Strengthening Regional Fisheries Management Organisations



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Foreword

The effective management of international fisheries remains one of the great challenges in achieving long-term sustainable fisheries. Many shared fish stocks, including transboundary, highly migratory and high seas stocks, are under significant pressure and concerted international action is required if these resources are to be exploited on a sustainable basis. The development of stable cooperative regimes to manage international fisheries has been a central feature of international policy debate over the last few decades. The international community has sought to strengthen regional fisheries management organisations (RFMOs). However, there remains concern over the effectiveness of RFMOs and there have been repeated calls for improvements in the way in which RFMOs operate. The international community also examines other measures to address specific issues in the management of international fisheries (including, for example, the development of port state controls and flag state controls).

In 2007, the OECD Committee for Fisheries embarked on a study reviewing the experiences of a number of RFMOs that have undergone changes in recent years. The objective of the study was to indentify the key lessons from these experiences in order to inform efforts to strengthen RFMOs. The Committee recognised that, while the objectives of efforts to strengthen RFMOs are well understood, the process of change is problematic. It is hoped that this Study will help policymakers identify how change in RFMOs takes place, how to build momentum for change, and how to ensure that efforts to improve RFMOs are not impeded in the future.

This study is part of a broader three year project on the political economy of fisheries policy reform, which examined the process of policy reform in a number of different policy areas: domestic fisheries policy; international fisheries policy; social aspects of fisheries adjustment; and vessel decommissioning schemes. Publications from this project include *Structural Change in Fisheries: Dealing with the Human Dimension* (published in 2007) and *Reducing Fishing Capacity: Best Practices for Decommissioning Schemes* (2009).

In May 2009, the Committee for Fisheries agreed to the release of this report under the responsibility of the Secretary General.

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Acronyms

CCSBT	Commission for the Conservation of Southern Bluefin Tuna
CITES	Convention of International Trade in Endangered Species
DWFN	Distant water fishing nation
EBT	Eastern Atlantic and Mediterranean Bluefin Tuna
EC	European Commission
EEZ	Exclusive economic zone
EFP	Experimental Fishing Program
ENGO	Environmental Non-Governmental Organisation
EU	European Union
FAO	United Nations Food and Agriculture Organization
ICCAT	International Convention for the Conservation of Atlantic Tunas
ICES	International Council for the Exploration of the Sea
ICNAF	International Commission for the Northwest Atlantic Fisheries
ITLOS	International Tribune for the Law of the Sea
IUU	Illegal, Unreported and Unregulated
MCS	Monitoring Control and Surveillance
MSY	Maximum sustainable yield
NGO	Non-Governmental Organisation
NEAFC	North East Atlantic Fisheries Commission
NAFO	Northwest Atlantic Fisheries Organization
PECCOE	Permanent Committee on Control and Enforcement
PECMAS	Permanent Committee on Management and Science
PRWG	Performance Review Working Group
RFMO	Regional Fisheries Management Organization
SBT	Southern bluefin tuna
STACFAD	Standing Committees on Finance and Administration
STADFIS	Standing Committees on Fisheries and Science
STACREC	Standing Committees on Research Coordination

STACPUB	Standing Committees on Publications
STACFEN	Standing Committees on Fisheries Environment
STACTIC	Standing Committees on International Control
TAC	Total allowable catch
TIS	Trade Information Scheme
UNCLOS	United Nations Convention on the Law of the Sea
UNFSA	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 High Migratory Fish Stocks

Executive Summary

With the development and entry into force of the United Nations Fish Stocks Agreement (UNFSA) in 1995, the international community made a commitment to strengthen, where needed, Regional Fisheries Management Organizations (RFMOs). Since then, RFMOs have been under increasing pressure to better manage the fisheries resources under their control. The expectations placed on RFMOs have grown over the past decades alongside a proliferation of international hard and soft law and there continues to be widespread concern over the performance of RFMOs. This is reflected in calls in international fora such as the United Nations and the FAO for improvements in the way in which RFMOs operate.

However, a number of RFMOs have undergone significant changes in recent years, with varying degrees of success in terms of ensuring stable cooperative agreements and improved management of the fisheries resources under their control. This study reviews the experiences in four RFMOs: the Commission for the Conservation of Southern Bluefin Tuna (CCSBT), International Commission for the Conservation of Atlantic Tunas (ICCAT), the North East Atlantic Fisheries Commission (NEAFC), and the North Atlantic Fisheries Organization (NAFO). The objective of the study is to elicit the key lessons from the recent experiences of each of these RFMOs in order to inform efforts to strengthen RFMOs, bearing in mind that RFMOs are currently engaged in a process of performance review. The study focuses on the political economy issues underlying the process of implementing change in the structure and operations of RFMOs. It is important to recognise that change occurs at both a large scale (such as major reform and re-writing of a convention underpinning an RFMO) and at smaller scales (such as introducing new catch information systems or dispute resolution mechanisms). The study analyses how the pressure for change arises, how it gains momentum, and how the outcomes are sustained over time.[1] The study is not intended to be normative or prescriptive, but it provides insights into ways in which governments and international organisations can help smooth the path of change in strengthening RFMOs.

Key messages

The study highlights the fact that changes to strengthen RFMOs have been underway for some time and that there are significant success stories. The study also illustrates that change is feasible under a wide range of circumstances, with the pace of change depending on the characteristics of particular RFMOs. It also highlights the dynamic, long-term nature of efforts to strengthen RFMOs and, although there is no one recipe for this process, the study emphasises the importance of ensuring that the fundamental building blocks are in place to help create and maintain the economic and political momentum for change. In particular, altering the underlying economic incentives may help to ensure that the interests of member countries might be better aligned, allowing coalitions for change to develop within the membership.

The costs of delaying action on strengthening RFMOs can be significant in terms of both adverse impacts on stocks and reduced profitability. The case studies demonstrate that incremental progress within a particular RFMO, and demonstrated in other RFMOs,

can be very effective in building the case for driving change within an RFMO. Moreover, the case studies demonstrate that this can take place even when some key issues remain unresolved. For example, the issue of allocation of resources between Contracting Parties (and potential new members) is generally under constant discussion in many RFMOs and often involves effectively pushing the problem off into the future with potentially adverse effects on stocks and fisheries profitability. Yet, in many cases, this has not deferred action on other substantive changes to the RFMOs.

Moves to strengthen RFMOs should also be viewed as a package, with many interlocking parts that help to mutually reinforce changes to rules, structures and operations. For example, the use of port state measures, flag state controls, mutual recognition of vessel lists, statistical documentation or catch documentation schemes, dispute resolution mechanisms, and so on all work together to improve the effectiveness of RFMOs. A piecemeal approach to change in RFMOs may have the advantage of making it easier for countries to reach agreement on specific issues and may pave the way for more substantial reforms. Such an approach can also provide a prelude to more substantial changes that may be required: get countries accustomed to the idea of change; builds trust in the process and outcomes of change; and can demonstrate the potential and actual benefits of change. However, there are risks with such an approach due to possible reform fatigue, a possible lack of strategic direction, and stock collapse in the interim. Therefore, a strategic vision for the direction and endpoints of change within an RFMO (and even across RFMOs) is essential. Such a vision has been defined by the UNFSA principles and has been elaborated upon by the extensive work on a model RFMO and on best practice guidelines. To that end, getting agreement on the goals for strengthening RFMOs has not been that difficult; overcoming the obstacles to change is the real challenge.

The case studies

The case studies (CCSBT, ICCAT, NAFO and NEAFC) highlight the range of challenges that RFMOs face in undergoing change. Each RFMO has a different set of historical, cultural, social, environmental and economic circumstances that strongly influences the viability, stability and success of change. Issues such as lack of political will, disparate national agendas, divergent economic priorities, different time horizons, and scientific uncertainty combine to influence the ability of coalitions to develop and to undertake change. The case studies examined in this study underscore this variety, with the two tuna RFMOs facing different challenges than the two North Atlantic RFMOs. The fundamental difference lies in the membership of the RFMOs: tuna RFMOs are characterised by a larger number of distant water fishing nations within their memberships with a growing interest from developing countries, while the North Atlantic RFMOs are dominated by developed coastal states. This key distinguishing characteristic is reflected in the approaches to, and success of, change across the RFMOs.

The two tuna RFMOs examined here, the CCSBT and ICCAT, have undertaken difficult changes which, while achieving their limited objectives, have had mixed results in terms of improving the sustainability of the tuna stocks under their control. The CCSBT case study focuses on the expansion of the membership to include new countries and a Cooperating Non-Member. While the expansion was successfully achieved, this came at the cost of avoiding the resolution of fundamental issues, such as the TAC and allocation mechanisms.

In ICCAT, there have been a large number of Recommendations addressing specific issues. Although the Recommendations have been successful in improving the operations

and outcomes of ICCAT in some areas (such as rebuilding plans for swordfish and marlin), the obstacles to undertaking more extensive changes have proven difficult to overcome. In particular, the political will to implement agreed conservation and management measures has, until recently, been inconsistent across Member countries. However, the decision in November 2008 to reduce the total allowable catch for a number of key species, including eastern bluefin tuna, is seen by some as a breakthrough. The diverse interests of the large membership in ICCAT have also been a major challenge. This is compounded by the lack of an agreed objection procedure and dispute resolution mechanism, making it difficult to generate momentum for further changes within ICCAT.

The two North Atlantic RFMOs examined in the study, NEAFC and NAFO, have undertaken more wide-ranging changes. In both these RFMOs, the process of change was made significantly easier by having a relatively small, homogeneous membership, with considerable overlap of major fishing countries between the two which facilitated cross-fertilisation of best practices. The changes in NEAFC were undertaken relatively speedily as there was a high degree of commitment by members to the changes. While problems still remain, the institutional structure is now much more likely to handle disputes without de-stabilising the organisation.

The rewriting of the NAFO Convention represents, arguably, the most far-reaching of all recent RFMO reform experiences. It was a long process and overcoming the obstacles to reforming NAFO required considerable efforts by members to generate the economic and political conditions for reform, in particular with respect to developing trust and credibility amongst member countries. It is too early to assess the outcomes of the NAFO reforms, in terms of impacts on stocks, profitability and stability of the agreement, as the Convention amendments have yet to enter into force. However, the sweeping changes to the Convention incorporating many best practice mechanisms provide a strong foundation for moving towards improved resource and economic sustainability.

While the case studies highlight the range of experiences across the selected RFMOs, they also reveal strong recurring themes. These relate to the drivers for change, which strongly influence the political will to seek and embrace change, and to ways in which RFMOs can help to create economic and political conditions that are more conducive to change. It is clear that there are some basic features of RFMO institutional arrangements that make it easier for reform initiatives to take hold and flourish, and that these are common across RFMOs, irrespective of their composition and species coverage.

Drivers for change

The power of external drivers to generate political pressure and will for tackling difficult challenges should not be under-estimated. The ratification of the UNFSA was a pivotal event in the push for strengthening RFMOs, while the St John's Conference (May 2005) provided important political momentum, particularly for NAFO and other RFMOs. Environmental NGO pressure campaigns have also proved to be effective in raising political and popular understanding of the need for changes to strengthen RFMOs.

It is clear that economic crisis in fishing fleets, rather than resource crisis, tends to drive change. A stronger understanding of the costs of delaying action can help stakeholders to overcome inertia. This requires a stronger focus on the economic consequences of RFMO activities and policies than is currently the case.

Successful change requires strong leadership on the part of countries, individuals and coalitions of countries. Critical motivation for leadership on efforts to strengthen management and enforcement arises from the fact that historically dominant countries in

RFMOs tend to have the most to lose under ineffective multilateral management. The challenge lies in incorporating new members into the change process itself, as well as addressing their aspirations with respect to sharing the benefits of RFMO membership.

The use of performance reviews has shown to be a powerful external tool for identifying possible directions for change and reinforcing the incentives for member countries of RFMOs to undertake change. The performance reviews have been primarily undertaken by independent experts with a wide-ranging mandate in order to provide both internal and external credibility to the review. A regular cycle of review would also recognise the dynamic nature of the political, economic, social and environmental context within which RFMOs operate.

A strong external influence on RFMO reform is the demonstration effect. Learning from successful experiences is a potentially useful mechanism for considering best practices across RFMOs. However, only 19 countries or economies belong to four or more RFMOs, meaning that there are many more countries (more than 80% of all RFMO members) with only limited exposure to multiple RFMOs. The task of disseminating best practice ideas therefore often falls to a relatively small handful of countries, most of whom are OECD countries.

Creating the conditions for change

Ratification of legal instruments governing high seas fisheries, including the UNFSA and the FAO Compliance Agreement, by all RFMO members creates a common starting point for efforts to strengthen RFMOs. Agreement on the basic rules and objectives within the membership of an RFMO is an essential ingredient for successful change to take place.

Commitment to RFMO change requires a high level of trust and credibility between member countries. Where this is lacking, no amount of leadership or legal imperative will be sufficient to get change underway, let alone be successfully undertaken. Achieving trust and credibility can be challenging and may require fundamental relationship building among counterparts in RFMOs.

An essential ingredient in developing trust and credibility is agreement on a clear, well-structured dispute settlement mechanism for all aspects of RFMO operations. Negotiations on any changes to the operations of RFMOs need to be undertaken with the institutional support of clear, agreed processes and rules for working through problems and issues, with little or no scope for opting out without consequence (i.e. requiring proposing alternative measures, the merits of which are independently assessed).

Agreement on, and adherence to, scientific advice is critical for efforts to generate the political and economic conditions for change. There may be a role for independent review of science assessments and some RFMOs (such as the CCSBT) have instituted such mechanisms.

Removing external pressures on resource stocks and economic viability by reducing IUU fishing allows RFMO members to focus on addressing internal priorities for change. The use of port state measures, flag state controls, catch document schemes have been shown as being very effective in largely eliminating IUU fishing in some RFMOs. This provides the space for countries to focus on improving the economic viability of the fishery, knowing that the short term costs of any changes will, in all likelihood, improve the longer term economic outcomes for their fleets.

Similarly, addressing domestic overcapacity problems may reduce some of the domestic political pressures that influence national positions in RFMO discussions. This would help to alter the nature of the economic imperatives driving countries' positions in RFMO negotiations from a focus on protecting or gaining short term advantages to a longer term focus on resource and economic sustainability. It also reduces the incentives for non-compliance by member countries' fleets as they are no longer driven by the need to cover operating costs in the short term. The abolition of subsidies that explicitly or implicitly support fishing operations in RFMO waters would assist in this regard.

Finally, RFMOs may need to look for more flexible and innovative solutions in order to overcome obstacles to change. Within the broad parameters of the UNFSA and the best practice principles elaborated in other fora, members could explore mechanisms that create more policy space for individual countries to "buy in" to reform efforts. Examples include the treatment of non-members through innovative membership arrangements (such as the CCSBT Extended Commission), and the potential for market-based solutions such as tradable rights.

Moving forward on strengthening RFMOs

The pressure for improvements in RFMO performance continues to steadily build from both internal and external sources. Harnessing the potentially powerful drivers for change can help governments initiate and maintain change. But, while there may be broad agreement on the ultimate objectives of efforts to strengthen RFMOs, diverse political and economic priorities make the task more challenging. Creating the conditions within which efforts to improve RFMO operations can flourish depends critically on aligning the incentives facing members of RFMOs. This study identifies a number of directions that policy makers can take to help create a political economy environment within which changes to RFMOs can be more easily addressed. Key among these is getting agreed rules and processes in place for RFMOs through ratification of legal instruments (notably the UNFSA) and the establishment of dispute settlement mechanisms. These fundamental elements are central to building the trust, credibility and stability that underpin negotiations and action on changes to strengthen RFMOs.

There may also be scope for governments to "think outside the box" in exploring ways to further strengthen RFMOs. Governments could examine innovative policy directions, such as alternative rights structures and tradable quotas. Such analysis has the potential to enlarge the range of policy options and can help to find ways to better align incentive structures within the broader RFMO framework. Ultimately, governments need to demonstrate leadership, flexibility and innovation if they are to successfully address the challenge to strengthen RFMOs and ensure responsible and sustainable high seas fisheries and credible sectoral management in the high seas.

Note

1. It must be emphasised that the case studies presented in this study are not intended to be full performance reviews of the RFMOs. There are other processes in place for such reviews under the auspices of each of the RFMOs. Rather, the focus of the case studies is on the process of change. While this study inevitably needs to draw some conclusions about the efficacy of the changes that have been undertaken by each RFMO, it is not intended that the analysis pre-empts the findings of full performance reviews undertaken or underway in the RFMOs.

Chapter 1

Introduction

The pressure for Regional Fisheries Management Organizations (RFMOs) to improve their performance has increased significantly over the last decade. According to the FAO, approximately 30% of stocks of highly migratory tuna and tuna-like species and nearly two-thirds of straddling and high-seas fish stocks are overexploited or depleted. There has been extensive public airing of issues such as the depleted state of many high seas stocks, reduced profitability, overcapacity and disagreements within RFMOs over conservation and management measures. This has been communicated to the public through the popular press, leading fisheries industry journals, and press statements from environmental non-governmental organisations, all of which regularly headline management failures by RFMOs. It also goes to the heart of the debate over the credibility of sectoral management of fisheries, and the pressure for other international processes to play a greater role in managing fisheries.

There has also been extensive debate within the major international fisheries policy fora on ways in which the effectiveness of RFMOs can be improved. Since the adoption of the United Nations Fish Stocks Agreement (UNFSA) in 1995 [1], organisations such as the United Nations, the FAO, and the OECD have addressed the issue of strengthening RFMOs through a range of meetings, high-level fora, workshops, resolutions *etc*. Such discussions are also reflected in debates at the national and regional levels (such as within the European Union) where the focus tends to be on the compatibility of national fisheries objectives and legislation with RFMO goals and international legal obligations.

However, a number of RFMOs have undergone significant changes over the last decade. These changes have variously focused on modernising the treaties establishing some of the RFMOs, improving the conservation and management measures (particularly in relation to reducing the impacts of IUU fishing), and incorporating principles such as the precautionary approach and ecosystem approaches to management. The pace and extent of change varies considerably across RFMOs, as does the degree of success of changes to governance, institutional structure and operations in providing for more effective management of the fisheries under their control. A critical element in strengthening RFMO performance is the ability of Contracting Parties to learn from the experiences of past changes. Such experiences can be particularly helpful in avoiding the pitfalls and dead-ends that can stall or roll back the process of change, and in implementing processes that have been successful in the other situations.

The objective of this report is to review the experiences of four RFMOs in order to identify lessons that may assist efforts to strengthen other RFMOs. While it is recognised that each RFMO is different due to different mandates, actors, history, nature of the resource, and so on, it is likely that there is a degree of commonality in the processes of change across RFMOs. Pooling the experiences of several RFMOs can provide insights

into the types of strategies that can be successful in overcoming obstacles to change. The RFMOs reviewed in this study are the Commission for the Conservation of Southern Bluefin Tuna (CCSBT), International Commission for the Conservation of Atlantic Tunas (ICCAT), the North East Atlantic Fisheries Commission (NEAFC), and the North Atlantic Fisheries Organization (NAFO). Each of these RFMOs has undergone significant change in recent years, with varying degrees of success in terms of improved management of fisheries.

Box 1.1. Defining broadly the goals of successful RFMOs

At a high level, the objectives of RFMOs are given by the UNCLOS and UNFSA principles as well as in UN General Assembly Resolutions which set standards against which RFMOs will be measured. These can be encapsulated as:

- A stable cooperative agreement that is time consistent (i.e. able to withstand exogenous shocks);
- Sustainability of the resource stock over time; and
- Optimum utilisation of the resource (including maximizing resource rent from the resource).

In the day to day operation of an RFMO, these broad objectives are given practical effect through the outcome of negotiation between sovereign states that are Contracting Parties of the RFMO. Compromises and tradeoffs made by member states in the context of negotiations mean that it is possible that the changes agreed may result in a decline in overall welfare (for example, as a result of information asymmetry or different rates of time preference between Parties). However, merely reaching agreement on a change measure could not considered a success if the change undermines or does not advance the achievement of the broader objectives.

It must be emphasised at the outset that the aim of the study is to present analysis for policy debate and case studies presented in this study are not intended to replace or complement the performance reviews currently underway in RFMOs. There are other processes in place for such reviews under the auspices of each of the RFMOs. Rather, the case studies focus on the process of change and address the drivers for change in the RFMOs, how obstacles to change were overcome (or not), how sustainable the changes are, and the key lessons to be learned from the RFMOs' experiences.

Pressure for change

Pressure to strengthen RFMOs has steadily increased since the United Nations Fish Stocks Agreement (UNFSA) came in to force in 1995, reflecting widespread dissatisfaction with the performance of many RFMOs. The push for change reached a high point a decade later when a series of international meetings and reports focussed particular attention on the need to modernise the RFMO system. In early 2005, the FAO Committee on Fisheries called for States to take steps to ensure that RFMOs implemented the provisions of current international fisheries instruments and for RFMOs to carry out assessments of their performance (FAO 2005).

The call to strengthen the performance of RFMOs was reiterated at the 2007 meeting of the FAO Committee for Fisheries when member countries agreed that all RFMOs needed to undertake performance reviews and those RFMOs should themselves determine the criteria, methodology, and frequency of such reviews (FAO 2007). Indeed, most RFMOs are now engaged in a process of Performance Review. The NEAFC review

was completed in 2006, ICCAT and CCSBT in 2008, and there is a review underway in CCAMLR.

In May 2005, the St John's Conference on the Governance of High Seas Fisheries and the UN Fish Agreement pressed for faster progress to modernize fisheries management on the high seas. The Ministerial Declaration from the Conference recognised that RFMOs "face new challenges and responsibilities, and while the governance of some RFMOs has been improved by incorporating the principles and provisions of newly developed international instruments and tools, … other RFMOs remain to be so improved and, to that end, there is a need for political will to further strengthen and modernize RFMOs" (DFO 2005).

In a parallel process, the final report of the High Seas Task Force on Illegal, Unreported and Unregulated Fishing, hosted by the OECD Round Table on Sustainable Development, highlighted the importance of promoting better high seas governance by: developing a model for improved governance by RFMOs; independent review of RFMO performance; encouraging RFMOs to work more effectively through better coordination and use of port and trade-related measures; and supporting initiatives to bring all unregulated high seas fisheries under effective governance (High Seas Task Force 2006).

As a follow-up to the High Seas Task Force, an independent high-level panel was established in 2006 to develop a model for improved governance by RFMOs. The panel, hosted by the Royal Institute of International Affairs (Chatham House) in London, handed down its report in mid-2007 and highlighted the scope for more effective cooperation among Contracting Parties of FRMOs, among RFMOs themselves, and for the implementation of practical steps such as standardising and sharing vessel registers and information from vessel monitoring systems (Lodge *et al*. 2007). The report provided extensive and detailed options for improving the functioning of RFMOs in key areas such as the allocation of fishing rights, compliance and enforcement, dispute settlement, and decision-making. Importantly, the report noted that many practical steps to improve the effectiveness of RFMO operations could be undertaken without changing existing paradigms about the nature of RFMOs (Lodge *et al*. 2007).

