	60	10	70	90	40	0	40	70	100