Meanwhile, in January 2007, a meeting of tuna RFMOs undertook an initiative to develop a common methodology and set of criteria for assessing the performance of the five tuna RFMOs (Joint Meeting of Tuna RFMOs 2007). This resulted in an agreed set of criteria being circulated in May 2007.

Perhaps the major international meeting on the issue of RFMOs in recent years was the UN Review Conference on the UNFSA held in May 2006 (United Nations 2006). The Review Conference considered: the extent to which the UNFSA provisions have been incorporated into national laws and regulations, as well as into the charters and measures of RFMOs; the extent to which these provisions are actually being implemented in practice; and the extent to which States and RFMOs are taking action to remedy instances of failure to apply the UNFSA provisions. Amongst a wide range of commitments undertaken at the Review Conference, it was recognised that high priority should be given to strengthening RFMO mandates to implement modern approaches to fisheries management and undertaking performance reviews of RFMOs. Other key outcomes included commitments to integrate ecosystem considerations in fisheries management, the urgent reduction of fishing capacity to levels commensurate with the sustainability of fish stocks, the development of a legally binding instrument on minimum standards for port State measures and a comprehensive global register of fishing vessels, and expanded assistance to developing countries.

In addition to the intergovernmental pressure for modernising and strengthening RFMOs, environmental non-governmental organisations (ENGOs) have also played a significant role in raising public awareness of issues related to the effective management of high seas fisheries resources. Some ENGOs are engaged at a broad policy level in pressing for improvements in RFMO operations. For example, the World Wildlife Fund (WWF) provided funding to the High Seas Task Force on IUU Fishing. WWF also teamed up with Traffic International to develop a comprehensive paper on experiences and best practice in RFMOs (Willock and Lack 2006). Other efforts by ENGOs have focused on issues within specific RFMOs. For example, a 2005 report by Greenpeace addressed issues in NAFO while, in 2007, the WWF started the "Bluefin Witness" campaign focused on the Mediterranean bluefin tuna stocks under the management of ICCAT (McDiarmid *et al*. 2005; WWF 2007). The Deep Sea Conservation Coalition has raised concerns about the ability of RFMOs to adequately protect deep sea biodiversity, focusing in particular bottom trawl fishing. The result of the range of ENGO actions has been to add public pressure to that arising from the various intergovernmental activities and to reinforce the push for reform.

The challenge to strengthen RFMOs

Recent work has developed clear guidelines for best practice in RFMOs. The model RFMO developed in Lodge *et al.* (2007) provides a comprehensive blueprint for RFMO structures and operations. Many of these guidelines were echoed in the work by the WWF and Traffic on lessons and best practice from experiences in RFMOs (Willock and Lack 2006). It can be argued, therefore, that there is a broad understanding of the goals and operation of RFMOs in general. However, the process by which specific RFMOs actually move towards these objectives remains a challenge: while the goals may be relatively clear, undertaking the necessary changes is not always straightforward.

Gaining support for change within RFMOs is difficult when diverse national agendas and economic priorities are at stake. Catch limitations negotiated at the international level have an impact on national fleets, making it difficult for countries to resist domestic pressure in agreeing to policy changes that may affect narrow national interests. Issues of how to accommodate new members within existing allocation regimes and to address the aspirations of developing states within an agreement are also major stumbling blocks to garnering agreement. There are often considerable divisions among distinct groups of parties to negotiations, each of which has separate priorities and agendas in any given negotiation.

For example, coastal states compete with distant water fishing nations (DWFNs), while developed and developing countries tend to have a different starting point in negotiations, even though they may have similar longer term objectives. In addition, a stable cooperative arrangement needs to be "time consistent" whereby the management arrangement has the flexibility and robustness to withstand the shocks of unexpected and unpredictable changes through time.

An additional challenge arises from the fact that most RFMOs were established prior to UNFSA (Box 1.2). The UNFSA is the primary multilateral treaty that elaborates the basic rights, duties and obligations of States for the effective management of international fisheries and one of the significant achievements of the treaty was to set out for the first time in binding legal form the essential characteristics of RFMOs. However, because most RFMOs pre-date UNFSA, they do not necessarily have the mandates to carry out all

the functions ascribed to them. Nor do they necessarily have the institutional structure that readily allows for the modernisation of their mandates, requiring extensive and exhaustive negotiations on both process and substance.

Box 1.2. Progress in high seas fisheries governance

Sen (1997) notes that the development of high seas fisheries policy and management in general can be classified into three distinct phases. The ***first phase*** was the period until the 1970s when most parts of the world's oceans were international waters marked by open-access fisheries, while the coastal states' jurisdiction over maritime zones did not encompass but a narrow belt of three nautical miles along the coast lines. This phase saw a considerable increase of both fishing effort as well as advances in technology which allowed greater catches. At the same time states perceived the need for cooperation on the regional level so as to reduce resource conflicts and to prevent overfishing on the high seas. The first fisheries management bodies were established.

The ***second phase*** was that of the "enclosure of the seas" from the mid-1970s through the extension of coastal state jurisdiction to 200 nautical miles and the reduction of the scope of international fisheries management following UNCLOS III. The development of high seas fisheries management entered into its ***third phase*** in the early 1990s with the international community's growing concern about overfishing and the adoption of groundbreaking political and legal instruments such as the 1992 Rio Declaration, the 1995 UN Fish Stocks Agreement and the 1995 FAO Code of Conduct for Responsible Fisheries, which created a whole new framework for the governance of high seas fisheries.

To these three phases can be added a ***fourth phase*** which has seen the adoption of various international instruments into reformed Conventions and RFMO practices. This has also seen the implementation of the principles in these instruments in practice.

Source: Sen (1997).

A rapidly emerging issue in RFMOs is the growing interest in participating in international fisheries being demonstrated by developing countries, many of whom may not have a prior history of fishing on the high seas in general, or in specific RFMO areas. This is particularly the case for those RFMOs that are managing highly migratory species (such as the tuna RFMOs). This push for participation raises difficult issues of defining "real interest" in international fisheries and puts the question of "benefits sharing" squarely on the RFMO reform agenda. It also raises the issue of the capacity of such countries to contribute effectively to scientific, management and enforcement efforts under RFMO arrangements.

Further complicating the challenge is the fact that many developing countries that are Contracting Parties or cooperating non-Contracting Parties (or equivalent) of the ten major RFMOs have not ratified the UNFSA (Annex).[2] Moreover, of the 100 or so countries or economies listed in the Annex, 19 countries belong to four or more RFMOs and four of these have yet to ratify the UNFSA (China, Indonesia, Philippines and Vanuatu) (Table 1.1). The lack of a common agreed starting point for reform in terms of principles, processes and objectives will hamper the prospects for generating momentum for change in some RFMOs.

Table 1.1. Adherence to key international instruments by countries which are members of four or more RFMOs

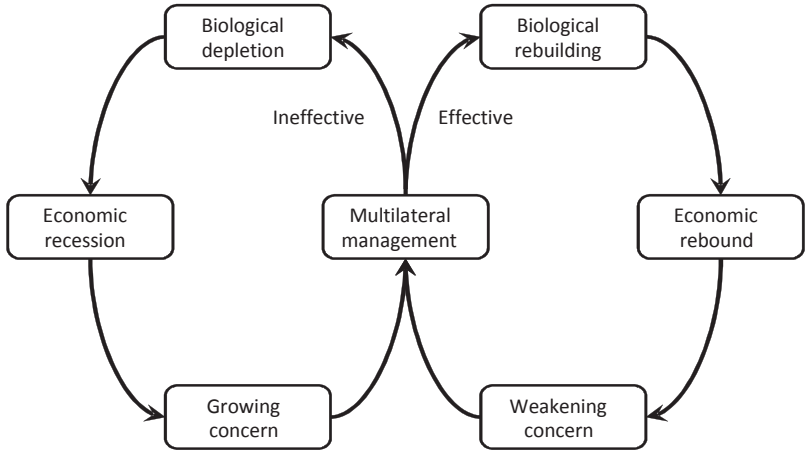
Country	UNCLOS	UNFSA	FAOCA	CCAMLR	CCSBT	GFCM	IATTC	ICCAT	IOTC	NAFO	NEAFC	SEAFO	WCPFC	Total
Australia	Y	Y	Y	M	M				M				M	4
Canada	Y	Y	Y	CNM			CNM	M		M			M	3/2
China	Y	N	N	CNM			CNM	M	M				M	3/2
Cook Islands	Y	Y	Y	CNM			CNM						M	1/2
EC	Y	Y	Y	M	CNM	M	CNM	M	M	M	M	M	M	8/2
France (SPM)	Y	Y	Y	M		M	M		M					4
Iceland	Y	Y	N					M		M	M			3
Indonesia	Y	N	N		(CNM?)				CNM				M	1/2
Japan	Y	Y	Y	M	M	M	M	M	M	M			M	8
New Zealand	Y	Y	Y	M	M								M	3
Norway	Y	Y	Y	M				M		M	M	M		5
Philippines	Y	N	N		CNM			M	M				M	3/1
Rep. of Korea	Y	Y	Y	M	M		M	M	M	M			M	7
Russia	Y	Y	N	M				M		M	M			4
South Africa	Y	Y	N	M	CNM			M	CNM					2/2
Spain	Y	Y	Y	M		M	M							3
Chinese Taipei	-	-	-		M		CNM	CNM					M	2/2
United States	N	Y	Y	M			M	M		M			M	5
Vanuatu	Y	N	N	CNM			M	M	M				M	4/1

FAOCA refers to the FAO Compliance Agreement; M refers to Member; CNM refers to Cooperating Non-Member (or equivalent); the total refers to the number of members and Cooperating Non-Members. The GFCM is not a full RFMO but is included here for completeness See Annex for full listing of acronyms. *Source*: Based on the annex to this report.

Efforts to strengthen RFMOs also have to deal with internal and external factors that may work against the benefits of change from being realised and shared by participants in the RFMO. The problem of IUU fishing is clearly one of these factors that can severely hamper change. However, non-compliance and illegal fishing by Contracting Parties to an RFMO can have an even greater impact on generating support for reform. Not only does such non-compliance undermine conservation measures and reduce benefits of change, it also undermines the trust and credibility between Contracting Parties that is essential to undertake lasting reform.

The political economy aspects will, therefore, be particularly important in determining the prospects for generating support for and sustaining change. The key issue is the potential (or perceived) distribution of benefits and costs of change both between countries and over time. Different groups of countries tend to have significantly different rates of time preference, which will influence their evaluations of the relative net benefits of different paths (including resisting efforts to introduce change). The role of compensation and side payments to try and entice members into undertaking changes will also be important. Figure 1.1 illustrates the economic drivers in determining the political responses to economic losses (and gains) when multilateral management ineffective (or effective).

Figure 1.1. Multilateral management as a mechanism of change



Source : (2005), Webster.

Generating coalitions for change within RFMOs is therefore a challenging task. Much will depend on the conditions for change being sufficiently fertile for initiatives to take root and prosper. A positive convergence of economic and political conditions, both within the RFMO itself and within the economies of the Contracting Parties to the RFMO, is essential.

Introduction to the case studies

The four case studies presented in this study are of RFMOs which have undergone significant changes in recent years. Two of the case studies are of tuna RFMOs, involving highly migratory fish stocks that pass through the EEZs of several countries as well as through high seas areas. These RFMOs tend to have a higher proportion of distant water fishing States as parties to the agreements.

The other two case studies, in contrast, involve straddling stocks in the North Atlantic Ocean. In these RFMOs, the coastal States tend to have a greater role in the functioning of the organisation.

The case studies seek to address a number of questions:

- What was the policy change?
- What were the key external and internal drivers to the policy change?
- What were the key obstacles to the policy change?
- How were these obstacles overcome? If they were not overcome, what was the reason?
- How sustainable is (are) the change(s) likely to be (i.e. is there a likelihood of the changes being undermined or wound back)?
- What are the key lessons to be learned from the experience?

The case studies were undertaken as desk top studies, complemented with interviews with participants in the RFMOs. The interviews were conducted on a confidential, non-attributable basis. The CCSBT case study was prepared by a consultant, while the other case studies were prepared by the OECD Secretariat.

Notes

1. The UNFSA is formally known as 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 High Migratory Fish Stocks. It came into force on 11 December 2001 and currently has 68 signatories.

2. The terms to describe parties who are less than full members of an RFMO vary between RFMOs. Unless specified in relation to a specific RFMO, the term “cooperating non-Member” will be used generically in the report.

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Chapter 2

Expanding membership in the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) [1]

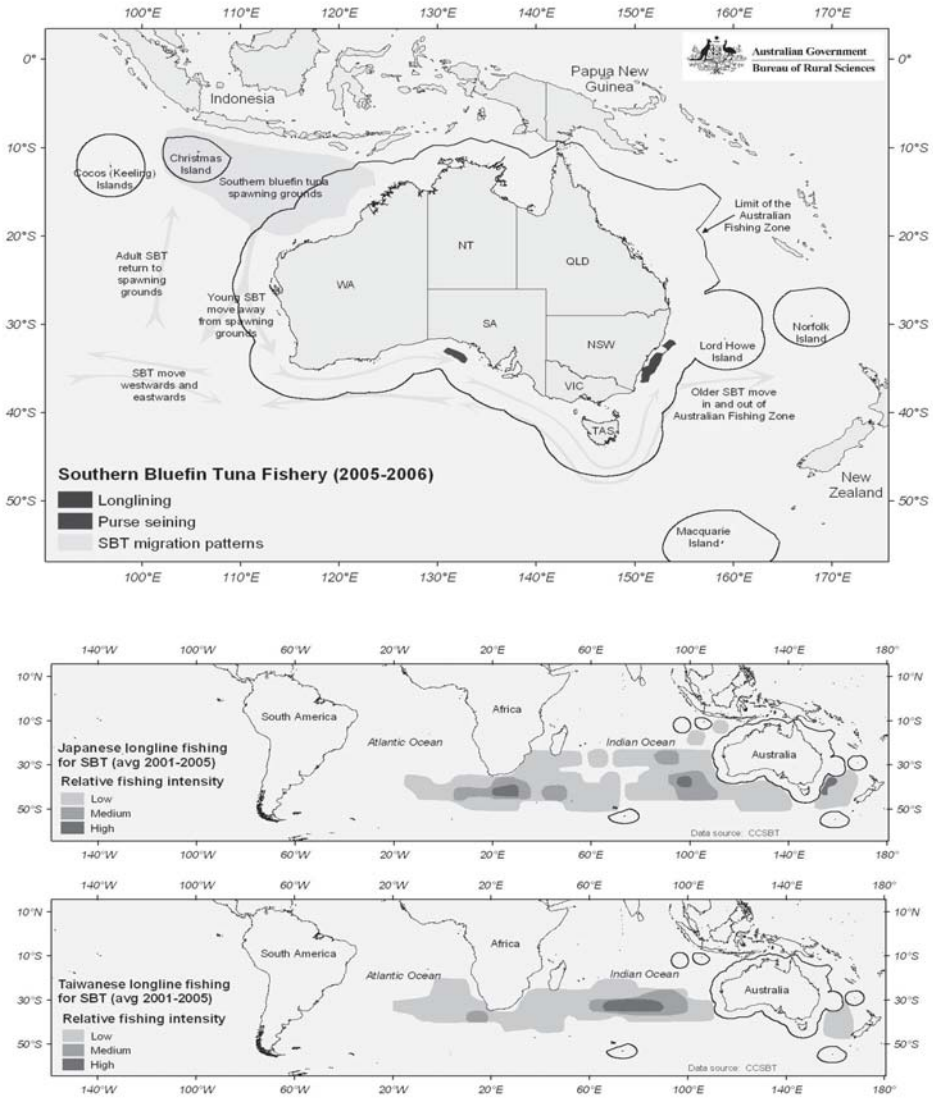
The Commission for the Conservation of Southern Bluefin Tuna (CCSBT) was established as a relatively small RFMO in 1994, comprising just three Parties, Australia, New Zealand and Japan. Following a period during which the three Parties were unable to come to an agreement over a total allowable catch, serious concerns were expressed about the ability of the CCSBT to function effectively. Compounding this was the increased activity in the southern bluefin tuna fishery by economies that were not party to the Convention. It became clear that it was necessary to, in addition to agreeing on a TAC, bring these other economies under the management arrangements of the CCSBT. This chapter reviews the CCSBT's policy initiatives to incorporate new members and Cooperating Non-Members. It examines: the need for the policy change; how, and the extent to which, obstacles to its implementation were addressed; the success of the changes; and the key policy insights of relevance to other regional fisheries management organizations (RFMOs).

Background[2]

Southern bluefin tuna (SBT) are large, fast swimming, pelagic fish. SBT are found throughout the southern hemisphere mainly in waters between 30 and 50 degrees south but only rarely in the eastern Pacific. The only known breeding area is in the Indian Ocean, south-east of Java, Indonesia and straddles the Indonesian Exclusive Economic Zone (EEZ) and the high seas. The movement of SBT from the spawning grounds together with the pattern of fishing effort by method is described in Figure 2.1.

As SBT breed in the one area and all look alike wherever they are found, they are managed by the CCSBT as one stock. With the exception of Australian catches, the main method used for catching SBT is longline fishing with the catch frozen onboard at very low temperatures (-60°C). The Australian component of the fishery mainly uses the purse seine fishing method and after capture the fish are towed to waters near the Australian mainland and placed in floating cages anchored to the ocean floor. The tuna are then grown out for several months and sold as frozen or chilled fish.

Figure 2.1. Map of SBT Fishery



Source: Bureau of Rural Sciences, Australian Government.

Because of the high fat content of SBT flesh, premium prices can be obtained in the Japanese sashimi market. While this market remains the primary SBT market, markets in Europe and the USA are growing. The total value of the SBT fishery is estimated to be about USD 900 million.

SBT were heavily fished in the past, with the annual catch reaching 80 000 tonnes in the early 1960s. Heavy fishing resulted in a significant decline (near collapse) in the numbers of mature fish and the annual catch began to fall rapidly. By the mid 1980s, it was apparent that the SBT stock was at a level where catches had to be tightly limited and, from 1985, the main nations fishing SBT at the time, Australia, Japan and New

Zealand, voluntarily agreed to apply strict quotas to their fishing fleets to enable rebuilding of the stock.

On 20 May 1994 these voluntary management arrangements between Australia, Japan and New Zealand were formalised when the Convention for the Conservation of Southern Bluefin Tuna, which had been signed by the three countries in May 1993, came into force. The Convention established the CCSBT.

The CCSBT's objective is to ensure, through appropriate management, the conservation and optimum utilisation of the global SBT fishery. In pursuit of this objective the CCSBT performs a number of functions:

- sets a total allowable catch and allocates it among the Members;
- considers and administers regulatory measures to meet Convention objectives;
- conducts and coordinates a scientific research program aimed at providing information to support the Commission's management objectives;
- takes decisions to support and implement fishery management;
- provides a forum for the discussion of issues relevant to the conservation objectives of the Convention;
- acts as a coordination mechanism for Members' activities in relation to the SBT fishery;
- fosters activities directed towards the conservation of ecologically related species and bycatch species;
- encourages non-members engaged in the fishery, to accede, apply for Cooperating Non-Membership, or participate as observers in Commission activities; and
- cooperates and liaises with other tuna RFMOs in areas of mutual interest.

The nature and extent of participation in the CCSBT has changed markedly since 1994. There are now five members and three Cooperating Non-Members (Table 2.1). Members and Cooperating Non-Members continue to reflect, predominantly, those States that catch SBT (coastal States and other fishing States) and that comprise the traditional and major market (Japan) and some emerging European markets. It is worth noting that other growing markets such as the USA and potentially China are not participants.

Table 2.1. Characteristics of participants in the SBT fishery[1]

	Annual total allowable catch (TAC) 2007-2009 (tonnes)	2006 Catch (tonnes)	Predominant nature of SBT catch	Catch method (%)
CCSBT	**11 810**	**11 850**		**Longline: 67%** **Purse seine: 33%**
Members				
Australia	5 265	5 635	Target	Purse seine: 99% Longline: 1%
Japan[2]	3 000	4 207	Target	Longline
Korea[3]	1 140	150	Target	Longline
New Zealand	420	238	Target	Longline: 98% Other: 2%
Chinese Taipei[3]	1 140	963	Bycatch and seasonal target	Longline
Co-operating Non-Members				
European Community	10	0	Bycatch	Longline
The Philippines	45	50	Bycatch	Longline
South Africa	40	9	Bycatch	Longline
Other				
Indonesia	750	598	Bycatch and seasonal target	Longline

1. These data are drawn from the historical catch records of the CCSBT. Recent reviews of SBT farming and market data suggest that catches may have been substantially underestimated over the past 10-20 years. This may have consequences for the accuracy of data on total catch and catch by gear.

2. In 2006, Japan's TAC was reduced from 6 065 tonnes to 3 000 tonnes for the period 2007-2011.

3. In order to contribute to the recovery of the SBT stock, Chinese Taipei and Korea undertook to maintain their actual catch to below 1 000 tonnes each for the period 2007-2009.

Source: CCSBT (2006, 2007a, 2007b and 2008)

Policy change: Expanding the CCSBT membership

When the CCSBT was established in 1994, membership did not cover all relevant coastal States (e.g. Indonesia and South Africa) and did not include other fishing nations, such as the Republic of Korea and the Fishing Entity of Taiwan, Chinese Taipei.[3]

The founding members of the CCSBT recognised, from the outset, that given the depleted nature of the SBT stock, the unrestricted catches of Korea, Chinese Taipei and Indonesia reduced the effectiveness of the members' quotas and that it was important to encourage their membership. Indeed, as early as the second Commission meeting in 1995, Korea, Indonesia and Chinese Taipei attended as observers and each indicated interest in participating in the Commission's conservation and management measures. The same meeting called upon all non-members not to expand their fishing effort and discussed approaches for accommodating potential new entrants and principles for determining quota allocations for new entrants.

The key elements of the CCSBT's policy initiatives to ensure the membership and/or cooperation of all parties with an interest in the SBT fishery and to minimise the impact of non-members on the status of the stock have included:

- the development, in 1995, of principles for allocation of quota to new members;
- since 1995, a series of bilateral and Commission-led negotiations with individual coastal and fishing States/entities (Korea, Chinese Taipei, Indonesia, South Africa) to secure their membership of the Commission;
- the adoption in 2000 of an Action Plan on Non-Members and the introduction of a Trade Information Scheme (TIS). The Action Plan recognized that there were a significant number of vessels registered to non-parties catching SBT and undermining management and conservation measures and sought to address this by:
  - asking non members to cooperate fully with Commission management and conservation measures and advise what actions they have taken to this effect;
  - using catch data, trade information and other information from ports and fishing grounds to identify non-members whose vessels are catching SBT and diminishing the effectiveness of conservation and management;
  - seeking that non-members rectify their fishing activities so as not to diminish conservation and management measures;
  - individual and joint approaches by members to non-members catching SBT urging them to cooperate fully with the Commission in implementing conservation and management measures;
  - monitoring the actions of non-members to identify those who have not rectified their fishing activity; and
  - imposing trade restrictive measures, consistent with international obligations, on SBT from non-members who have not rectified fishing activities.
- the development of an approach to provide for the full participation of Chinese Taipei in the Commission; and
- the adoption in 2003 of a resolution providing for "Cooperating Non-Members". Such members can participate fully in the business of the CCSBT but cannot vote and are required to adhere to the management and conservation objectives of the CCSBT and agreed catch limits. The CCSBT's resolution on the status of Cooperating Non-Members stated that it "is not intended to be a permanent arrangement and that Cooperating Non-Members should ultimately accede to the Convention".

Drivers for policy change

The CCSBT's attempts to ensure membership or full cooperation of coastal and catching States/entities were driven primarily by the failure of the SBT stock to rebuild and the impact of non-member catch on the stock and on the viability of the SBT fisheries of the three founding members. By the mid to late 1990s it was apparent that the stock was not rebuilding in response to the TAC reductions of the 1980s and continued catch restraint of the members in the 90s. Members felt that they were doing all the right things to manage the stock while others were "free riding" on their restraint. At the same time an improved understanding of the biology of the stock lead to revisions in assumptions on key stock parameters. This in turn led to a more pessimistic outlook for stock rebuilding and hence any chance of increasing the TAC. In addition, an increasing proportion of the global catch was being taken by non-members, with that proportion increasing from around 12% in 1990 to around 30% by 1997.[4]

The number of non-member catching countries was also increasing. In addition to the three members and Korea, Chinese Taipei and Indonesia, the Philippines had indicated an intention to develop a fishery for SBT and South Africa, a coastal State, also advised that it wished to develop its own SBT fleet. Further, after the introduction of the TIS, countries including Cambodia, Honduras, Equatorial Guinea and Belize were identified as catching SBT.

Overcoming obstacles to change in the CCSBT

Despite its early recognition of the need to encourage membership of Korea, Chinese Taipei and Indonesia, the CCSBT's progress in achieving this has been slow and not wholly successful. After protracted negotiations, Korea joined the Commission on 17 October 2001 and Chinese Taipei's membership of the Extended Commission became effective on 30 August 2002. Indonesia remains neither a member nor a Cooperating Non-Member. It has repeatedly indicated that it intends to lodge an application for Cooperating Non-Member status but has failed to do so. In 2007 Indonesia advised the CCSBT that it intends to become a full member of the Commission.

The CCSBT's decision to offer Cooperating Non-Member status to non-members was a further attempt to maximise the cooperation of relevant non-members with the activities of the Commission. Subsequently, between 2004 and 2006, the Philippines, South Africa and the European Community have been formally accepted as Cooperating Non-Members. The creation of this category of membership facilitated engagement with States/organizations who may otherwise have considered full membership too onerous. However, in spite of the fact that this category is relatively new, it already appears that some Cooperating Non-Members are not fulfilling all their obligations.

Perceptions of effectiveness of CCSBT

There are a number of reasons for the slow progress and, in some instances, failure, to secure membership of key catching and coastal States. An underlying factor which hindered a timely and united response to the challenges facing the stock and the Commission was the operation of the Commission itself. Despite there being only three members from its establishment in 1994 through to 2001, Commission members disagreed strongly on many key management issues. There were a number of factors which exacerbated this, including:

- the stock was severely depleted and there was disagreement on stock assessments and sustainable catch levels;
- no agreed basis for proportional distribution of the TAC between the original members and therefore no basis on which to agree on the distribution of a change (either increase or decrease) to the TAC;
- for many years no agreement on the TAC itself. Japan called for increases in the TAC, Australia and New Zealand favoured reducing the TAC. Japan foreshadowed a unilateral Experimental Fishing Program (EFP) which would entail catch in addition to its agreed allocation of 6,065 tonnes.

The disagreement among the members, in particular about the EFP, preoccupied the CCSBT for a number of years and ultimately resulted in the issue being taken to the International Tribunal for the Law of the Sea (ITLOS).

What remains unclear is the extent, if any, to which this disharmony and dysfunctionality in the CCSBT discouraged Korea, Chinese Taipei and Indonesia from joining the Commission. While there is no conclusive evidence on this there are reasons to believe that these circumstances might have had such an impact. For example, in 1999 Korea formally indicated concern about discord among CCSBT members and the potential influence of this on Korea's consideration of acceding to the Convention (CCSBT, 1999). At about the same time non-member observers witnessed a discussion within the CCSBT (initiated by Japan) as to whether SBT should be managed by the CCSBT or the Indian Ocean Tuna Commission. Such propositions, combined with the stock status, would undoubtedly have caused doubts in the minds of non-members as to whether membership of CCSBT was worth pursuing.

Real progress on new membership did not occur until the early part of the current decade. This progress coincided with a period of a renewed spirit of co-operation among the then members, flowing from the ITLOS hearing and agreement between the members to address the underlying reasons for their disagreements. As a result, this period saw a number of changes in the Commission, including the appointment of independent scientific advisors and the adoption of the TIS and the Action Plan on non-members. In retrospect it appears that these developments provided a united front and a much stronger platform from which to negotiate with non-members.

Membership and quota allocation to new members

There is no doubt that following the turbulent years of the late 1990s the operations of the Commission improved and renewed effort was made to accommodate and extend membership from 2000. However, questions still remained as to the allocations to be provided to new entrants and this resulted in considerable delays in reaching agreement on these allocations. While there appears to have been agreement by the Commission on a basis for quota allocation for new entrants as early as the second Commission meeting (Annex 6, CCSBT, 1995) the agreed criteria do not appear to have been applied in any subsequent negotiations with new entrants. To have made the effort to establish the criteria and then not use them seems strange. However, it is possible that with developments in international law and the finalisation of the United Nations Fish Stock Agreement[5] (UNFSA) there was a view that they did not adequately reflect contemporary thinking or arrangements, nor adequately accommodate the interests of developing States.

There appears to have been reluctance by Members to implement the requirements of the UNFSA as it relates to accommodating the interests of developing States. This has caused frustration on the part of non members such as the Philippines as reflected by their opening statement to the Commission in 2003[6]. "At this point the commission in the name of conservation and sustainable SBT fishing became a closed club of participating countries and entity. Outsiders wishing to join in, invariably developing economies, are almost treated as 'gate crashers', not exercising the freedom to fish in the high seas, but rather as villains out to deprive the participating states of their catch entitlement" (CCSBT, 2003).

Despite the fact that some consideration had been given to quota allocation for new entrants, with changing circumstances and a more pessimistic outlook on stock rebuilding there was no doubt significant pressure to balance the overall TAC and catch levels with the need to provide sufficient incentive for new members to join. This, together with a lack of agreement on how to allocate any reduction in the TAC among existing members, resulted in the TAC being increased to accommodate new members[7]. Between 1989 and 2001 the TAC remained at 11 750 tonnes and allocations to the Members remained at the tonnages agreed in 1989 (Australia 5 265 tonnes, Japan, 6 065 tonnes and New Zealand 420 tonnes). However the accession to the Convention of Korea and Chinese Taipei resulted in additional allocations of 1 140 tonnes each, a further 95 tonnes is allocated to Cooperating Non-Members and an Observer allocation of 750 tonnes provided for Indonesia.

CCSBT Members, jointly and individually, have used diplomatic pressure on non-members to secure new members. Japan, for example, played a key role in finalising membership arrangements with Korea. However this approach has not been as successful with other non-members. Despite continuing diplomatic efforts, Indonesia remains outside the Commission.

The longer the delays in securing membership of non-members, the harder it became to accommodate their interests. In the case of Korea, a key obstacle to membership was agreement on an appropriate allocation. Korea had indicated, from almost the time of the formation of the CCSBT, which Korea wanted to join, but it continually maintained that the proposed catch allocation would be too small.

Korea's claimed catches of SBT between 1994 and 1997 increased from 119 tonnes to around 2 000 tonnes (CCSBT, 1999). However, Korea's catches reduced from 1 796 tonnes in 1998 to 1 135 tonnes in 2000 due to the voluntary efforts by Korea to join the conservation efforts of the CCSBT such as providing scientific information and statistics on a regular basis, withdrawing long-liners from the Convention area in 1999, and implementing annual catch limits of 1 600 tonnes. Korea was given an allocation of 1 140 tonnes when it joined the CCSBT based on its previous catch and the conservation efforts. The CCSBT's failure to secure Korea and Chinese Taipei's membership and to constrain their catches, as well as the catches of existing Parties, early in the 1990s did not help improve the state of the stock.

There is no doubt the development and implementation of the Action Plan on Non Members helped to increase the pressure on those non-member States with a "genuine interest" in the fishery. It was also successful in curtailing the flow of product from vessels operating under flags of convenience. The "naming and shaming" and requests for "cooperation" probably had less of an effect than the threat and imposition of restrictive trade measures. Even today it is likely that market restrictions on SBT product from

Indonesia are helping to influence a decision by that country on membership of the Commission.

The Action Plan together with the increased information on catches provided by the Trade Information Scheme and closer monitoring of catches in Indonesia has helped fine tune stock assessments. The threat of trade restrictions and closer attention to trade flows has improved the Commission's knowledge of what product is coming from where. It is worth observing that the effective use of trade-related measures was almost entirely due to the specific nature of the product and dominance of Japan in the market for SBT. The effectiveness of the TIS and the Action Plan may be reduced as the markets for SBT expand. For example, the import statistics of the USA show that considerable quantities of SBT are being imported into that country from Indonesia (National Marine Fisheries Service, 2008). This reduces the effectiveness of the CCSBT's decision that members do not accept product from Indonesia as a means of exerting pressure on Indonesia to cooperate with the Commission's conservation and management measures.

Status of Chinese Taipei

Chinese Taipei was also keen to join the Commission, in all likelihood for both fisheries and non-fisheries related reasons[8]. However, providing Chinese Taipei with membership presented its own separate set of problems, which were providing challenges for other RFMOs. Article 18 of the CCSBT Convention allows only for 'States' to accede to the Convention. Other RFMOs continue to struggle with the means to accommodate the participation of Chinese Taipei and the CCSBT, to its credit (ultimately, but it might be said belatedly), developed an innovative mechanism to provide for such participation. The resolution to establish an Extended Commission and an Extended Scientific Committee to allow full membership of Chinese Taipei was a novel and successful approach to what had potentially been a difficult problem.

Cost and capacity to participate

A final, yet significant, obstacle facing potential new members of the Commission was the 'cost' of membership. This 'cost' includes not only direct monetary cost (i.e. the contribution to running the Commission), but also the costs incurred in meeting the responsibilities of membership. These include the human and financial capacity required within domestic fisheries management, legal and financial costs of developing and implement domestic arrangements to implement and enforce CCSBT management and conservation measures, and finally the cost of participating fully in Commission processes (meetings and sub-committees).

A number of the Members and Cooperating Non-Members of CCSBT have expressed concerns in this regard. For example, South Africa indicated in 1999 that it was keen to join the Commission but was concerned about limited financial and human resources.

The CCSBT has recognised the resource constraints faced by Indonesia and has provided funding over many years to facilitate attendance at meetings by Indonesian observers. In addition, Australia and Japan have funded joint scientific and data collection programs for SBT in Indonesia in order to improve both capacity for data collection and the quality of the data available. CCSBT assistance has enabled Indonesia to attend the CCSBT meetings, but it has not delivered the outcome sought and funding for Indonesia's attendance at CCSBT meetings as an observer was reduced when it failed to progress its undertaking to become a Cooperating Non-Member.

The Commission's view of the merits of minimising financial disincentives does, however, appear somewhat confused. In 2003 it acknowledged that there was a need to assist Indonesia if it was to meet the obligations of a Cooperating Non-Member and in October 2004 it agreed that the Commission's funding formula was a financial disincentive to membership of developing countries, such as Indonesia and the Philippines. However the Members decided not to amend the funding formula noting that such an amendment would require an amendment to the Convention which would be difficult to achieve in a short timeframe. The Commission's funding formula therefore remains an obstacle to membership of developing countries.

How sustainable are the changes likely to be?

New members

The relatively recent changes in membership of the CCSBT resulted in Korea and Chinese Taipei joining the Commission/Extended Commission and three other States becoming Cooperating Non-Members. Of the Cooperating Non-Members, South Africa is a relevant coastal State, the Philippines wishes to develop a high seas fishery and the European Community has indicated that it takes only a small quantity of SBT as bycatch to other long-lining operations in the Indian Ocean. Indonesia, a relevant coastal State within whose waters SBT spawn, is neither a member of the Commission nor a Cooperating Non-Member, despite many bilateral initiatives, Commission-led inter-sessional working groups, and formal threats of trade restrictions. Within the context of the need to fully engage a very important coastal State and now an increasingly important fishing State, the Commission's attempts have been less than successful and this makes the benefits associated with other membership changes less sustainable.

The changes resulting in Korea and Chinese Taipei joining the Commission can be viewed positively. However, there is the question of the time it took and the way of allocating quotas to new members. Perhaps in the case of Chinese Taipei, given the greater complexity in finding a solution consistent with the Convention and indeed the agreed allocation of quota, this may be viewed as somewhat more successful. However, the ongoing absence of a formal, agreed basis for accommodating the interests of new members remains an obstacle to new membership and ensures that case-by-case, and potentially lengthy, negotiations will continue to characterise discussions with non-members, to the detriment of the SBT stock.

Emerging players and markets

There are two other important issues in respect of the sustainability of these membership changes.

- The extent to which these hard fought gains could be dissipated by new fishing States entering the fishery;
- What will happen if further markets develop and Japan becomes less important as the predominant market State? Is it realistic to restrict CCSBT membership to coastal/fishing States or does the Convention needs to be widened to include key port and market States?

China is frequently mentioned in respect of potential new SBT fishing States. As far back as 2004, concern was expressed in the CCSBT about the potential for China to

expand into catching SBT. China advised the CCSBT in 2006 that it had no current interest in the SBT fishery other than perhaps some minor bycatch (CCSBT, 2006). However the product is already passing through China for processing, which is something that will continue to expand. China is also likely to grow as an SBT market. As the standard of living increases and a wealthy upper middle class further develops, the demand for high quality tuna will increase. The historical ties between Japan and China have no doubt left a knowledge and taste for sashimi quality tuna. The combination of a highly efficient and low cost processing sector, internal demand and a large high seas fishing fleet with increasingly restricted high seas fishing opportunities available, will likely lead to China entering the fishery probably sooner rather than later. It is interesting to note that the EC has become a Cooperating Non-Member on the basis that it takes a small quantity of SBT as bycatch, yet China has not done so despite having acknowledged that it also takes some minor bycatch.

In respect to the second point above, Article 18 of the Convention restricts accession to the convention to States whose vessels fish for SBT or coastal States through whose EEZ SBT migrate. While Article 13, which provides for the Parties to "encourage accession by any State to this Convention where the Commission considers this to be desirable", may suggest that broader accession may be possible, there would be merit in rewording the Convention to allow explicitly for port and market States to become members as necessary. As end markets and trading conditions change and the cost of catching SBT by existing fishing States and by existing fishing methods increases, there will undoubtedly be new entrants in the fishery and new ways of transporting the product to new markets. There have already been recent changes in catch levels and comments by some members that the cost of catching SBT is reducing the size of their industries. These changes will put increased pressure on existing arrangements and potentially undermine the expanded membership and effectiveness of the Commission, unless new arrangements can be developed.

Use of Co-operating Non-Member status

The sustainability of these membership changes might also be questioned due to issues associated with the long-term use of the Cooperating Non-Member status. It is not at all clear that the CCSBT's intention that this status be a transition towards full membership is in fact how Co-operating Non-Member status is being viewed or used. There appears to be little, if any, movement by the Cooperating Non-Members towards full membership. Further, the CCSBT's decision in 2004, in considering options for the admission of new members suggests that it does not envisage the need for admission of new members. The CCSBT noted that "… in the context of the circumstances of the fishery including that it is fully exploited and that existing members have made sacrifices there were significant impediments to new entrants into the fishery. Consideration of new rules for the admission of new members was not an urgent matter" (CCSBT, 2004). At that time the Philippines had already become a Cooperating Non-Member and the EC and South Africa are now also in that category.

Co-operating Non-Members are expected to abide by all conservation and management measures and in return are granted a (small) allocation of quota. Yet they have few of the benefits (other than the quota) and all of the costs of being a member apart from the direct membership contribution. It is not clear whether this sends the right "signals" to prospective members. Existing members no doubt see this as a good "deal", Co-operating Non-Members can not vote so the operations of the Commission are more

"manageable". However some of the potential problems with this membership status are already apparent. In 2007 it was noted that written reports had not been received from Co-operating Non-Members and the EC was not present at the Commission meeting. In addition, the EC had not met its obligations in respect to reporting SBT catches in 2007. At the same meeting South Africa indicated that due to its small allocation and the fact that its catches of SBT were predominantly bycatch, it was unable to commit to becoming a full member.

Quota trading

An issue associated with those discussed above is what role, if any, quota trading (among members) might play in retaining and attracting new members? The Commission has pondered the question as to whether to allow quota trading for some years. It has been provided with legal advice that the CCSBT could decide to approve quota trading arrangements, but that without such a decision and under the current legal framework, a member could not unilaterally decide to trade or lease its quota (CCSBT 2004). Some Members, notably Philippines, have indicated support for quota trading while other Members are not currently supportive.

Given the nature of the fishery and the changes already underway, quota trading may occur in the not too distant future. In fact, in many respects, it makes sense where the stock is severely depleted and being rebuilt and where there is little or no scope to accommodate an increase in the global TAC for States wishing to enter the fishery (whether targeting SBT or catching them as a bycatch) or those already in the fishery who wish to expand their fishing operations. In theory, this should lead to the most efficient use of what are scarce resources. There are obviously a range of administrative processes that would need to be developed and implemented for this to occur.

Adequacy of monitoring, control and surveillance (MCS)

In reviewing the development and operation of the Commission an obvious question that emerges is whether the CCSBT's MCS measures had been effective enough to ensure that the benefits of participating as a member were not dissipated through Illegal, Unreported and Unregulated (IUU) fishing. It has not been possible to explore this issue in detail for this study. However, the recent exposure of significant quantities of unreported SBT catch by at least one member, indicates that while there have been a range of MCS measures in place, which each member is obliged to implement and enforce, this has not stopped IUU fishing from occurring. Furthermore, despite consideration over an extended period there is no centralised VMS, no independent observer program, no agreed boarding and inspection arrangements and the documentation scheme continues to relate only to traded product rather than catch. This reflects, in part, the failure of the CCSBT to activate the Compliance Committee which was established in 1997. The CCSBT acknowledged in 2006 that the Committee was important in ensuring Members and Cooperating Non-Members were in compliance with conservation and management measures and that it also had an important role in reviewing the activities of non-members fishing for SBT. The Committee did not meet for the first time until 2007.

Key lessons learned

In looking back at the history of the CCSBT there are a number of things, such as a small original membership and a single stock, which make it unique and that should have facilitated its operation. Equally there are a number of characteristics that impeded its performance, namely that the stock was severely depleted from the outset and that many aspects of the stock were not well understood. This created a separate and powerful set of issues that jeopardised progress on many issues, including membership. The lessons identified below from the experience of CCSBT in its handling of membership issues must be considered in that context.

Clear policies on Membership

In the circumstances one of the key things the Commission should have done initially was to establish principles for the allocation of participatory rights and for accommodating new members, recognizing in particular, the needs of developing coastal States. The policy should have clearly spelled out the stock status (as understood at the time) and also the need for a precautionary approach to management given this status and associated uncertainty. Much of the delay and frustration during the 1990s may have been avoided had this been done initially and immediate negotiation commenced with Indonesia, Korea and Chinese Taipei based on this policy. It would have also sent a clear message to all interested States of the constraints within which the Commission was operating. In the absence of a clear, publicly available policy on accession to the Convention and allocation of quota, negotiations with prospective new Members (for example, China) are likely to be as protracted and difficult as with previous new Members. However, it is acknowledged that the articulation of such a policy would not be easy given the provisions of Article 116 of UNCLOS and Article 8 of the UNFSA which provide an expectation that freedom to fish on the high seas will be accommodated in existing or new RFMOs for those that have a 'real interest in the fisheries concerned'. It remains unclear as to how 'real interest' should be interpreted and accommodated. It should be noted that there appears to be an inherent tension between provisions which provide for 'real interest' and the global community's desire for healthy fisheries and ecosystems.

Agreed proportional TAC allocations

The failure of the CCSBT to agree on proportional allocations of the TAC is a potential source of conflict for Members and potential Members. The lack of agreement on how changes (increases and decreases) to the TAC would be reflected in Member allocations may itself have affected the Commission's ability to make decisions on the level of the TAC and hence the overall management and rebuilding of the depleted stock. The merits of making initial Member allocations based on proportions of catch are clear.

Need for flexible solutions

To its credit the Commission showed flexibility and used an innovative solution to the complex problem of how best to accommodate Chinese Taipei. It does not appear that the same flexibility was used to find a way to bring Indonesia into the Commission as a member. While establishing the Cooperating Non-Member status no doubt sought to provide a way forward for Indonesia it has not been taken up. More thought and much

greater effort should have gone into bringing Indonesia into the Commission. This would have had to include effective financial assistance and help with domestic management arrangements. Bilateral scientific and catch monitoring arrangements established with Indonesia by Australia went part of the way, but clearly more was required to solve what remains an intractable problem.

The costs of delaying action

With the benefit of hindsight, it is unclear why more effort had not been made initially to address some of the issues which plagued the Commission throughout the 1990s. These include the initial allocation of a proportional TAC to the founding members Australia, Japan and New Zealand, a clear statement on entry requirements for new members and how their allocation would be determined (although there was a policy on allocation which does not appear to have been applied) and a more structured approach to the core business of the Commission, independent scientific committee and detailed approach for dealing with MCS issues.

While a number of these issues have been addressed and have paid dividends there are still some outstanding, and the Commission does not appear to be addressing these with any urgency. In particular, the CCSBT's 2004 decision that rules for the admission of new members was not a priority should be revisited. There are now three Cooperating Non-Members and, if the Commission is serious about this status being interim rather than permanent, it needs to establish clear rules for transition to full membership. Such rules would also apply to the major non-cooperating country, Indonesia, and to other potential catching countries such as China and should provide for the participation of relevant market States such as the USA.

Regular review of the Convention

It may be necessary to review the Convention on a regular basis in order to ensure it has sufficient flexibility to accommodate the dynamic environment within which it is operating.The changing nature of the catching sector and the development of new markets were highlighted as factors likely to have an impact on the CCSBT in the future. This suggested that there is a need to provide for broader Commission membership under Article 18 of the Convention. While this may bring with it a new set of challenges it will also help provide the breadth needed to address current and future changes in the operation of the fishery.

Most importantly, the performance review of the CCSBT that was agreed upon in 2007 provides a good opportunity to make a more fundamental review of the Convention's operations, structure and effectiveness. The CCSBT review will be based on a self-evaluation by an internal Performance Review Working Group (PRWG) which will produce a draft report and recommendations for review by the independent expert(s) (CCSBT 2007c, Attachment 13). The Members will then review the two reports (internal and external) before the final report is prepared by the PRWG (excluding the independent expert).

Membership and meeting obligations

Co-operating Non-Member status, as a transitional step towards accession to the Convention, has some merit. However, when such status is allowed to become quasi permanent, it confuses membership and inadvertently undermines key obligations. Further, it removes the imperative for Members to seek to resolve issues surrounding full membership and provides a means by which coastal and fishing States can claim to be meeting their international responsibilities to cooperate while failing to do so in any meaningful way. If it is to be used it must be only as a short term "stepping stone" to full membership and this must be clear from the outset and time frames established for full accession.

It can be argued that there may be a need to provide for port and market States to participate in the Commission. The status of Co-operating Non-Members may be attractive for these purposes. However, it would be preferable that such States become full Members and that the relative costs, responsibilities and benefits reflect the nature of their involvement in the fishery.

Membership of any RFMO involves a full suite of responsibilities consistent with the UNFSA, which must be reflected in domestic law and fully enforced. There appears to be a tendency to sign up to various arrangements to be seen to be doing the right thing, with in some cases, little or no intention of meeting all necessary responsibilities. In some cases this may be due to limited human and financial resources.

There are a number of other high level obligations under the UNFSA. These include the application of the precautionary approach, greater emphasis on effective MCS and recognition of the special requirements of developing states, including in relation to the nature and extent of their participatory rights. This review of the recent developments in the CCSBT suggests that members have only partially met these high level obligations. While there are complex issues at play the failure to have clear public policies on participatory rights for new members and the proportional allocation of rights, has impeded the CCSBT's ability to deal in an effective and timely manner with these issues.

In order to ensure that all members are fully engaged in the operation of the RFMO, roles and responsibilities must be clearly articulated for existing and new members and there must be independent processes in place to monitor that these arrangements are being fully implemented.

Changing circumstances

There is a need to monitor and respond quickly to changes in the catching and market environment to ensure the comprehensiveness of membership and effectiveness of conservation and management measures. The emerging role of China as a potential fishing, port and market State for SBT is a good example of a looming challenge.

Comprehensive membership will not necessarily deliver a healthy stock or fishery

Despite considerable effort to include all coastal and catching States in the CCSBT the outlook for the stock (and hence the fishery generally) is relatively poor. Membership alone will not solve this problem. Comprehensive management arrangements, including necessary MCS and a precautionary approach to catch limits are essential. While considerably more is now known about the stock than was the case when the Commission

was established, the outlook for stock recovery has worsened. Further reductions in the global TAC are necessary to reverse this trend. That is a matter that members can directly address. The absence of an agreed proportional allocation of the TAC between members will exacerbate the difficulty in agreeing on such reductions.

Better management could be facilitated in part by establishment of a range of agreed decision rules and greater devolution of power to the Commission Secretariat which would implement pre agreed arrangements as necessary. Improved MCS arrangements including a centralised vessel monitoring system and a comprehensive and centralised catch documentation scheme would assist this outcome.

In the end however, there are always likely to be some loopholes which unscrupulous operators supported by irresponsible States will seek to use. Member states must be vigilant to ensure their nationals or companies are not also involved in such activity. Where it does become event they should move quickly to close the loophole. The onus is on the member to monitor and respond quickly to these changing circumstances.

Notes

1. This case study was prepared by Frank Meere and Mary Lack, Sustainable Fisheries Management, Australia. The authors would like to acknowledge the helpful information and comments provided by Mr Glenn Hurry (Australian Fisheries Management Authority), Mr Brian Jeffriess (Australian SBT Industry Association), Mr Glenn Sant (TRAFFIC International), Dr Derek Staples (Fisheries Consultant) and Mr Brian Macdonald (Executive Secretary, CCSBT 2001-2006). The conclusions of the chapter do not necessarily reflect the opinions of these experts

2. The Background section relies, with some minor variation, on material on the CCSBT website www.ccsbt.org/.

3. Note that the term Fishing Entity of Taiwan is the official name used in the CCSBT, although some CCSBT reports refer to Taiwan. However, the term Chinese Taipei is used throughout this study in accordance with OECD procedure.

4. From data available at www.ccsbt.org/docs/data.html.

5. The United Nations 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 (in force as from 11 December 2001).

6. Prior to it becoming a Cooperating Non-Member.

7. The SBT stock assessment had for some time taken the estimated catch of non-members into account. While there is some doubt as to whether the allocations to new Members were consistent with those estimates, the new allocations are not thought to have resulted in an increase in overall catch.

8. These might have included greater recognition in international fora.

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Chapter 3

Strengthening the International Commission for the Conservation of Atlantic Tunas (ICCAT)

The dynamics of RFMOs are often complex and difficult to disentangle. This is certainly the case with the International Commission for the Conservation of Atlantic Tunas (ICCAT) where the workings of the RFMO and the process of change are made more difficult by a relatively large number of Contracting Parties, a dated Convention, disagreements over scientific assessments, and continued concerns over the overexploitation of key tuna stocks. There is particular concern about the effectiveness of ICCAT's conservation and management measures for the Eastern Atlantic and Mediterranean bluefin tuna stock. For example, at the meeting of stakeholders and managers for East Atlantic Bluefin tuna, held in Tokyo in March 2008, the ICCAT Chairman noted that "grave concerns are being raised about ICCAT's competence to manage the tuna stocks in the region" (OPRT 2008). The US has repeatedly expressed frustration at the slow pace of change within ICCAT and the reluctance of the membership to address pressing problems (Hogarth, 2007).

This concern was also reflected in the decision by the European Commission to close the fishery for Bluefin tuna in the Mediterranean and the eastern Atlantic from 16 June 2008 for all purse seiners flying the flags of Cyprus*, France, Greece, Italy and Malta, and from 23 June 2008 for Spanish-flagged purse seiners (Borg 2008). The closure was prompted by "many failures of implementation and control which … have made it extremely difficult for the Member States to monitor their own fleets' Bluefin tuna catches accurately" (Borg 2008).

However, despite ongoing concerns over the sustainability of particular stocks within ICCAT's responsibility, it is clear that ICCAT has been engaged in a process of changes to strengthen its performance for some years. The last decade has seen a large number of changes focused on improving conservation, management, compliance, and enforcement. While there may be some questions over the effectiveness of some of these changes and the extent to which they are implemented by some Contracting Parties to ICCAT, the changes have helped to move the organisation towards a framework for more effective management. This is reflected in the success stories of the management of other stocks under ICCAT management, such as the recovery of the Atlantic swordfish stocks.

Nevertheless, Contracting Parties to ICCAT have recognised that further efforts are required. An independent Performance Review was undertaken in 2008 and was considered at the 16th Special Meeting of ICCAT in November 2008 (Hurry, Hayashi and Maguire 2008). The Review delivered a robust assessment on the performance of ICCAT (Box 3.1). At the same meeting at which the Performance Review was delivered, ICCAT decided to reduce the bluefin tuna quota from 28 500 tonnes in 2008 to 22 500 tonnes in 2009, and then to 19 950 tonnes in 2010. The recovery plan for the stock also imposed restricted fishing seasons and cuts in both fishing and farming capacity, as well as introducing measures to strengthen control throughout the production chain.

The aim of this case study is to focus on the process of change in ICCAT in order to analyse the factors that have driven change, the obstacles to change, and how these have been addressed. The case study aims to highlight key lessons from the ICCAT experience that may be relevant to other RFMOs.

Box 3.1. General observations and assessment from the report of the Independent Review of ICCAT

"The Panel made the following general observations:

- ICCAT has developed reasonably sound conservation and fisheries management practices, which, if fully implemented and complied with by Contracting Parties, Cooperating non-Contracting Parties, Entities and Fishing Entities (CPCs), would have been expected to be effective in managing the fisheries under ICCAT's purview.
- The ICCAT Convention should be reviewed, modernised, or otherwise supplemented, to reflect current approaches to fisheries management.
- The ICCAT standing committee and panel structure is sound and the committees provide timely advice to ICCAT. However, the Panel expressed strong reservations on the performance of the Compliance Committee (CC).
- The Standing Committee on Research and Statistics (SCRS) provides sound advice to the Commission members operating under significant difficulties largely caused by CPCs failing to provide timely and accurate data.
- The performance of the Secretariat is sound and well regarded as both efficient and effective by CPCs.
- The fundamental problems and challenges that ICCAT faces in managing sustainably the fisheries under its purview are not unique; other tuna RFMOs also face them, but the size of the ICCAT membership adds more difficulties.
- The Panel made the following general assessment of ICCAT performance:
- Fundamentally ICCAT's performance to date does not meet its objectives for several of the species under its purview.
- ICCAT's failure to meet its objectives is due in large part to the lack of compliance by many of its CPCs.
- CPCs have consistently failed to provide timely and accurate data and to implement monitoring, control and surveillance (MCS) arrangements on nationals and national companies.
- The judgement of the international community will be based largely on how ICCAT manages fisheries on bluefin tuna (BFT). ICCAT CPCs' performance in managing fisheries on bluefin tuna particularly in the Eastern Atlantic and Mediterranean Sea is widely regarded as an international disgrace and the international community which has entrusted the management of this iconic species to ICCAT deserves better performance from ICCAT than it has received to date.
- There are concerns about transparency within ICCAT both in decision making and in resource allocation.
- Most of the problems and challenges ICCAT faces would be simple to fix if CPCs developed political will to fully implement and adhere to the letter and spirit of the rules and recommendations of ICCAT."

Source: Hurry, Hyashi and Maguire (2008, pp. 1-2).

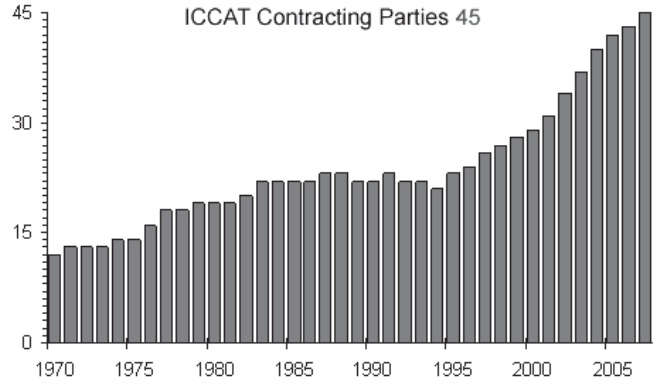
Background

ICCAT is responsible for the conservation of tunas and tuna-like species in the Atlantic Ocean and adjacent seas and to maintain these populations at levels that permit the maximum sustainable catch for food and other purposes. The organisation was established after the preparation and adoption of the International Convention for the Conservation of Atlantic Tunas, signed in Rio de Janeiro, Brazil, in 1966 and which came into force on 21 March, 1969. To achieve the objectives established by the international community, the Commission's work requires the collection and analysis of statistical information relative to current conditions and trends of the fishery resources in the Convention area. The Commission also undertakes work on the compilation of data for other fish species that are caught during tuna fishing and which are not investigated by other international fishery organisations (principally sharks).

Membership

The Commission is composed of Contracting Party Delegations who undertake the objectives set out in the 1966 International Convention for the Conservation of Atlantic Tunas (Figure 3.1). The Commission also created a special status known as Cooperating Non-Contracting Party, Entity or Fishing Entity.[1] Parties, entities or fishing entities that are granted this status have many of the same obligations and are entitled to many of the same privileges as Contracting Parties. Regular meetings take place biennially, at which time quotas for the Commission's members are established.[2] The Secretariat performs the functions that are necessary for the implementation of the Commission's work. This includes the day-to-day administrative and financial tasks, as well as coordinating various research programs, preparing the collection and analysis of data necessary for stock assessment and preparing scientific, administrative and other reports.

Figure 3.1. ICCAT Contracting Parties



Source: www.iccat.int

The Commission may be joined by any government that is a member of the United Nations, any specialised UN agency, or any inter-governmental economic integration organisation constituted by States that have transferred to it competence over the matters governed by the ICCAT Convention. Instruments of ratification, approval or adherence

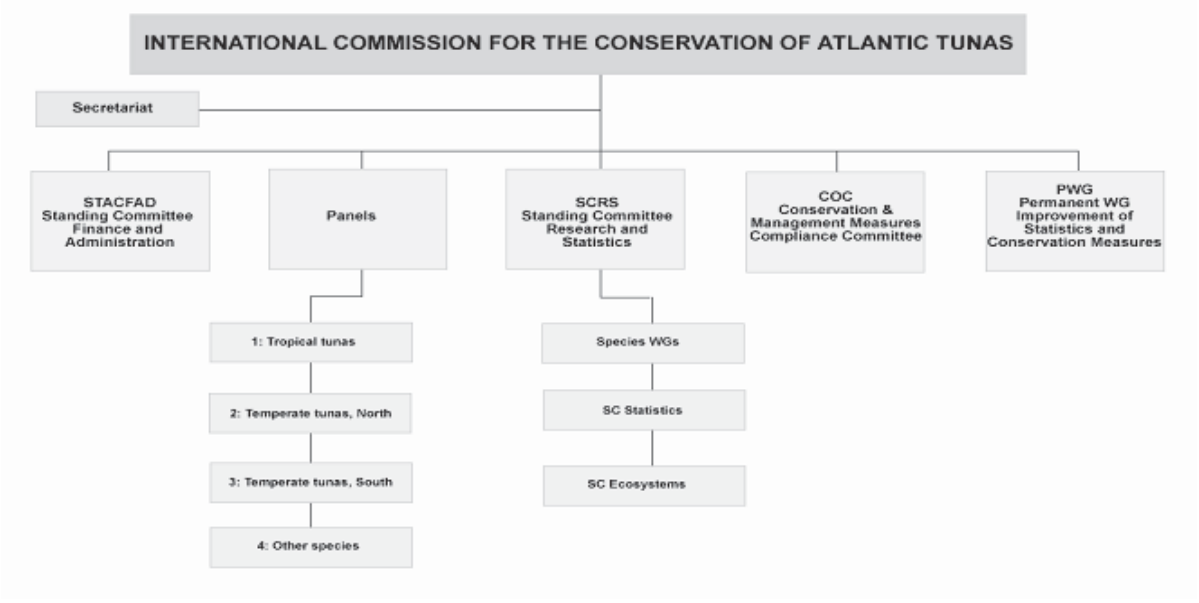
are deposited with the Director-General of the FAO. The Chair is currently held by Brazil while the European Community (EC) and South Africa currently hold the Vice-chairs. The Secretariat is based in Spain. The total budget approved by the Commission for the year 2005 was EUR 2.1 million.

Structure

ICCAT is comprised of a Commission, Council, two standing Committees (one for Finance and Administration and one for Research and Statistics) and four Panels that are responsible for keeping under review the species, group of species or geographic area under its purview and for collecting scientific information and other relevant information pertaining to that area (Figure 3.2). Panels may propose to the Commission recommendations for joint action by Contracting Parties.

ICCAT has its own scientific advisers, who consist of scientists from Contracting Parties and Cooperating Non-Contracting Parties, entities and fishing entities. They are mandated to advise on conservation and management measures, address specific ICCAT requests, meet annually and produce annual reports on stock status. Almost all of the Commission's scientific work and data collection efforts are accomplished by the Contracting Parties themselves.

Figure 3.2. ICCAT Organisational Structure



Source: www.iccat.int.

Species and geographic scope

In total, ICCAT manages about 30 key highly migratory fish stocks with an annual landed value of about USD 3 billion in 2005.[3] Approximately 36% of the fleet is a purse seine fishery and 30% longline. The Convention Area covers the Atlantic Ocean, including the Mediterranean Sea.

According to ICCAT data (available at www.iccat.int), some stocks in the ICCAT Convention Area are showing signs of decline. Reported catches of Atlantic and Mediterranean Albacore were 76 000 t in 2006, the lowest recorded level since 1988. For

Atlantic bluefin tuna, the 2007 assessment indicated gradual declines to 19% of the 1975 level of catch by 2004. A lack of data remains a concern for blue marlin fisheries and it is difficult to establish whether declines shown in data have been arrested. Furthermore, unreported catches have been estimated at between 6 000 – 8 000 t during the 2004-5 fishing season after being landed as 'false tuna' in Côte d'Ivoire. Atlantic swordfish is still caught as a bycatch species but the introduction of ICCAT recommendations has limited this effect.

Policy changes

ICCAT began making policy changes from the mid-1990s in an attempt to modernise its operations and bring its regulations into line with best practices. These changes have focused on improving conservation and management measures, as well as introducing a series of governance changes and compliance and enforcement mechanisms (Table 3.1). Given that ICCAT's Convention dates from 1966, it is not surprising that gaps exist between the agreement establishing ICCAT and current best practices which, ideally, should reflect relevant international law and internationally-agreed standards for the conservation and management of stocks. Contracting Parties have recognised that the Convention is out of date and in 2006, ICCAT established a Working Group on the future of ICCAT to review the Convention and to evaluate its compatibility with developments in international law since the signature of the Convention in 1966. Revision of the ICCAT Convention to reflect current approaches to fisheries management is one of the recommendations of the 2008 Performance Review process.

Conservation and management measures

The use of multi-annual recovery plans to help strengthen the legal basis for conservation in order to align fishing effort with fishing opportunities has been a thrust of recent changes in ICCAT. Changes have been mainly species-specific, with recent emphasis on the overfished Eastern Atlantic and Mediterranean bluefin tuna stock (EBT) and northern albacore tuna. EBT is now subject to a multi-annual recovery plan to run for 15 years from 2007, allowing for a gradual reduction in the TAC, a substantial increase in the minimum landing size and extensions to the existing closed seasons (Box 3.2). A bluefin tuna Catch Documentation Scheme, adopted in 2007, supports the recovery plan and requires documentation and monitoring of all stages of the fisheries from capture to market. For northern albacore tuna, the TACs for 2008 and 2009 have been reduced in line with scientific advice. The maximum carry-over of unused quota between fishing years will also be reduced from 50% to 25%. For Mediterranean swordfish, the general health of the stock was being undermined by large catches of very small fish when ICCAT agreed to close the fishery for a period of one month in 2007.

In line with a greater emphasis on long-term thinking, broader ecosystem approaches have been adopted. One initiative includes the adoption of bird by-catch mitigation measures in the Atlantic longline fisheries, similar to those recently established by the Indian Ocean Tuna Commission. ICCAT has also introduced plans to mitigate shark bycatch.

Table 3.1. Key dates in ICCAT

Year	Event
1966	Establishment of ICCAT.
1969	Entry into force of ICCAT.
1993	Supplemental regulatory measures for the management of Atlantic yellowfin tuna.
1994	Management of Atlantic swordfish.
1997	Transhipments and vessel sightings.
1998	Ban on landings and transhipments of vessels from non-Contracting Parties identified as having committed a serious infringement.
2000	Statistical Document Programs established for swordfish, bigeye tuna and other species managed by ICCAT.
2001	Temporary adjustment of quotas introduced.
2002	Establishment of an ICCAT record of vessels over 24 metres authorised to operate in the Convention Area.
2003	Bigeye tuna conservation measures. Duties of Contracting Parties and cooperating non-Contracting Parties, entities or fishing entities in relation to their vessels fishing in the ICCAT Convention Area. Recording of catch by fishing vessels in the ICCAT Convention Area. Minimum standards for the establishment of a vessel monitoring system in the ICCAT Convention Area. Adoption of additional measures against illegal, unreported and unregulated fishing. Criteria for attaining the status of Cooperating non-Contracting Party, Entity or Fishing Entity in ICCAT.
2004	Multi-year conservation and management program for bigeye tuna.
2005	Bluefin Tuna farming starts in the Mediterranean.
2006	Establish a Multi-Annual recovery Plan for Bluefin Tuna in the Eastern Atlantic and Mediterranean. Trade Measures. Measures by ICCAT to Promote Compliance by Nationals of Contracting Parties, Cooperating Non-Contracting Parties, Entities or Fishing Entities with ICCAT Conservation and Management Measures. Working Group on the Future of ICCAT established.
2008	Performance Review undertaken

Source: www.iccat.int

Box 3.2. Eastern Bluefin tuna stock

The Mediterranean-spawning Eastern Bluefin tuna stock is a highly prized fish, in particular on the Japanese market, which accounts for 80 % of global sales. According to the latest projections made public by ICCAT scientists in October 2006, current catches represent a mortality rate that is over three times the Maximum Sustainable Yield. Spawning stock biomass per recruit is now less than one-fifth of the level of 1970. The exact extent of the stock decline is difficult to assess, due to the fact that not all the parties involved have respected their commitments under ICCAT to report catches. The 2009 quota for Eastern Bluefin tuna is set at 22 500 t, reducing to 19 950 tonnes in 2010, still well above the limit recommended by scientists of around 15 000 tonnes. It has been estimated that the over-quota catch of tuna in this fishery was around 26 000 t in 2006 (Bregazzi 2007).

ICCAT has introduced prior notification measures in an attempt to reduce IUU fishing in the Convention Area. Operators are now required to notify the Contracting Party concerned in advance before proceeding to land, tranship or transfer fish to cages in

an attempt to reduce IUU fishing. Vessels must inform the state where the operation is to be carried out in advance, and all such operations must be conducted in the presence of an observer. Transshipment to processing vessels at sea is banned for all vessels with the exception of longliners over 24 metres operating in the Central Atlantic, on condition that the fish are carried by vessels listed in ICCAT from designated ports.

In response to new methods of fishing such as tuna ranching, ICCAT has introduced policies that strengthen control over farming operations in order to ensure a coherent overall approach to the fishing of tuna. As a result of the changes, fish cannot now be placed in cages until confirmation has been received from the flag state of the vessel that caught the tuna, to ensure that they were caught legally and within quota. If inconsistencies are found, the farm state is required either to stop the transfer from taking place, or to seize and release back to sea the fish already transferred. This requirement for the sharing of information between the flag state of the catching vessel and the state where the tuna farm is located is an attempt to provide a new level of real-time guarantee for the origin of farmed fish.

Compliance and enforcement measures

As early as 1974, ICCAT recommended limiting the bluefin tuna catch in both the Atlantic and the Mediterranean. However, these attempts had little or no impact as there was little ability by ICCAT to enforce its regulations, compounded by the large number of participants in the fishery. A number of recent changes have focused on promoting compliance with ICCAT conservation measures. Strengthening the role of ICCAT in monitoring the fishery and reinforcing the responsibilities and powers of Contracting Parties is necessary to combat illegal fishing activities and ensure the success of conservation measures.

A plan on control and enforcement has provided a stronger legal basis for Contracting Parties to ensure that conservation measures for bluefin tuna are effectively enforced. Monitoring was previously undertaken in a piecemeal manner and catch reports were often submitted late. The plan addresses these challenges by including reporting obligations at every step in the chain with clear deadlines for submission. Flag states are also obliged to systematically cross-check all the information they have, including the satellite-based vessel monitoring system (VMS) data. If any inconsistencies are discovered, parties are required to suspend the licence of the vessel concerned pending further investigation. In addition, this data must be transmitted not only to the Contracting Parties concerned, but also to ICCAT where it can be centralised for control and quota uptake monitoring. For example, skippers have ten days to report catches to their flag states prior to 1 June, and five days during the remainder of the season. The flag states must in turn transmit this information immediately to ICCAT. As soon as any contracting party reaches 85% of their quota, ICCAT will immediately inform them and they are then obliged to close the fishery in time to prevent any possible overshoot.

A legal framework for the inspection and boarding of vessels operating on the high seas (outside territorial waters) has also been established through a Joint International Inspection Scheme. The Scheme permits inspectors from any contracting party to control the vessels of any other contracting party operating in international waters.

ICCAT has introduced a port inspection scheme as well as restrictions on landings and transhipments of catches by non-member vessels. The port inspection scheme aims to promote individual vessel compliance as well as to facilitate overall monitoring of

landings of ICCAT species. The Revised Port Inspection Scheme became effective in 1998 and requires ICCAT members to carry out inspections of all tuna fishing vessels in their ports, including vessels of ICCAT members. In the case of apparent violations by a vessel registered in another State, the inspectors must draw up a report containing standardized information and transmit the report to the flag State and to the ICCAT Secretariat within ten days. The procedure is similar for vessels of the port State. Informing the ICCAT Secretariat of action undertaken is designed to enhance consistency and enforcement.

In 1998, ICCAT adopted a measure similar to NAFO's Scheme to Promote Compliance by Non-Contracting Parties. Any vessel of a non-member that is sighted in the ICCAT Convention Area and may be fishing is presumed to be undermining ICCAT conservation measures. If the vessel voluntarily enters the port of an ICCAT member, it must be inspected. If the inspection reveals that the vessel has onboard any species that are subject to ICCAT conservation measures, the vessel may not land or tranship any fish unless it establishes that the fish were caught outside the Convention Area or in compliance with ICCAT measures. The port State must transmit the results of the inspection to the ICCAT Secretariat, which will send the information to all ICCAT members and also to the flag State.

ICCAT has introduced a catch reporting system that covers the bluefin tuna value chain from capture to landing, transshipment to processing vessels and transfer to cages, to marketing. Catches must be entered in a compulsory log book and all subsequent operations to be declared in order to prevent the marketing and trade of illegally caught fish.

ICCAT has also introduced vessel lists and has established a register of all vessels and traps authorised to catch bluefin tuna, including vessels that do not target bluefin tuna but take it as by-catch. An IUU vessel list has been extended to deny listed vessels access to ports and services.

Drivers for policy change

UN Fish Stocks Agreement

A major external driver for change in many RFMOs was the ratification of the UN Fish Stocks Agreement in 1995. This spurred broad efforts to modernise RFMO operations to conform to the new and evolving norms in international law. Efforts within ICCAT were part of this general push for change as members, particularly those with a long history in the organisation, responded to the legal imperative and sought to institute changes to ICCAT's structure and operations. However, efforts to strengthen ICCAT do not appear to have not been as strongly driven by the perceived need by members to modernise the Convention as has been the case in other RFMOs (particularly NAFO and NEAFC as discussed later in this report). One of the key reasons for this is that a total of 25 of ICCAT's 46 members have not ratified this basic international legal instrument (Table 3.2). 26 parties have also not signed the FAO Compliance Agreement. This creates a fundamental problem for any effort to change the fundamental text in so far as the full membership does not necessarily ascribe to a shared vision and understanding of the basic international rules surrounding the governance of high seas stocks and the structure and functions of RFMOs.

Depleted stocks

Growing demand has precipitated considerable expansion of the fishing industry targeting tuna stocks, resulting in the overexploitation of some stocks. The 2007 report of the Standing Committee on Research and Statistics expressed concern about the poor state of most of the key stocks under ICCAT management (ICCAT 2007a). Particular attention was drawn to the state of the eastern bluefin tuna stock where available information indicates that the fishing mortality rate may be more than three times the level which would permit the stock to stabilise at the MSY level. The report warned that continuation of this level of fishing is expected to drive the spawning biomass to a very low level, with a high risk of fishery and stock collapse. The introduction of farming activities into the Mediterranean, TACs set well in excess of recommended levels, and a high degree of unreported catch in the Mediterranean have all contributed to this situation. A collapse in the near future is a possibility unless adequate management measures are implemented and enforced.

Over the years, the Commission has recommended various management measures, including catch limits (bluefin tuna, albacore, bigeye tuna, swordfish and billfishes); effort restriction (yellowfin and bigeye tunas); minimum size (swordfish and yellowfin, bigeye and bluefin tunas); time/area closure (bluefin, yellowfin and bigeye tunas); and rebuilding plans (white and blue marlin) (Mooney-Seus and Rosenberg, 2007). However, stocks such as yellowfin tuna continue to decline with catches dropping 36% since 2001; total catches of bigeye tuna have decreased from a historic high in 1994 of 132 000 t to 76 000 t in 2006, the lowest catch on record since 1988; and Japan's baitboat catch of is now only one third of 1994 catches.

In 1992, Sweden submitted a proposal to list Atlantic bluefin tuna in Appendix II of the Convention on International Trade in Endangered Species (CITES) in light of declining stocks. This would have led to the need to notify and monitor trade of the species and may have created pressure to move the species onto Annex I, which would introduce trade restrictions and effectively diminish ICCAT's role in managing the stock. Although the proposal was withdrawn during the meeting, it created significant pressure for ICCAT to manage the stock better.

Economic loss experienced by developed countries

The poor overall stock situation has reduced the profitability of many of the tuna fleets, particularly those in developed countries. The story is familiar and is repeated throughout high seas fisheries. Tuna fishing was pioneered by entrepreneurs in capital-rich countries such as Japan, the United States, Spain and France, due to the highly capital-intensive nature of the activity. However, poor management and the open access nature of the fishery lead to overcapitalization. Over time, such barriers to entry were less significant, allowing fleet development in developing countries where capital is less abundant but labour and other operating costs are cheaper. New entrants intensified competition on diminishing stocks of fish, often to the detriment of historically dominant fleets. These economic losses eventually motivated the early fishing states to respond politically through RFMOs to protect their interests. As a result, management measures to protect and conserve the stocks exploited were introduced and promoted by developed countries.

There is very little data available on trends in the profitability of fleets operating in ICCAT. It is generally assumed that most vessels are under severe economic pressure and

have not been able to adjust to the declining stock abundance and catches. However, the pressure brought to bear on tuna fleets as a result of the recent fuel price increases, and the promise in some countries of government support to alleviate the pressure, indicates the lack of resilience and flexibility that exists within many tuna fleets.

Table 3.2. ICCAT members' adherence to key international legal instruments

Country	UNCLOS	UNFSA	FAO Compliance Agreement	ICCAT status[a]
Albania	Y	N	Y	M
Algeria	Y	N	N	M
Angola	Y	N	Y	M
Barbados	Y	Y	Y	M
Belize	Y	Y	Y	M
Brazil	Y	Y	N	M
Canada	Y	Y	Y	M
Cap Verde	Y	N	Y	M
China	Y	N	N	M
Côte d'Ivoire	Y	N	N	M
Croatia	Y	N	N	M
Equatorial Guinea	Y	N	N	M
European Community	Y	Y	Y	M
France (St Pierre et Miquelon)	Y	Y	Y	M
Gabon	Y	N	N	M
Ghana	Y	N	Y	M
Guatemala	Y	N	N	M
Guinea	Y	Y	N	M
Guyana	Y	N	N	CNCP
Honduras	Y	N	N	M
Iceland	Y	Y	N	M
Japan	Y	Y	Y	M
Libya	N	N	N	M
Mexico	Y	N	Y	M
Morocco	N	N	Y	M
Namibia	Y	Y	Y	M
Nicaragua	Y	N	N	M
Norway	Y	Y	Y	M
Panama	Y	N	N	M
Philippines	Y	N	N	M
Republic of Korea	Y	Y	Y	M
Russia	Y	Y	N	M
São Tomé E Principe	Y	N	N	M
Senegal	Y	Y	N	M
South Africa	Y	Y	N	M
St Vincent and the Grenadines	Y	N	N	M
Syrian Arab Republic	N	N	Y	M
Chinese Taipei	-	-	-	CNCP
Trinidad and Tobago	Y	Y	N	M
Tunisia	Y	N	N	M
Turkey	N	N	N	M
United Kingdom (Overseas Territories)[b]	Y	Y	Y	M
United States	N	Y	Y	M
Uruguay	Y	Y	Y	M
Vanuatu	Y	N	N	M
Venezuela	N	N	N	M

a. M indicates member; CNCP indicates Cooperating Non-Contracting Party. b. France and the UK (together with Spain, Portugal and Italy) withdrew from ICCAT following the accession of the European Community in 1997, although they both retain membership on behalf of their overseas territories not covered by the Treaty of Rome.

Source: ICCAT.

Greater participation by developing countries

The number of developing country participants in ICCAT has increased significantly in recent years; the total number of parties to ICCAT has more than doubled since 1995, and all of the additional members are developing countries. This growth has had two effects on the push for change. First, as seen above, the growth of developing country fleets within ICCAT has provided a strong incentive for developed countries to push for stronger management. When historically powerful countries, such as the United States and Japan, with relatively high costs of production began to lose market share under open access, they began to negotiate access rights in order to protect their fleets. Sharing the resource amongst more players provided an incentive to strengthen conservation and management measures in order to try to reduce overexploitation (Webster 2007).

Second, developing countries pushed for further changes by seeking changes in quota allocation arrangements that are based solely on historical catch levels that favoured developed countries. Developing countries have arguably tended to play a dual role in this regard in ICCAT by slowing management changes until concessions are introduced to secure their cooperation. The use of quota exchanges has reportedly become increasingly common in ICCAT and may reflect this trend, although there is limited transparency on such transactions.

Adverse publicity

ICCAT has endured particularly bad publicity in recent years, with the effect of keeping public and political attention on the adequacy of ICCAT conservation and management measures. In the 1990s and early 2000s, environmental NGOs mounted a strong campaign to rebuild Atlantic swordfish stocks, with strong and innovative campaigns targeting consumers and restaurants. This ENGO push undoubtedly helped to generate political and popular support for rebuilding efforts in the swordfish stocks, which have proven to be successful up to this point. More recently, ENGO attention has focused on the eastern Bluefin tuna stock, particularly in the Mediterranean. WWF has launched a major campaign based around its "Bluefin Witness" program, calling for significant quota cuts and greater enforcement of regulations. It remains to be seen what impact this campaign will have on efforts to constrain catches in the EBT fishery and rebuild the stock.

Addressing obstacles to change in ICCAT

As with the other tuna RFMOs, ICCAT faces considerable challenges. A large and diverse membership, with considerably different political and economic agendas and development priorities, makes it difficult to achieve consensus on many topics. ICCAT has addressed the obstacles to change with varying degrees of success. While there have been many Recommendations on conservation and management introduced over the past decade, it is clear that some obstacles remain. This section reviews ICCAT's response to the key obstacles and highlights the ways in which the obstacles were addressed.

Political will

Garnering the political will of ICCAT as a whole, as well as that of its individual member States, is crucial to generating a coalition for change and will largely determine the success of efforts to strengthen ICCAT. As argued in the Performance Review, a high

degree of non-compliance with agreed conservation and management measures does not provide a sound basis for building a common understanding of the need for reform. This may be the inevitable outcome of a process that does not adequately manage the competing agendas of different members. The range of national objectives within ICCAT exerts pressure on policy changes but sometimes in competing directions and with different priorities. The matter has also been hindered by the lack of a dispute settlement process, and the ability of members to opt out of conservation and management measures with which they disagree and with no requirement to provide an explanation or alternative.

As a result, risk has generally been transferred to the stock rather than to members' short-term fishing interests; this, of course, can result in long term costs to all parties. Maintaining high quota levels for stocks that do not have the necessary biological capacity is due to a lack of willingness to see short-term profits reduced in order to maintain the viability of the stock. ICCAT is yet to properly address the root causes of a lack of political will by addressing the incentives that govern the actions of states and their vessels, which will inspire the political will necessary to adopt a long-term perspective. There are recent signs that this is changing, at least in the EU where the European Commission (EC) closed the Bluefin tuna fishery in the Mediterranean and the eastern Atlantic from 16 June 2008 for all purse seiners flying the flags of Cyprus*, France, Greece, Italy and Malta, and from 23 June 2008 for Spanish-flagged purse seiners (Borg 2008). In 2009, the EC followed this up with regulations to cut the 2009 and 2010 quotas for its Member states involved in ICCAT, in line with the quota allocation decisions reached at the November 2008 meeting of ICCAT.

Disagreement over scientific advice

While the major obstacle is the lack of political will, disagreement over scientific advice has also hindered the adoption of and compliance with a number of conservation and management measures in ICCAT. ICCAT operates on a "national scientists' model" which requires scientists from member countries to submit the results of their research to a scientific committee established as a subsidiary body of the Commission. Disputes over stock status can arise if the research results vary and these must be resolved within the scientific committee. Such a model may also potentially disadvantage those members who have limited capacity to undertake scientific research. In some cases, data might be poor, such as for non-target stocks, leading to disagreements on management measures. Data collection may also be voluntary and, where undertaken, may focus only on seabirds, sharks and turtles, rather than more complex ecosystem-based relationships. Likewise, data on bycatch and discards also tend to be poor and therefore these remain largely unmanaged by ICCAT (Willock and Lack, 2006). The use of independent reviews of the advice generated by the scientific committee in order to reduce any disagreements over the advice has not been tried in ICCAT to date.

In addressing this issue, ICCAT has established a fund to build capacity in developing countries for data collection and science. However, ICCAT continues to maintain higher standards for the participation of vessels from co-operating non-members than those required for members. For example, ICCAT requires taking into account the applicant's record of compliance with the conservation and management measures of other RFMOs, a provision which is not in place for members.

In terms of the precautionary approach, in parallel situations in other RFMOS, using the best science available alongside the adoption of the precautionary approach to stock

management has reduced the potentially negative effects of disagreement over scientific advice. This has met with some resistance by ICCAT members and ICCAT has neither developed a management strategy nor a decision-making framework based on precautionary reference points for target stocks.

Voluntary compliance

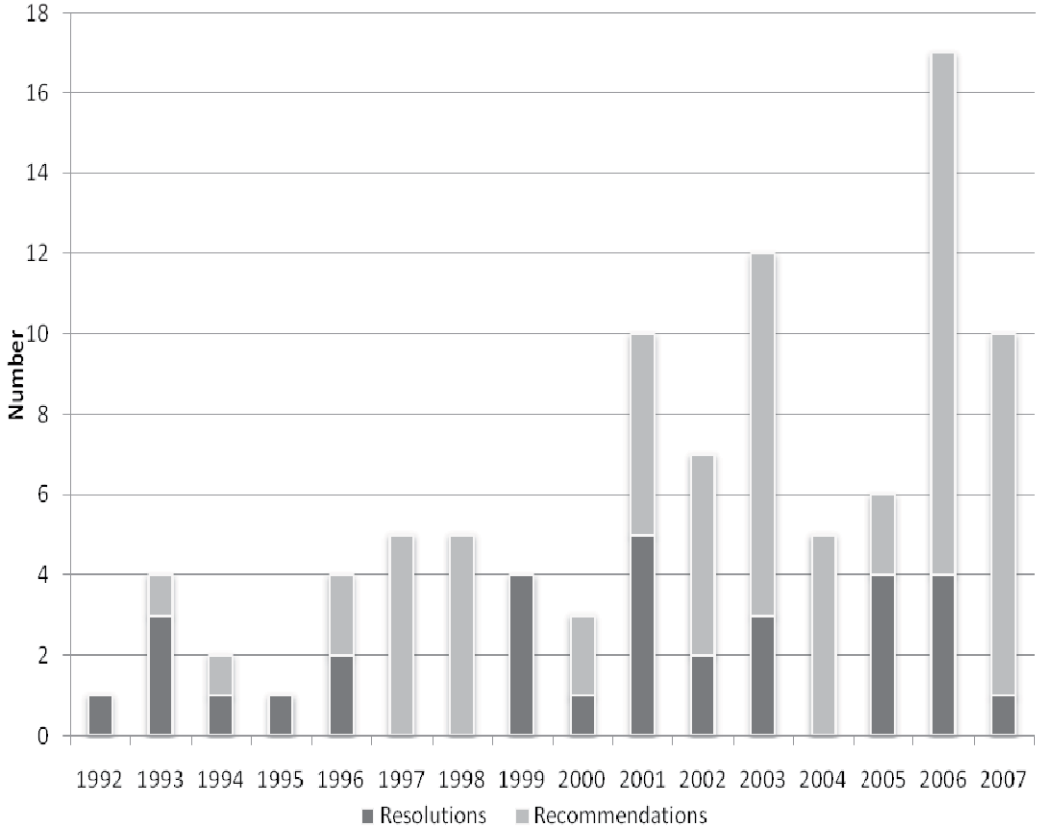
Changes within ICCAT may also be hampered by the voluntary nature of some key conservation measures and provisions in the Convention for members to opt out of measures with which they disagree. Attempts to deter non-compliance have generally focused on non-members, and these have proved relatively successful in some stocks. However, the same commitment to compliance with conservation measures has not been shown by all Contracting Parties, compromising outcomes and undermining the commitment of members to get behind any push for reform. For example, in 2004, ICCAT passed a three-year programme to mitigate the impact of tuna fishing on sea turtles. However, the resolution is only voluntary in nature and merely "encourages" Contracting Parties to collect and provide data on turtle interactions and to develop mitigation measures.

ICCAT has certainly tried to address the voluntary compliance obstacle through the establishment of a legal framework by passing a number of recommendations regarding enforcement measures. There has been a significant increase in the number of recommendations passed by ICCAT relative to resolutions (Figure 3.4). However, the size and scope of the organization's membership, the extent of the Convention Area, and the nature of highly migratory stocks make enforcement an enormous challenge, particularly when combined with the political will to comply with measures as noted above.

Instead, ICCAT has adopted some measures that tend to focus on punishing infringers for violations rather than for ensuring violations do not occur in the first place, and this has met with some success. For example, in the mid-1990s, ICCAT implemented a prohibition on the importation of Atlantic Swordfish, Atlantic Bluefin tuna and Bigeye from Belize. Belize took steps to strengthen control of its fleet and removed a significant number of vessels from its register. In recognition of these efforts, ICCAT suspended import bans from 1 January 2004 and Belize is now a contracting party to the Convention. A further example is from 2005 when ICCAT took action against over-quota catches, including a yearly deduction of 1 600 t from Taiwan's annual catch limit for five years in response to overharvesting in 2004. It is also noteworthy that the penalties imposed to date have been on Cooperating Non-Contracting Parties, and none have been imposed on full Contracting Parties.

ICCAT has also taken measures to reduce overfishing by ICCAT members by implementing a payback regime. For example, in 2007, the EU overfished its quota by over 4000 tonnes, due to the failure of some Member States to transmit data in a timely manner, and where necessary to close their fisheries as soon as their quota were exhausted. The Commission declared this overfishing to ICCAT, and a payback regime was agreed that will see the EU pay back 100% of the quota overshoot in three equal annual installments, starting in 2009.

Figure 3.3. Number of ICCAT recommendations and resolutions



Source: ICCAT.

However, all these efforts to address the voluntary compliance issue and to reduce non-compliance to some extent reflects an *ad hoc* response to specific crises, and may do little to fundamentally alter the incentive structures underlying the non-compliance. Furthermore, the low level of compliance with ICCAT responsibilities regarding data provision and the resulting difficulty in determining stock status is reducing the effectiveness of measures that are introduced. In the period 2006-07, only 19 of the 43 Contracting Parties that comprise the Commission had submitted their information on nominal catches. This means that 56% of the Contracting Parties have not complied with their obligations (ICCAT, 2008). There has been no attempt yet to address the systemic problems arising from the opting out provisions and the lack of well-structured dispute settlement mechanisms.

Expanding membership

As with any consensus organisation that has a large membership, change is hindered by the number of players involved and their capacities to meaningfully engage in negotiations over changes. In much the same vein as political will, the active membership of ICCAT is crucial to its successful functioning. ICCAT has maintained its historical focus through its membership of only fishing States and coastal States. This may be too narrow to account sufficiently for the growing emphasis on the role of port and market states in the effective implementation of conservation and management measures.

At the same time, although many ICCAT members, co-operating non-Contracting Parties and fishing entities have been unwilling to fully implement existing measures, some members may have been unable to. The needs and responsibilities of developing states were not well recognised when conventions were established and substantial costs such as data collection and research and monitoring, compliance and enforcement, were met by developed countries. Three quarters of the ICCAT membership comprises developing countries and many of these nations lack the necessary capacity to implement agreements such as the United Nations Fish Stocks Agreement, or to handle enforcement challenges, such as illegal, unreported and unregulated fishing.

Many developing states will not agree to management measures unless provided with room to develop their fleets or side payments to cover their opportunities foregone. Some may refuse to join ICCAT unless coerced through enforcement mechanisms or through improved allocation of quota (Webster, 2007). The use of side payments in the form of quota swaps is common in ICCAT. ICCAT has also attempted to overcome this obstacle through the creation of an Assistance Fund, whose purpose is to provide financial assistance to developing State Parties to the Agreement to assist in the implementation of the Agreement. States, intergovernmental organisations, international financial institutions, national institutions, non-governmental organisations and individuals can make voluntary financial contributions to the Fund. As the fund has only been in existence for a year, there is little information on the number of applications for financial assistance and the average award.

Developing countries are seen as key players in attempting to create greater political will to enhance conservation measures and in light of this, ICCAT has attempted to give greater rights to developing countries. For example, in 2001, ICCAT was the first RFMO to adopt Criteria for Allocation of Fishing Possibilities to address new entrants and limit capacity. In addition, a reformed budget contribution formula was implemented and a special fund established to provide capacity building as needed. Developing countries received large side payments for their cooperation and obtained derogations for circumventing enforcement measures. The recent election of a developing country to the Chair of ICCAT (Brazil) may see an increased interest by developing countries in the work of the organisation.

Allocation of fishing opportunities

Involvement by fishing and coastal states, particularly developing countries, may be discouraged as a result of a general reluctance to provide new members with sufficient allocations of fishing opportunity. It took four years for ICCAT to negotiate allocation criteria and yet they are rarely explicitly used; most quota setting and allocation is done by political negotiation. Indeed, the quota allocation criteria are so broad that they can be used to justify almost any allocation permutation. Even when science shows that stocks are over-fished, members repeatedly choose to increase quotas and TACs to accommodate new and recent members rather than reduce the quotas of existing members, which is akin to 'sanctioned overfishing' (Willock and Lack 2007). Ultimately, there is a conservation cost associated with a lack of mechanisms or an unwillingness to address the requirements of new members.

In 1999, the Group of 18 developing countries led by Brazil, blocked consensus on conservation and management measures until the quota allocation system was changed. This group continued until 2001, when a new, more inclusive version of the criteria was adopted. Although this seemed a substantial victory for developing countries at the time,

ICCAT's attempts at addressing this obstacle to developing country participation fell rather short. As actual quota allocations are negotiated on a stock-by-stock basis, there has been little appreciable change in the distribution of quotas since 2001 (Webster, 2007).

One element of the allocation problem lies in the fact that quotas are not expressed as proportional allocations of the TAC. By negotiating over quantities of fish rather than shares of the catch, there is the strong risk that countries are unwilling to compromise on their historical level of the catch. An alternative approach would be to separate the allocation decision (relating to shares) from the conservation decision (establishing the TAC) by using a proportional allocation mechanism whereby members are allocated a percentage of the TAC, which may go up or down from year to year. Moving to such a system may reduce the adverse effects of disputes over allocations for reaching consensus on changes within ICCAT.

Overcapacity

Overcapacity in member country fleets is an obstacle to change as it constrains the options that such member countries have in pushing for changes that may reduce fishing opportunities for their fishing fleets. The onus here is primarily on member countries to effectively manage their own overcapacity problems. However, this is often politically difficult and, as a result, countries may seek to slow down or block attempts to change key aspects of ICCAT that may jeopardise their share of (a declining) resource. This is reflected in the unwillingness of many countries to reduce their annual quota despite strong scientific advice of the need to do so. ICCAT is seeking to address the overcapacity problem and has established a Working Group on Fishing Capacity which met for the first time in 2007 (ICCAT 2007b).

The numbers of developing countries in ICCAT who are trying to develop their tuna fishing capabilities is increasing. For example, Brazil is expanding a programme to rebuild its fleet, with a strong emphasis on tuna harvesting. The Profrota Pesqueira Programme will support the construction, modernisation or purchase of 52 new fishing trawlers. It will include the financing of 20 new oceanic tuna fishing vessels, in addition to refurbishment and conversion of eight coastal fishing vessels into ocean-going tuna fishing trawlers. Subsidies of up to BRL 4 million, plus other grants, are available for each trawler (*WorldFish Report* 2008). Such policy developments, while understandable from the short term perspective of trying to gain a foothold in the highly competitive industry, will merely serve to exacerbate the general problem of overcapacity, with flow-on effects to the incentive to undertake difficult changes.

Decision making

Decision making processes within ICCAT represent a significant obstacle to undertaking effective change. ICCAT faces a number of challenges in this regard; an ability to opt-out of decisions; no dispute resolution process; and a lack of transparency. While ICCAT has a voting procedure, it is rarely used and provides for a member to opt out of decisions. When members do opt out, there is no requirement for them to state why and what they will do instead. The lack of a dispute resolution process tends to undermine the credibility and robustness of decision-making within ICCAT. Although ICCAT is attempting to move towards greater transparency, when contentious issues are under discussion, it often excludes observers and reverts to closed meetings. All of these areas

may undermine the outcome of conservation and management measures and prove obstacles to change.

How sustainable are the changes?

In the case of ICCAT, changes in operations and management have been fairly substantial and, on paper at least, would lead to sustainable utilisation of tuna stocks in the Convention Area. Indeed, the adoption of rebuilding plans for north Atlantic swordfish, West Atlantic bluefin tuna and marlin have been largely successful. ICCAT's trade sanctions scheme, the establishment of negative and positive vessel lists, improvements in monitoring, control and surveillance provisions, port inspection schemes, and rules for vessel chartering, plus training and assistance for developing countries, all contribute to the prospect of improving the sustainability of fish stocks. Indeed, ICCAT is of particular interest because it has adopted many of the most important recent innovations in international fisheries management.

Although many of the tools for the sustainable management of fish stocks may now largely be in place, this does not seem to have translated into improved conservation outcomes across the range of stocks for which ICCAT is responsible. In particular, the implementation of the changes is not uniform across Contracting Parties. For ICCAT, problems appear to be largely of an institutional nature and obstacles generally remain internal and reflect the lack of political will on the part of many Parties. Failure to agree on conservation and management measures, including disagreement over the relative fishing opportunities of members, compromises the sustainability of the reforms that have been undertaken to date. Without a change in incentives, it is unlikely that mere words on paper will create the political will necessary to make more fundamental, longer-term changes to the organisation.

Key lessons learned

The experience of ICCAT has been mixed. The adoption of a number of forward-thinking recommendations to address IUU fishing and the establishment of capacity-building funds to assist developing country members figure among the highlights of efforts to strengthen and modernise ICCAT. Some of these recommendations have introduced management measures that are rebuilding stocks, although generally only those stocks that are less highly valued in the market place. Much of the change to date has been responsive rather than forward-looking and proactive. This largely reflects the particular challenges facing ICCAT in terms of the large number of parties and the divergent priorities of its members. Further fundamental changes to address the institutional blockages within ICCAT are yet to take place, although the Performance Review may provide a good opportunity to generate further momentum and political will for change.

The key lessons from the ICCAT experience therefore revolve around the mechanisms by which the organisation has effectively negotiated and then implemented the changes that have been undertaken, and overcoming the inertia brought about by divergent national positions – building a coalition for change.

Priority to sign up to basic rules

The process of change would be appreciably enhanced if all members of ICCAT were to ratify the relevant international legal instruments governing the operations of RFMOs, in particular the UNFSA. Without a common commitment to the basic principles underlying RFMOs, efforts to modernise ICCAT to reflect current fisheries management practices will be hamstrung from the very beginning. Without ratification, many members will continue to have no legal obligation to apply basic principles such as the precautionary approach. Support for change will be enhanced if all parties agree on the basic rules of engagement within the negotiations, some of which are defined by UNFSA and related instruments.

Introducing recommendations is only a first step

Lasting change is the outcome of comprehensive management arrangements, as well as necessary compliance and enforcements measures coupled a precautionary approach to catch limits. This may require a move to long-term thinking rather than a focus on short-term gains in order to secure a reduction in TAC levels while the outlook for some stocks remains generally poor. At the same time, it is the responsibility of member states to ensure that their nationals abide by frameworks in place in order to encourage the rebuilding of stocks and that any loopholes are quickly closed.

Political will is required to bring lasting reform

An RFMO can only be as strong as its members wish it to be: the conservation and management measures adopted by an RFMO are a reflection of the collective will of its individual members. A perceived lack of political commitment by some members in ICCAT, unyielding positions that do not always promote sound regional fisheries management, and a lack of compliance with RFMO regulations on reporting, have hindered the effectiveness of efforts taken to address conservation and management challenges. The ICCAT experience demonstrates that improvements in legal frameworks can be undermined when total allowable catches are set above recommended scientific advice, large catches of small and juvenile fish are not discouraged, and overcapacity is not fully addressed.

Disagreements over scientific advice can undermine conservation measures

The ICCAT experience has also demonstrated that a lack of information can be used as an excuse for a lack of action on change. For example, the status of Albacore, a range of small tunas, some Shortfin Mako stocks, Sailfish, Swordfish in the South Atlantic and the Mediterranean, Atlantic Bluefin in the East Atlantic and Skipjack Tuna is uncertain, either because there are no assessments, because assessments are dated, or due to uncertainty in stock assessments (Willock and Lack, 2006). Therefore, the development of standards for the collection and submission of data is an essential step in obtaining high quality and timely data from members. This would then improve the prospects for obtaining support for change more generally.

The lack of a well-structured, agreed process for resolving disagreements and grievances may also hamper reform. Members may have a reduced incentive to participate fully in either scientific assessment processes or broader efforts to strengthen

the ICCAT if they know that they, or any other party, can always opt out of measures and policies without any consequences.

Resolve and expand the membership categories

As with other RFMOs, Cooperating Non-Member status should be seen as a transitional step towards full accession to the Convention. Maintaining the status of Cooperating Non-Member indefinitely removes the imperative for Members to seek to resolve issues surrounding full membership and provides a means by which coastal and fishing states can claim to be meeting their international responsibilities to cooperate while failing to do so in a meaningful way.

At the same time, there may be a need to invite further port and market States to participate in ICCAT in order to ensure compliance in the value-chain. Institutional reform at ICCAT may also be the only method of including adequate provisions for the participatory rights of developing states.

Costs of delaying action

As the case of ICCAT has clearly shown, decision makers often postpone the introduction of management changes until the costs of overfishing manifest themselves. As a result, the effective management of international fisheries can occur in a response to a need to rebuild depleted stocks, rather than to maintain stocks at sustainable levels. Earlier action may have prevented hardship and economic loss associated with management but, in the case of some key stocks, members of ICCAT have been unable to reach a compromise on conservation measures until the costs of overexploitation have become well established.

A significant factor that contributes to the cost of delaying action is continued overcapacity in the fishing fleets of some ICCAT members. Such overcapacity can generate perverse incentives for the member countries concerned as they are likely to be under pressure to maintain or increase their country shares in the face of evidence of overexploitation. ICCAT has successfully dealt with overcapacity in one Member country – Chinese Taipei. And moves are underway in the EU to assist in the further restructuring of the relevant fleets working in ICCAT. The need to deal with overcapacity is therefore a key lesson to be learnt from the ICCAT experience as it allows Member countries incentives to be better aligned and reduces the incentives for states to undermine the cooperative nature of the RFMO.

The participation of developing countries is essential in bringing about lasting change

As mentioned earlier, the ability of RFMOs to be effective is reliant on the individual members that comprise the RFMO. Therefore, there is a heavy reliance on states to enforce measures with regard to their own vessels. In addition, further steps towards regional enforcement should assist those countries that require assistance in this area. Successful change therefore relies on the ability to create consensus and the cooperation of developing countries. Capacity building is essential and efforts within ICCAT to improve the developing countries' capacities to meaningfully participate in the organisation are beginning to bear fruit.

Independent review can be a strong driving factor for change

Finally, the independent Performance Review process provided a robust assessment of the performance of ICCAT, highlighting areas in which the organisation was performing as well as identifying particular causes of concern. This Review can play an important role in ICCAT in providing a further mechanism for gaining support for the kind of fundamental institutional change required to fully modernise the Convention and ensure it is implemented and enforced by all Contracting Parties. While it remains to be seen to what extent the recommendations of the review are taken up by the Contracting Parties of ICCAT, and the pace at which any changes are implemented, such a review process is clearly a positive step in generating momentum for change.

Notes

* *1. Footnote by Turkey:* The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognizes the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus" issue.

2. Footnote by all the European Union Member States of the OECD and the European Commission: The Republic of Cyprus is recognized by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus."

1. These are: Guyana, Netherlands Antilles and Chinese Taipei.

2. ICCAT members are: Albania, Algeria, Angola, Barbados, Belize, Brazil, Canada, Cap-Vert, People's Republic of China, Côte d'Ivoire, Egypt, Equatorial Guinea, European Community (on behalf of France, Italy, Portugal, Spain, United Kingdom, Cyprus* and Malta), Croatia, France (on behalf of its overseas territories), Gabon, Ghana, Guatemala, Guinea, Honduras, Iceland, Japan, Republic of Korea, Libya, Morocco, Mexico, Namibia, Nicaragua, Nigeria, Norway, Panama, Philippines, Russia, São Tomé E Principe, Senegal, Syria, South Africa, St Vincent & the Grenadines, Trinidad and Tobago, Tunisia, Turkey, United Kingdom (on behalf of its overseas territories), United States, Uruguay, Vanuatu, Venezuela.

3. Atlantic bluefin (*Thunnus thynnus thynnus*), skipjack (*Katsuwonus pelamis*), yellowfin (*Thunnus albacares*), albacore (*Thunnus alalunga*) and bigeye tuna (*Thunnus obesus*); swordfish (*Xiphias gladius*); billfishes such as white marlin (*Tetrapturus albidus*), blue marlin (*Makaira nigricans*), sailfish (*Istiophorus albicans*) and spearfish (*Tetrapturus pfluegeri*); mackerels such as spotted Spanish mackerel (*Scomberomorus maculatus*) and king mackerel (*Scomberomorus cavalla*); and, small tunas like black skipjack (*Euthynnus alletteratus*), frigate tuna (*Auxis thazard*), and Atlantic bonito (*Sarda sarda*).

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Chapter 4

Modernising the North East Atlantic Fisheries Commission (NEAFC)

Prior to the mid-1990s, the North East Atlantic Fisheries Commission (NEAFC) acted primarily as a forum for consultation in fisheries management issues rather than for adopting conservation and management measures. In fact, only two recommendations had been agreed within NEAFC up to 1995: a minimum mesh size for capelin (1984) and a minimum mesh size for blue whiting (1986). Since the mid-1990s, however, NEAFC has undergone a series of policy changes, culminating in the adoption of a new Convention in 2006 (which is applied provisionally as it has yet to enter into force). This case study reviews the recent changes that have been undertaken in NEAFC, focussing on the process of policy change, the factors underlying the push for change, obstacles to change and how they were addressed, and the key lessons learned from the NEAFC experience.

Background

The North East Atlantic Fisheries Convention was negotiated and adopted in 1959 and entered into force in 1963. The purpose of the North East Atlantic Fisheries Commission (NEAFC), which was the management body for the Convention, was to recommend measures on the rational exploitation of fish stocks in the area beyond national jurisdiction, taking scientific advice from the International Council for the Exploration of the Sea (ICES). Following the extension of coastal states' jurisdiction to 200 nautical miles in, the marine areas and commercial species falling under the management powers of NEAFC diminished considerably.

In 1980 a new Convention on Future Multilateral Cooperation in the North East Atlantic Fisheries was signed in order to take into account these developments in the international law of the sea as well as to enable the European Economic Community (now the European Union) to be a signatory. Following the entry into force of the Convention in 1982, a new Commission was also established. The new Commission's mandate was to serve as a forum for consultation and the exchange of information on fish stocks and management; it furthermore had the power to make recommendations concerning fisheries in the Convention Area. However, since most of the fisheries took place inside coastal state jurisdiction, NEAFC lacked any responsibility to manage them. In the light of the developments in the legal framework for international fisheries since the 1992 Rio Declaration, in particular the UN fish Stocks Agreement, the Commission decided to consider the future of NEAFC and adopted amendments to the 1982 Convention in 2004 and 2006. Contracting Parties agreed to use the "new" convention on a provisional basis, pending ratification. The key dates for NEAFC are provided in Table 4.1.

Table 4.1. Key dates in NEAFC

Year	Event
1953	Foundation of the Permanent Commission, the predecessor of NEAFC
1963	North East Atlantic Fisheries Convention, entry into force
	Establishment of the commission (NEAFC)
1969	Scheme of Joint Enforcement
1970	Collapse of the herring stocks in the Convention Area
1977	Reduction of the Regulatory Area to its current scope, due to 200 miles extensions
1982	Convention on Future Multilateral Cooperation in the North-East Atlantic Fisheries, entry into force (adoption: 1980)
	The EC becomes Contracting Party
	Establishment of a new commission (NEAFC)
1996	Working Group on the Future of NEAFC
	Working Group on Measures for Control and Enforcement
	First management measure since 1986: TAC and allocations for Oceanic redfish
1999	"Scheme of Control and Enforcement in respect of fishing vessels fishing in areas beyond the limits of national fisheries jurisdiction in the Convention Area", entry into force
	"Scheme to promote compliance by non-Contracting Party vessels with recommendations established by NEAFC" (NCP Scheme), entry into force
	Permanent Secretariat established, headquartered in London, UK
2001	Permanent Committee on Control and Enforcement (PECCOE), first meeting
2004	First set of amendments to the 1982 convention: fast track dispute settlement mechanism, adoption
	IUU "black lists" (A-list, B-list), entry into force of the new NCP Scheme (adoption: 2003)
	Estonia becomes Contracting Party
2005	Second set of amendments to the 1982 convention, agreement in principle
2006	"New Convention", agreement on provisional application pending ratification
	Performance review panel report
	NEAFC and NAFO agree to create a pan-Atlantic blacklist of IUU vessels
2007	New "Scheme of Control and Enforcement", including Port Control System, entry into force

Source: NEAFC.

Membership

NEAFC is comprised of the Contracting Parties of Denmark (in respect of the Faroe Islands and Greenland), the European Union, Iceland, Norway and the Russian Federation. Currently, Belize, Canada, Japan, Cook Islands and New Zealand have cooperating non-contracting party status.

All current Contracting Parties except the EU were members of the 1963 convention. The EU became a signatory to the 1982 convention, just like Bulgaria, Sweden and Poland. Bulgaria and Sweden formally discontinued their membership of the Commission in 1995. Estonia was the last state to join NEAFC in 2004. Poland and Estonia acceded to the European Union and therefore left NEAFC in 2006.

Governance structure

The organizational structure of NEAFC includes the Commission (made up of the Contracting Parties), a permanent secretariat based in London/UK, three permanent committees and four working groups. The permanent committees are the Permanent Committee on Control and Enforcement (PECCOE), the Finance and Administration Committee (FAC), and the Permanent Committee on Management and Science (PECMAS). The working groups are the Working Group on the Future of NEAFC, the Advisory Group for Data Communications, the Working Group on Blue Whiting, and the Working Group on the Appraisal of Regulatory Measures for Deep-Sea Fisheries.

Geographical scope

The NEAFC *Convention Area* covers the Atlantic and Arctic Oceans east of a line south of Cape Farewell – the southern tip of Greenland, (42° W), north of a line to the west of Cape Hatteras – the southern tip of Spain, (36° N) and west of a line touching the western tip of Novya Semlya (51°E) (Figure 4.1). The Baltic and Mediterranean Seas are excluded. Most of this area is under the fisheries jurisdiction of the Contracting Parties, but three large areas are international waters and constitute the NEAFC *Regulatory Area*.

Species

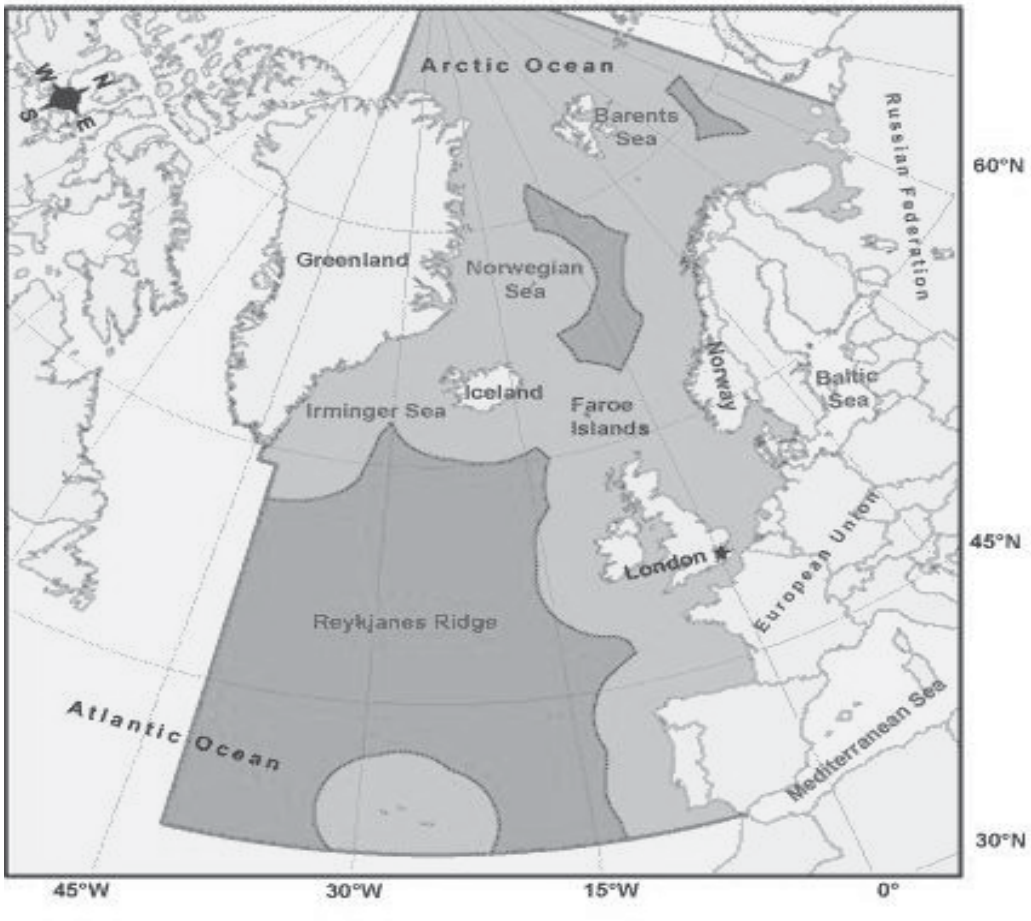
The main fisheries in the NEAFC Convention Area are Redfish (Oceanic Sebastes Mentella and Pelagic Deep-Sea Sebastes Mentella), Mackerel, Haddock, Herring (Norwegian Spring-Spawning Atlanto-Scandian), Blue Whiting as well as deep-sea species. The commercially most significant stocks are the herring, blue whiting and mackerel stocks. The various stocks are exploited by different countries to differing degrees (Table 4.2).

Table 4.2. Catches of major species by NEAFC Contracting Party, 2006 (tonnes)

Country	Blue whiting	Herring	Mackerel	Redfish
EU	290 781	46 693	163 681	3 812
Faroe Islands (Denmark)	289 049	65 564	11 857	4 024
Greenland (Denmark)	6 382	18 309	0	2 588
Iceland	306 106	154 716	4 112	21 699
Norway	638 232	342 991	117 019	6 556
Russian Federation	298 507	118 506	33 341	28 620

Based on 2006 reported catch in the NEAFC Convention Area (provisional data).
Source: NEAFC

Figure 4.1. Map of the NEAFC area



Source: NEAFC.

Policy changes: modernising NEAFC

Beginning in 1995, NEAFC underwent a series of changes with respect to conservation and management measures and to the governance and functioning of the organisation. In 1995 NEAFC adopted its first significant management measures, covering the herring, redfish and mackerel stocks. At the 15th Annual Meeting held in the same year, the Commission established two working groups, the Working Group on the Future of NEAFC and the Working Group on Measures for Control and Enforcement. The terms of reference for the Working Group on the Future of NEAFC required it to evaluate the structure and function of the Commission measured against the provisions of the Convention and in light of the UNCLOS and the development of relevant international law, in particular the UN Fish Stocks Agreement and the FAO Code of Conduct (NEAFC 1997). The second working group was asked to consider possible elements to be included in a future control and enforcement scheme applicable to fishing vessels of the Contracting Parties operating in the NEAFC Convention Area beyond national fisheries jurisdiction (NEAFC 1997).

The policy changes that then ensued within NEAFC dealt primarily with the enforcement of management measures and control of IUU fishing and participation in the RFMO, and in the adoption of a new convention by NEAFC and a performance review of the commission (Box 4.1).

Box 4.1. Summary of key changes in NEAFC

1999: Control and Enforcement Scheme and the NCP Scheme

The "Scheme of Control and Enforcement in respect of fishing vessels fishing in areas beyond the limits of national fisheries jurisdiction in the Convention Area" (Control and Enforcement Scheme) sets out control measures, monitoring of fisheries including the introduction of the duty to collect and communicate VMS data, rules concerning inspections and follow-up of infringements. The "Scheme to promote compliance by non-Contracting Party vessels with recommendations established by NEAFC" (NCP Scheme) reflected the objectives of the FAO IUU-International Plan of Action.

2001: Permanent Committee on Control and Enforcement (PECCOE)

The main tasks of PECCOE were among others to review the implementation of the 1999 Control and Enforcement Scheme, to report on compliance by Contracting Parties, to issue technical advice and to monitor implementation of the 1999 NCP Scheme.

2004: Amendments to the 1982 Convention: fast track dispute settlement mechanism

NEAFC was the first RFMO to adopt a fast track dispute settlement mechanism. One of the main features of the mechanism is that any dispute arising between the Contracting Parties is to be settled before the start of the annual fishing season.

2005/2006: Amendments to the 1982 Convention: ecosystem approach, protection of biodiversity and precautionary approach

Through the 2005/2006 amendments, the convention was given a clearer mandate to pursue the ecosystem approach, protection of biodiversity and applying the precautionary approach, taking into account the developments in international law since 1992.

2007: Port control system

To ensure that management measures are properly enforced and monitored as well as to deter IUU fishing, in 2007 NEAFC introduced a port control system. It requires European ports to close to landings of frozen fish which have not been verified to be legal by the flag state of the vessel. This is to be controlled by direct inspection in designated ports all over Europe.

Control, enforcement and IUU fishing

The lack of control and enforcement in the north-east Atlantic has been a major concern of NEAFC since its inception. IUU fishing activity has been particularly damaging to the redfish resources on the Reykjanes Ridge in the Regulatory Area (NEAFC 2006a, p.40). The Working Group on Measures for Control and Enforcement was set up in 1996 specifically to address this problem. Following a recommendation adopted by the commission at the annual meeting in November 1998, the working group drafted the "Scheme of Control and Enforcement in respect of fishing vessels fishing in areas beyond the limits of national fisheries jurisdiction in the Convention Area". The scheme entered into force on 1 July 1999 and has been amended annually since then. It includes control measures, monitoring of fisheries including the introduction of the duty to collect and communicate VMS data, rules concerning inspections and follow-up of infringements. At the same meeting in November 1998 the commission also adopted a recommendation on a "Scheme to promote compliance by non-Contracting Party vessels with recommendations established by NEAFC" (NCP Scheme), which reflected the objectives of the FAO IUU-International Plan of Action. The scheme was amended in 1999, 2001, 2003 and 2004.

In 2001, a Permanent Committee on Control and Enforcement (PECCOE) was set up to, among other things, review the implementation of the 1999 Control and Enforcement Scheme, to report on compliance by Contracting Parties, to issue technical advice, and to monitor implementation of the 1999 NCP Scheme. Among the most significant amendments to the NCP Scheme were the establishment of two IUU lists, the A-list and B-list, and the introduction of measures to be taken with regard to vessels that appear on such list (Box 4.2). These changes, as well as accompanying port control measures, came into effect in 2004. At the annual meeting in 2006, NAFO and NEAFC reciprocally recognised the other's IUU lists.

Box 4.2. IUU fishing and vessels lists

Regional fisheries management organizations have started to develop lists of vessels that are believed to have engaged in IUU fishing (blacklists). Blacklists are aimed at deterring IUU vessel activity by putting political pressure on the flag state concerned through a "blame and shame" approach. NEAFC maintains two blacklists, the A-List and the B-List. The lists are published on the NEAFC website.

The A-List is an observation list. When non-Contracting Party fishing vessels are observed engaging in IUU fisheries activities in the Regulatory Area, they are immediately put on this list. A vessel on the A-List entering a port will not be authorised to land or tranship and will be thoroughly inspected. The vessel will not have access to services such as supplies of any provisions or fuel. Assistance from Contracting Party vessels (fishing vessels, refuelling vessels) is prohibited, as is transshipment and joint fishing operation.

The Secretary requests explanations and information from the flag state; if it is not satisfactory, the vessel will be put on the confirmed B-List. A vessel on the B-List will not be authorized to enter into port and to fish in waters under the jurisdiction of Contracting Parties. Contracting Parties will not grant their flag to such vessels and they will encourage importers or transporters not to contract with those vessels.

Both of these schemes were merged and replaced by a new "Scheme of Control and Enforcement", which was adopted at the annual meeting in November 2006 and entered into force in May 2007. One of the most significant innovations introduced by the 2007 Scheme was the establishment of a strong port state control system. It had become clear that increasing control in ports (hereunder ports in countries which, through bilateral

arrangements, have agreed not to accept illegal catches) have proved a strong instrument in tracking, combating and stopping the activity of vessels on the NEAFC IUU lists (NEAFC 2006b, p.4). Under the port state control system, European ports are required to close to landings of frozen fish which have not been verified to be legal by the flag state of the vessel. Control should be carried out through direct inspection in designated ports in Europe. Furthermore, the new scheme includes provisions on control measures such as the notification of fishing vessels, the marking of gear and the labelling of frozen fish; the recording and reporting of data on catches, fishing effort, transhipments and of VMS data; inspections at sea; infringement procedures; and measures to promote compliance by non-contracting party fishing vessels.

Participation

There has been some pressure from countries that are not Party to NEAFC to join the Convention and participate in fishing opportunities in the NEAFC area. In responding to this pressure, NEAFC developed a set of "Guidelines for the expectation of future new Contracting Parties with regard to fishing opportunities in the NEAFC Regulatory Area". These were agreed in 2003, and stated that:

"Non Contracting Parties of NEAFC should be aware that presently and for the foreseeable future, stocks regulated by NEAFC are fully allocated, and fishing opportunities for new members likely to be limited to new fisheries (stocks not currently allocated). New Contracting Parties will participate, on the same basis as existing Contracting Parties, in future allocations of stocks which are unregulated at the time when the application is made. New Contracting Parties who were previously Cooperating Non Contracting Parties may request an allocation of a part of the relevant Co-operative quota. Such allocations will be done on a case by case basis." (NEAFC 2006a)

In essence, the policy shift removed the technical barriers to countries joining NEAFC but placed a relatively high hurdle in front of any country's aspirations to undertake fishing. As a result, NEAFC has not granted Contracting Party status to any flag state, except for Estonia in 2003-04. In 2003, Lithuania filed an application to accede but was not granted Contracting Party status due to concerns about ongoing IUU fishing activity of some Lithuanian vessels, underscoring the organisation's commitment to addressing IUU fishing in general.

Interested states may apply for the so-called Cooperating Non-Contracting Party status. This status has been introduced by the 1999 NCP Scheme. Cooperating Non-Contracting Parties are entitled to a share of a cooperative quota that NEAFC saves to this end. However, in recent years the cooperative quota has diminished to an unprofitable minimum. In addition, Cooperating Non-Contracting Parties can legally carry out transhipments and participate at plenary and scientific meetings as an observer. They are not obliged to pay contributions, but by becoming a cooperating member, they commit themselves to ensure the observation of NEAFC management measures by vessels flying their flag.

New Convention

The amendments to the 1982 NEAFC Convention of 2004 and 2005/2006 and the drafting of a new NEAFC Convention are the most significant recent developments within the organization. The process was led by the Working Group on the Future of NEAFC, and the amendments to the old Convention were based on proposals made by

individual Contracting Parties, mainly the EU and Iceland. The amendments adopted in 2004 concerned the introduction of fast track dispute settlement procedures and procedures to follow upon objection to a recommendation. The 2006 amendments concerning the ecosystem approach, protection of biodiversity and precautionary approach, were agreed on in principle in 2005, but were not adopted until 2006 because internal procedures in two Contracting Parties (the EU and the Russian Federation) had to be finalised. The proposal was aimed at modernizing the NEAFC Convention and bringing it in line with recent developments by including the aspects of an ecosystem approach, the protection of biodiversity and the precautionary approach.

Performance review

In the light of the importance attached to evaluating RFMOs, it was agreed at the 2005 meeting of NEAFC that a performance review should be conducted. Its purpose was to assess the performance of NEAFC as it relates to the organization's convention of 1982, the 1995 UN Fish Stocks Agreement and other relevant international instruments. A six member review Panel was appointed by NEAFC and was tasked to identify achievements and highlight areas where improvement could still be made. The panel consisted of three independent experts nominated by the UN Division for Ocean Affairs and the Law of the Sea (UN DOALOS), the Department of Fisheries and Oceans Canada (DFO) and the FAO, and three members of the panel were selected from inside NEAFC. The report of the performance review panel was presented to the NEAFC Commission at its 25th Annual Meeting in November 2006 (NEAFC 2006a). The findings of the panel were positive as to the overall performance of NEAFC. However, the panel also identified some areas of concern, such as the problems of Contracting Parties in reaching agreed allocation arrangements in key fisheries (most notably now the redfish stock), the need for increasing transparency in some management processes, and the critical status of main fish stocks in the Convention Area.

Drivers for policy change

A combination of factors helped to drive the push to modernise and strengthen NEAFC. Without doubt, the major external driver for change was the development of new instruments in the international law on high seas fishing since the early 1990s, in particular the 1995 UN Fish Stocks Agreement. Other instruments such as the 1995 FAO Code of Conduct for Responsible Fisheries and the 2001 FAO International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (IPOA-IUU) also prompted the Contracting Parties to amplify the NEAFC control and enforcement mechanism. Since all NEAFC Contracting Parties were parties to the agreement and thus had committed themselves to it, implementation was not only a legal obligation but also a matter of political credibility. The EU and Norway were among the main actors pushing for implementation through NEAFC.

Additional factors that pushed NEAFC into undertaking change included the critical state of key stocks coupled with increasing IUU fishing activity in the NEAFC Convention area. For decades the fish stocks of the north-east Atlantic had been overfished. The 1975-76 ICES evaluation of the state of stocks regulated by NEAFC classified only two stocks as underexploited, one as fully exploited, 28 as overexploited and two as depleted (Sen 1997). The situation had not improved to any great degree by the mid-1990s and the impact on profitability of the Parties' fleets was considerable

(Hannesson 1996). IUU fishing had been a constant source of concern and was also having an impact on fleet profits. The economic impacts on domestic fleets helped to generate internal pressure within Member countries to strengthen NEAFC. Coupled with the signing of the UN Fish Stocks Agreement, there was significant domestic political pressure in key countries to find a means of making NEAFC more active and responsive in managing the stocks under its control.

Addressing obstacles to changes in NEAFC

The fact that NEAFC is comprised of a small number of coastal states, with a broadly similar economic and political culture, helped to develop a constituency for change and drove the process forward. The fact that there is no distant water fishing nation among the Contracting Parties is significant: NEAFC is a small "club" of coastal states with similar interests. Once Contracting Parties overcame their long-lasting inertia in the mid-1990s, reaching agreement in NEAFC has been relatively straightforward compared to other RFMOs. Nevertheless, there were obstacles to overcome, some of which remain an issue for the organisation.

Political will to co-operate

Overcoming inertia and generating the political will to co-operate to strengthen and modernise NEAFC was a challenge up until the mid-1990s (Churchill 2001, Hannesson 1996). With regard to NEAFC's three major fisheries at that time, Atlantic herring, mackerel and blue whiting, the members felt no particular need for cooperation, since these stocks were of small commercial interest for them. There was a fishing ban on herring and, in the case of mackerel, only the EU and Norway were considered coastal states. Only Russia had an interest in and was fishing for blue whiting.

As discussed in the previous section, a shift in the perception of NEAFC came about when Contracting Parties began to use NEAFC as a forum for cooperation in the mid-1990s to fulfil their legal commitments as signatories to the 1995 UN Fish Stocks Agreement. The political and economic benefits of cooperation became clearer and helped to generate the political will to address NEAFC's shortcomings. Contracting Parties were also participating in change processes in other RFMOs as a result of the UNFSA and this helped to generate a more receptive environment for debate and agreement on measures to strengthen the organisation. As the process of change got underway, some of the more contentious issues were dealt with on a bilateral basis (*e.g.* the dispute over the redfish stock situation between Iceland and Russia) rather than being fought out within NEAFC meetings. This helped to maintain the momentum for change rather than diverting or distracting attention and effort into issues that may have been less critical to the success of NEAFC as a whole.

Decision-making in NEAFC

Prior to the mid-1990s, a particular issue was the objection procedure, which affected decision-making as well as compliance. Under the 1982 Convention, any member state could object to a proposed recommendation within 90 days, in which case the recommendation was not binding for that state. Another member state could object within 60 days on the basis of the first objection and consequently it was also not bound by the recommendation. If a third state then objected, the recommendation was not binding on

any of the Contracting Parties. The imposition of TACs required even more stringent procedures: a two-thirds majority and the consent of all member states. An objection by a single state would have been enough to invalidate the recommendation. It was because of this procedure that Contracting Parties had trouble agreeing on management measures until recently and that most of them were not binding on Russia, which filed objections to most decisions. Some of the Contracting Parties who objected took unilateral measures, which may or may not have led to sustainable outcome, but outside the framework of the Convention rules.

The adoption of a fast track dispute settlement mechanism in 2004 strengthened decision making in NEAFC. Under the new dispute settlement system Contracting Parties may confer any dispute concerning the interpretation or application of the convention to an *ad hoc* panel if they are not able to resolve the dispute by negotiation, arbitration, judicial settlement or other peaceful means. The Contracting Parties also agreed on an amendment to the objection procedure, by including that any party filing an objection "shall give a statement of the reasons for its objection or notice and a declaration of its intentions following the objection or notice, including a description of any alternative conservation and management measures which the Contracting Party intends to take or has already taken" (NEAFC 2004, p. 27-9). These new procedures make it more difficult for a Contracting Party to raise objections to a given measure and are a step towards a more efficient decision-making and cooperation in NEAFC.

Agreement on a new mechanism for decision-making and dispute settlement was achieved through the Working Party on the Future of NEAFC. A shared understanding and acceptance of the need to modernise NEAFC was essential to the workings of this group. Nevertheless, it took several years for a mutually acceptable solution to the problem to be found. Basing the dispute settlement mechanism on UNFSA principles provided a common starting point for discussions. Separating the allocation and policy aspects of disputes also contributed to the success of this particular change. There was also a significant element of cross-fertilisation of ideas between NEAFC and NAFO with respect to modernising aspects of their respective Conventions.

Scientific uncertainties on stock size and structure

Another issue has been the extent of scientific knowledge on the size and structure of key stocks, particularly the redfish stock. While ICES carries out scientific research for and provides advice to NEAFC, assessment of the data is a complex and at times contentious issue. A good example of this problem is redfish. The data available for redfish has been ambiguous and the stock assessment open to interpretation; a fact that has been a major obstacle to taking management measures, as the Contracting Parties have been unable to reach agreement until present. Iceland was of the opinion that there were two different redfish stocks, while Russia was convinced that it was a single stock. Russia carried out extensive scientific research on the domestic level and brought it into the NEAFC decision making process, although the disagreement remains.

In 2005, NEAFC established a Permanent Committee on Management and Science (PECMAS), which is intended to function as an interface between science and management. Its original task was to draft the request for advice to ICES, but the number of tasks has expanded rapidly. At present, the main tasks of the group are to maintain relations with ICES, draft requests for advice and consider proposals for area management (NEAFC 2007, pp. 8-11). The NEAFC review panel noted that PECMAS offered an opportunity to improve the current process of formulating requests for

scientific advice from ICES by helping to formulate questions which will better address the specific needs of NEAFC fisheries. The Panel further noted that NEAFC, through the operations of PECMAS, could play a greater role in determining priority areas for research and analyses with coastal states and ICES (NEAFC 2006a, p.27). Through the establishment of PECMAS the Contracting Parties did not directly address the pending issue of uncertainty on stock size and structure. However, by creating a committee functioning as an interface between managers and scientists, the collation, dissemination and debate of scientific research and advice can be managed in a more efficient way.

Allocation disputes

In NEAFC, allocation decisions on a number of key stocks are made outside the RFMO. This is due to the fact that most stocks occur within or straddle the coastal states' areas of jurisdiction, i.e. outside the NEAFC Regulatory Area. Accordingly, fisheries management in NEAFC can be categorized into three different sets of measures that apply:

- primarily inside the Regulatory Area (pelagic redfish, deep-sea species);
- both inside the Regulatory Area and the EEZ of a single coastal state (Rockall haddock); and
- both inside the Regulatory Area and the EEZs of several coastal states (blue whiting, Norwegian spring spawning (Atlanto-scandian) herring, and mackerel).

NEAFC takes management measures for the whole stock in the first category and for those parts of stocks in the second and third category that occur within the Regulatory Area. However, as to the last category, this is not done before the relevant coastal states groups have agreed on TACs and allocations outside of NEAFC. On the basis of their agreements, NEAFC measures are then tabled, discussed and adopted. When there is no coastal state agreement, there is an understanding among Contracting Parties that each coastal state shall determine its own management plan, including TAC. In these cases, NEAFC has limited, or no scope for management within the Regulatory Area.

The issue of allocation has been marked in the past by lack of agreement between coastal states on the management of individual stocks (Table 4.3 summary). For the redfish and herring stocks, significant agreements were reached for the first time only in 1996/97, while agreement for the mackerel was reached in 1999. In the following years, mainly the stocks of blue whiting, herring and redfish have been the primary cause for concern and disagreement among Contracting Parties of NEAFC. It was not until the 2007 annual meeting that agreement was finally reached for all major stocks (except redfish).

Diverging interests and claims with regard to the allocation of individual stocks have hindered decision-making in NEAFC (Box 4.3). A good example of the issue is the case of the blue whiting stock for which Contracting Parties failed to agree a management regime between 2002 and 2006. The lack of agreement on a new management plan sprung from the diverging positions of the Contracting Parties. Norway claimed that the blue whiting should be managed according to the zone appurtenance, whereby nations are granted shares of the TAC according to the proportion of the blue whiting stock located in the respective nation's zone. Based on this, Norway claimed 37 % of the TAC. The EU claimed that the catches in the respective countries' exclusive zones should form the basis for a future allocation, and that this should happen irrespective of which nation carries out

the catches. Therefore, the EU demanded 58 % of the TAC and claimed at the same time that Norway was only entitled to 12 %. The Faroe Islands shared the position of the EU and claimed 31 % of the blue whiting TAC, mainly taking into account Russian fishing in the Faroe Islands' zone in addition to their own. Following the EU position as well, Iceland claimed 22 %. At the same time, historical fishing rights were pointed out by various Contracting Parties to support their positions or to invalidate those of the other parties. All quota percentage claims total 160 %, which serves to illustrate the great distance between the parties (Standal 2006).

Box 4.3. Allocation disputes for key species in NEAFC

Blue whiting

While the commission established constant TACs on the blue whiting stocks from the mid-1990s until 2001, albeit without allocating them, it was not able to reach agreement on TACs and allocations for the years 2002-2006. At the annual meeting in 1999 it was pointed out that blue whiting was harvested outside safe biological limits. Regardless of the TACs set for the stocks, catches exceeded them considerably. Moreover, there had been a sharp increase in mortality since 1997 (NEAFC 2000, p. 8). In 2000, coastal states failed to reach an agreement on the management of the blue whiting stocks. Since the management measures for blue whiting in NEAFC were linked to the coastal state process, the Contracting Parties could only agree on a roll-over of the unallocated precautionary TAC of 650 000 t as a temporary measure. At the 2001 annual meeting the EU, supported by Poland, suggested the adoption of another precautionary TAC of 250,000-300,000 t until agreement among coastal states could be reached. Norway, Denmark, Iceland and Russia opposed this, as the ICES advice was a closure of the fishery. It was not until 2006 that coastal states managed to agree on a management regime for blue whiting, and TACs within NEAFC areas could be established.

Herring

The coastal states are primarily responsible for the management of the herring stocks. A long-term management plan had been agreed in 1999 between the EU, Faroe Islands, Iceland, Norway and Russia. Between 2003 and 2007, the Contracting Parties failed to reach agreement on management measures.

Pelagic redfish

Pelagic redfish is one of the species that are primarily managed by NEAFC. The allocation of the redfish stock has been subject to some dispute for a number of years, as some Contracting Parties (mainly Iceland) argued that there were two separate stocks that needed to be managed differently including a two-TAC system, while other parties argued that there was only one stock. These differences complicated the development of management measures for redfish and taking allocation decisions (Hedley 2001). It was mainly Russia that opposed the two-stock approach. In 1998 for instance, Russia claimed that historically it was entitled to 33% of the TAC and that its recommended allocation was not appropriate. Therefore it objected to the recommendation on regulatory measures for redfish, so that agreement was only reached by qualified majority instead of consensus as had been the case in the previous two years. Iceland, too, objected to recommendations on management measures and put into place national management measures. At the annual meeting in November 2006, the redfish stock was divided into two separate stocks for management purposes, the Pelagic redfish Armiger Sea, and the Pelagic redfish Norwegian Sea.

As of today, the TAC and allocation issue has not really been fully addressed within NEAFC. Contracting Parties solve most of their allocation disputes amongst each other in bilateral meetings, outside of NEAFC. Only allocations that concern stocks that do not straddle EEZs (redfish, deep sea species) are being discussed on the NEAFC level. It is noteworthy that NEAFC has successfully pursued and implemented change in other policy areas, despite full agreement not being reached on some aspects of allocation. In many other RFMOs, efforts to introduce change founder on disputes over allocation of fishing opportunities. Yet, in NEAFC, significant progress has been made on addressing core issues such as control and enforcement, dispute settlement, and port state measures. The small number of participants and the unusual nature of the stocks situation (with a mixture of intertwined high seas and EEZ fisheries), combined with the impacts of IUU fishing, may have made it easier to reach agreement on these issues, while effectively postponing resolution of ongoing allocation debates.

How sustainable are the changes?

The prospects for the changes to modernise NEAFC being sustained over the longer term are enhanced by the success of the process in setting out clear, agreed rules for key areas such as the port state control system, dispute settlement, vessel lists, and control and enforcement mechanisms. The new Convention, once ratified, will consolidate the changes. With IUU fishing now largely under control, there is reduced economic pressure on the domestic fleets of Contracting Parties, at least from this source. Of approximately 900 landings that have been reported under the port control system, only around 6 have been refused by the flag state. While there are still concerns relating to disagreements over scientific advice, the dispute settlement mechanism at least provides a means of maintaining the integrity of the NEAFC management measures while allowing Parties to resolve differences.

There remain, however, several issues that may undermine or test the sustainability of the changes. First, some issues remain in terms of allocation. That the moves to modernise NEAFC have been successful in spite of some remaining allocation issues is a testament to the small constituency of relatively homogeneous coastal states, and strong political will. It is arguable whether NEAFC itself should play a stronger role in the allocation negotiations. It has been seen in the past that individual Contracting Parties have set up their own TACs and quotas that, in some instances, have undermined NEAFC conservation and management objectives. In taking such courses of action, it can be surmised that individual members have concluded that they would be better off by refusing to cooperate on those particular issues. This is likely to be unsustainable in the longer term, and NEAFC may be at risk of losing the strong progress that it has achieved in the past decade. The ability of the organisation to withstand unexpected and unpredictable changes in environmental and economic circumstances depends on the flexibility and robustness of its institutional structure, in particular the sharing of the fisheries resources.

Second, the current *ad hoc* solution to new entrants merely postpones the problem of finding a robust mechanism for allowing new entrants to join the Convention. While there has not been a rush of countries seeking to join NEAFC (relative to, say, ICCAT), this situation may not last. In case new countries want to join the organization, NEAFC will have to accommodate a new member or find another solution so as to prevent an increase in IUU fishing.

Third, several emerging issues will test the new structures within NEAFC. Incorporating an ecosystem approach to management within NEAFC, including the use of closed areas, is likely to be a challenging task and one that NEAFC has been working on for some years. Building cooperative arrangements with other international agreements will also be important. It is noteworthy that a Memorandum of Understanding has been signed between NEAFC and the OSPAR Commission (which administers the Convention for the Protection of the Marine Environment if the North-East Atlantic).

Table 4.3. TACs and other management measures in NEAFC

Year	Stocks under NEAFC's regulatory competence					
	Blue whiting	**Mackerel**	**Norwegian spring spawning (Atlanto-scandian) herring**	**Pelagic redfish**	**Rockall haddock**	**Deep-sea species (not all measures mentioned)**
2008	Overall TAC of 1 100 000	Overall TAC of 385 000	Overall TAC of 1 500 000	Pelagic redfish Irminger Sea: Not agreed in NEAFC; Pelagic redfish Norwegian Sea: Overall TAC of 14,500 for the 2nd half of the year.	Box closed to trawl fisheries to protect juvenile haddock	Agreed to maintain a reduction of 35%
2007	TAC 1 700 000 of which 268,000 in the Regulatory Area. Staged reduction of TAC.	TAC 423 000 of which 48 000 in the Regulatory Area, with allocations	Not agreed in NEAFC. National measures only. Consultations continue.	Pelagic redfish Irminger Sea: 46 000 for the Convention Area; Pelagic redfish Norwegian Sea: fishery closed until 30 June 2007	Box closed to trawl fisheries	Effort less than 65% of effort in earlier years (*i.e.* a further 5% reduction)
2006	"Breakthrough in negotiations"; however, outstanding problems on bilateral level.	TAC 42 289 for the Regulatory Area	Not agreed in NEAFC. National measures only, quotas summing up to about the prec. limit of 1 000 000. "consultations continue"	TAC 62 416 for the Convention Area		Another 30% reduction
2005	Not agreed in NEAFC. National measures only. "consultations continue"	TAC 40 185 for the Regulatory Area	Not agreed in NEAFC. National measures only. "consultations continue"	TAC 75 200 for the Convention Area		Reduction of fishing pressure on vulnerable species by 30%
2004	Not agreed in NEAFC. National measures only. "consultations continue"	TAC 52 192 for the Regulatory Area	Not agreed in NEAFC. National measures only. "consultations continue"	TAC 120 000 for the Convention Area		prolonged
2003	Not agreed in NEAFC. National measures only.	TAC 56 610 for the Regulatory Area	Not agreed in NEAFC. National measures only.	TAC 119 000 for the Convention Area		Temporary freeze of fishing effort: effort shall not exceed the highest level put into deep-sea fishing in previous years

Table 4.3. TACs and other management measures in NEAFC (cont.)

Year	Stocks under NEAFC's regulatory competence					
	Blue whiting	**Mackerel**	**Norwegian spring spawning (Atlanto-scandian) herring**	**Pelagic redfish**	**Rockall haddock**	**Deep-sea species (not all measures mentioned)**
2002	Not agreed in NEAFC. National measures only.	TAC 66 400 for the Regulatory Area	TAC 76 500 for the Regulatory Area	TAC 95 000 for the Convention Area		Agreement reached on freeze of fishing effort, *c.f.* 2003
2001	TAC 650 000 for the Convention Area	TAC 65 000 for the Regulatory Area	TAC 76 500 for the Regulatory Area	TAC 95 000 for the Convention Area		
2000	TAC 650 000 for the Convention Area	TAC 50 000 for the Regulatory Area	TAC 102 000 for the Regulatory Area; total 1,250,000	TAC 120 000 for the Convention Area		
1999	TAC 650 000 for the Convention Area	TAC 44 000 for the Regulatory Area	TAC 102 000 for the Regulatory Area; total 1,300,000	TAC 153 000 for the Convention Area		
1998			Roll-over of agreement made at extra-ordinary meeting in March 1997: 102 000 t for Regulatory Area; total 1 300 000.			
1997			Discussions continued without agreement on TAC. Weekly reporting system agreed			
1996			Discussions continued without agreement on TAC. Weekly reporting system agreed.			
1995			Stock appearing in international waters for the first time in many years			

Source: NEAFC

Key lessons learned

Rewriting the text of an RFMO's convention is a major achievement. NEAFC had many factors that worked in its favour in achieving this milestone: a small number of coastal state Parties with a relatively common set of interests, coupled with domestic political momentum and commitment emanating from a desire to implement the UNFSA. NEAFC has been in the vanguard of efforts to strengthen and modernise RFMOs worldwide and, while the characteristics of the NEAFC experience are (naturally) unique, there are a number of general lessons that may be of relevance to other RFMOs.

Importance of external drivers in motivating change

External drivers can be a very powerful motivating force for instituting change. In the case of NEAFC, the introduction of new international legal obligations to strengthen and modernise RFMOs generated strong political support for change. The adoption of the UN Fish Stocks Agreement created the political atmosphere in which efforts to rejuvenate the Convention could take root. However, external drivers are a necessary, but not sufficient, condition for change to actually take place. It helped that there was a core NEAFC constituency of coastal states with similar domestic agendas and commitments to sound fisheries management. This enabled the international drivers to be translated into the domestic political agendas. But without the introduction of the UNFSA, it is an open question as to whether the NEAFC changes would have occurred.

The use of the performance review mechanism is also a significant external driver (although the review itself was organised and funded by NEAFC, it was nevertheless a relatively independent process and comprised a number of external and internal reviewers). The external review provided a "report card" on NEAFC. In critically evaluating NEAFC performance, it validated past efforts to strengthen the RFMO and provided guidance and support for future changes. Such an evaluation, if accepted by all the Parties, can bolster support for further change.

Reduce IUU fishing as a priority

By focussing on reducing or eliminating IUU fishing, NEAFC Parties were able to rally around a common cause and undertake changes that do not necessarily threaten or conflict with domestic political agendas. The economic benefits from tackling IUU fishing were clear to all participants and there were mutual gains from a cooperative approach to the problem, so there was no issue over the distribution of benefits from reducing IUU fishing. A comprehensive control and enforcement system was central to the NEAFC response to IUU fishing. The progressive implementation of the port control system, vessel lists and accompanying compliance and enforcement measures against IUU fishing then laid the foundation for further changes which have been more challenging to individual country interests (primarily, re-writing the convention). While the internal allocation issue is yet to be finally resolved, removing the problem of IUU fishing from the equation is a necessary first step towards developing such a solution.

Continuous improvement

A feature of the NEAFC experience has been the gradual build-up in the pace of change, culminating in the redrafting of the Convention. This process of continuous improvement can be seen as mechanism for building trust and gaining credibility within the membership, thereby enabling further changes to be undertaken as and when determined by the membership. The Working Group on the Future of NEAFC continues to have the mandate to consider recommendations for future changes.

Costs to delaying action on allocation and new Members

The changes that have been undertaken to date can be considered all the more impressive by the fact that they have been achieved without fully addressing two of the key issues that generally create significant problems in RFMOs – allocation and new members. There is a cost to delaying action on these issues and failure to fully address them can undermine the stability of the cooperative arrangement in the medium to longer

term, and impose economic costs on the fleets of Member countries (through, for example, a return of IUU fishing).

Professional Secretariat

It is significant that a permanent Secretariat for NEAFC was not established until 1999. A key element of the efficient functioning of any RFMO is an appropriately resourced, professional Secretariat. Without such a Secretariat, the transactions costs in undertaking and implementing change would have been significantly higher, and could well have delayed action.

Capacity to participate

An important lesson from NEAFC is the need to ensure that all Parties have the technical capacity and political mandate to fully participate in NEAFC meetings. The speedy resolution of management and policy problems requires such participation and the changes to NEAFC were delayed to some extent by a lack of institutional capacity in Russia. The use of cooperative arrangements to share expertise and to raise technical capacity can result in benefits flowing to all Parties from more efficient meetings and negotiations.

Synergies with efforts in other RFMOs

Finally, it is clear that NEAFC has benefited from the processes of change underway in other RFMOs, particularly those in the Atlantic such as NAFO and South east Atlantic Fisheries Organisation (SEAFO). Common membership in these organisations has helped to disseminate policy ideas and initiatives such as the vessel lists and dispute settlement mechanism. For example, information on the vessel lists is now reciprocally shared by these RFMOs, further reinforcing the effectiveness of the measure.

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Chapter 5

Updating the Northwest Atlantic Fisheries Organization (NAFO)

The Northwest Atlantic Fisheries Organization (NAFO) has been under significant pressure over the past few decades. The collapse of the cod stocks on the Grand Banks generated serious political and economic turmoil within Canada, as well as creating international tensions between the NAFO Parties. There were grave concerns about the ability of NAFO to withstand these pressures and, as a result, about the prospects for maintaining a cooperative approach to rebuilding the groundfish stocks over the longer term.

However, NAFO has undergone a period of change and renewal in the last decade that promises a brighter future for the organisation and for the groundfish stocks. This case study reviews the changes that have been undertaken in NAFO, focusing on the factors underlying the drive for change, the process of change, and key insights from the NAFO experience that may help to inform efforts to strengthen other RFMOs.

Background

Commercial fishing in the northwest Atlantic dates back to the discovery of Newfoundland and the rich cod resources on the Grand Banks off its coast at the end of the 13th century. European fishermen, French and Portuguese in particular, were among the first to exploit these stocks. Following the end of World War II, fishing in the north Atlantic intensified rapidly and, by the late-1940s and early 1950s increasing numbers of large trawlers were operating on grounds off West Greenland, Labrador and Newfoundland (Anderson 1992).

At the same time, fishing nations began to express serious concerns about reduced abundance and possible depletion of the fisheries resources in the northwest Atlantic, which until then had been considered inexhaustible. The concern amongst these nations to preserve the fish stocks resulted in the establishment of the International Commission for the Northwest Atlantic Fisheries (ICNAF) in 1950, which aimed to protect and conserve the fish resources of the northwest Atlantic area on the basis of modern fishery science. ICNAF was made up of the governments of Canada, Denmark, France, Iceland, Italy, Norway, Portugal, Spain, UK and USA.

In 1977, Canada and the USA extended their EEZs to 200 nautical miles, as did Denmark around Greenland, and France around the islands of St. Pierre et Miquelon. After several conferences held in 1977 and 1978, ICNAF members reached agreement on a new international organization to replace ICNAF. The Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries, signed on 24 October 1978 in Ottawa, came into force on 1 January 1979. It had seven signatories: Canada, Cuba, the European Economic Community (EEC), German Democratic Republic (GDR), Iceland,

Norway, and the Union of Soviet Socialist Republics (USSR). This Convention, establishing the Northwest Atlantic Fisheries Organization (NAFO), replaced the 1949 International Convention for the Northwest Atlantic Fisheries and ICNAF. The prime objective of NAFO has been to contribute through consultation and cooperation to the optimum utilization, rational management and conservation of the fishery resources of the Convention Area.

Membership

NAFO is comprised of the Contracting Parties of Canada, Cuba, Denmark (in respect of Faroe Islands and Greenland), the European Union, France (in respect of Saint Pierre et Miquelon), Iceland, Japan, the Republic of Korea, Norway, the Russian Federation, Ukraine and the United States of America.

Geographical scope and species

NAFO embraces a large portion of the northwest Atlantic, including the 200-mile zones of the four coastal states of Canada, Denmark (Greenland), France (St. Pierre et Miquelon) and the USA (Convention Area). The Convention Area encompasses "the waters of the Northwest Atlantic Ocean north of 35º00' north latitude and west of a line extending due north from 35º00' north latitude and 42º00' west longitude to 59º00' north latitude, thence due west to 44º00' west longitude, and thence due north to the coast of Greenland, and the waters of the Gulf of St. Lawrence, Davis Strait and Baffin Bay south of 78º10' north latitude". It is divided into various scientific and statistical subareas, divisions and subdivisions (Figure 5.1).

The area referred to as the Regulatory Area is the part of the Convention Area that is beyond coastal states' fisheries jurisdiction, hence the high seas. There are three rather limited parts of the Regulatory Area that are of particular importance for distant water fishing fleets: the southern part of the Grand Bank of Newfoundland, called the 'tail' (NAFO Division 3NO), the eastern part of the Grand Bank, or the 'nose' (NAFO Division 3L), and the shallow water area well beyond the Canadian 200 miles limit known as the 'Flemish Cap' (NAFO Division 3M).

NAFO manages 20 stocks comprising 12 species including American plaice, capelin, cod, Greenland halibut, redfish (4 species), shrimp, skate, squid, white hake, witch flounder and yellowtail flounder. Total catches for the NAFO Convention Area are detailed in Table 5.1 and in Figure 5.2.

Governance structure

Under the 1979 Convention, NAFO has a permanent Secretariat and three constituent bodies, the General Council, the Fisheries Commission and the Scientific Council. The General Council is responsible to supervise and coordinate the organizational, administrative, financial and other internal affairs of the Organization, including the relations among its constituent bodies and external relations of the Organization. The Fisheries Commission is responsible for the management and conservation of the fishery resources as well as the monitoring, control and surveillance of the fisheries of the Regulatory Area. It takes into account information and advice provided to it by the Scientific Council. The Scientific Council provides a forum for consultation and cooperation among the Contracting Parties with respect to the study, assessment and

exchange of scientific information and views relating to the fisheries of the Convention Area, including environmental and ecological factors affecting these fisheries. It compiles and maintains statistics and records and publishes or disseminates reports, information and materials pertaining to the fisheries of the Convention Area.

Table 5.1. Fishery Catches in the NAFO Convention Area, 2000-04, by Flag States (tonnes)

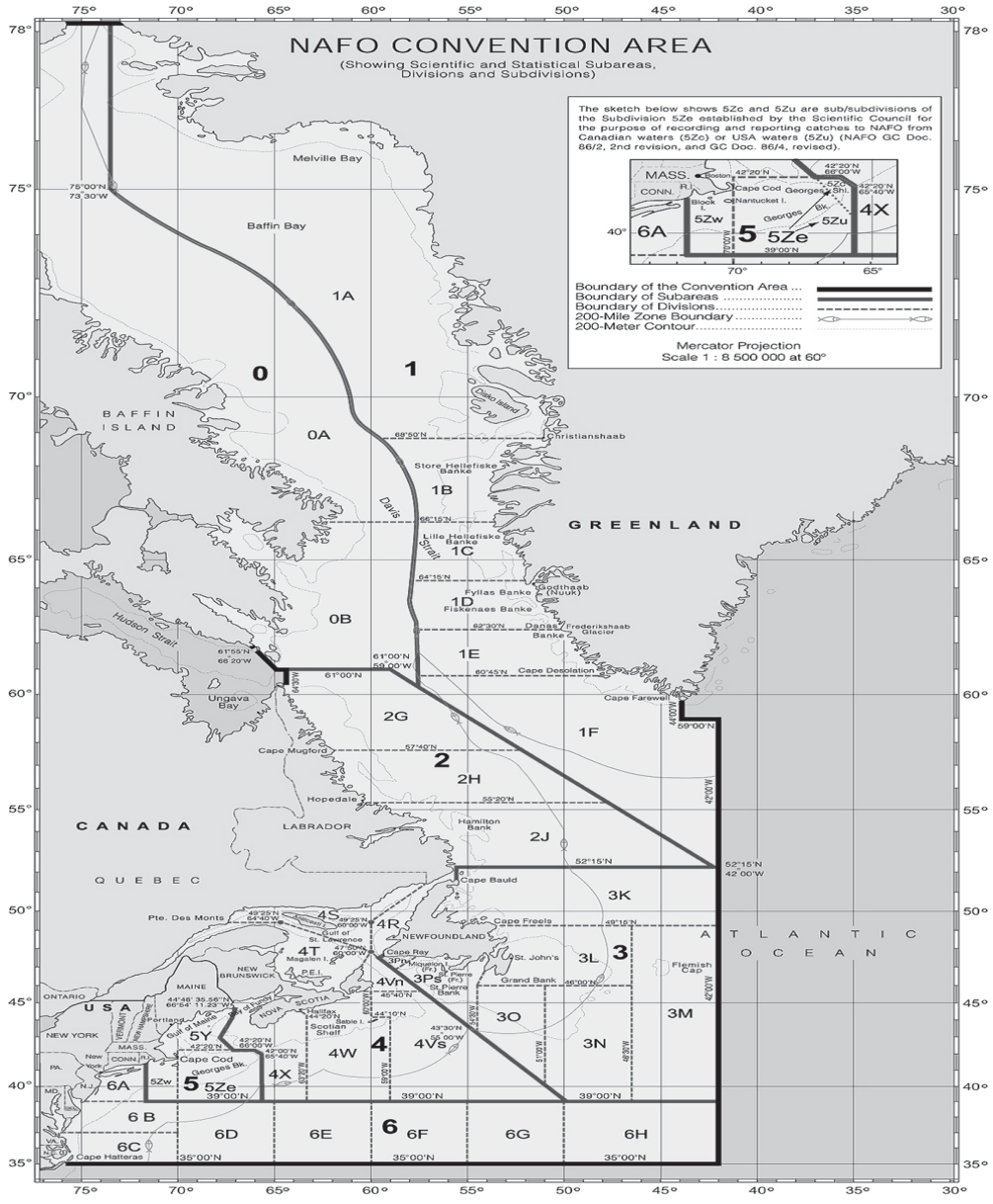
	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Bulgaria	9634	1097										1928	
Canada	1238161	1177206	1213420	1213004	1128380	1083743	1198942	1255238	1285216	1371463	1298729	1283140	1109406
Cuba	12483	9258	6667	18565	14786	20521	23509	24555	28132	16869	24131	27617	32007
Denmark	98189	113886	118250	114149	106504	88701	90670	91808	99788	123981	170084	141958	115772
EU	176022	118513	114427	125077	104538	123443	157821	235062	205740	146826	138565	107956	134697
France	10540	8615	11111	10474	9561	12026	12304	23771	23679	13970	18520	23177	23712
GDR	11479	4898	4786	5093	8394	13694	18161	26381	27744	27650	23036	13522	
Iceland								14					
Japan	41764	31408	20577	14952	4295	10050	8417	11855	10588	9634	9335	12037	7479
NCP	8085	4697											1196
Norway	8170	5270	3147	2974	3119	2033	2058	6515	442	1542	6934	26821	11004
Poland	20621	4619	9575	6919	13627	9128	7892	7125	7623	11880	9329	509	
Romania	2422	77											
Russia													
South Korea				2066	2138	4006	6876	7886	22383	20004	35326	24637	12805
Ukraine													
USA	1297004	1328959	1278037	1285504	1324171	1206433	1216449	1076829	1124291	1165284	1218369	1250473	1319711
USSR	125193	108288	118672	112250	88816	129129	133378	147681	155993	149637	155429	197332	102422
Grand Total	3059767	2916791	2898669	2911027	2808329	2702907	2876477	2914720	2991619	3058740	3107787	3111107	2870211

Table 5.1. Fishery Catches in the NAFO Convention Area, 2000-04, by Flag States (tonnes) Continued

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Grand Total
Bulgaria														12659
Canada	979886	832028	700290	615698	649827	712225	770054	805785	854704	871254	864832	817961	415274	25745866
Cuba	25955	29925	12333	18283	24075	17218	7727	4566	46					399228
Denmark	107051	110084	109596	115771	104550	102544	108006	128412	130429	136886	162904	202998	6942	2999913
EU	112581	102052	87456	38304	35894	43863	51611	71925	83366	79209	84486	95078	66145	2840657
France	16387	274	277	309	740	3553	6108	5916	6635	4206	3846	3890	3702	257303
GDR														184838
Iceland		2196	2462	8232	20682	7197	6572	9148	9363	5077	6878	7226	7588	92635
Japan	10843	5996	3370	4333	3883	2572	3109	3112	2941	3627	3389	3216	1948	244730
NCP		1298												15276
Norway	2546	9830	11753	12017	7534	3808	2684	4343	4424	14527	14370	26308	12214	206387
Poland							148	894	1732	761	428	921	2199	115930
Romania														2499
Russia	37100	26525	9187	10663	6956	1465	2872	6022	27660	32138	34311	34353	22254	251506
South Korea	20965	3738												162830
Ukraine										405		389	580	1374
USA	1295185	1232862	1106805	1226186	1162409	1097404	1042891	1015197	1032035	1170543	1112855			28585886
USSR														1724220
Grand Total	2608499	2356808	2043529	2049796	2016550	1991849	2001782	2055320	2153335	2318633	2288299	1192340	538846	63843737

Source: NAFO Annual Fisheries Statistics Databases website, *www.nafo.int/fisheries/frames/fishery.html*, accessed 19 March 2008.

Figure 5.3. Map of NAFO Convention Area



Source: NAFO

Six standing committees support the work of the three bodies, the Standing Committees on Finance and Administration (STACFAD), Fisheries Science (STACFIS), Research Coordination (STACREC), Publications (STACPUB), Fisheries Environment (STACFEN) and International Control (STACTIC). In the course of a comprehensive NAFO reform process, significant amendments to the NAFO Convention were adopted in 2007. Under the amended convention, the General Council and the Fisheries Commission will be merged to form a single Commission.

Policy reform: towards an amended Convention

NAFO looks back on a long and turbulent history of political dispute and many changes in policy direction. This section will focus on the most recent changes in NAFO, beginning with some background information to set the scene. Table 5.2 provides an overview of the key dates in NAFO's history.

NAFO until 2005

For the first 15 years of its existence, NAFO was not able to get a grip on the problem of overfishing and stock depletion in the Convention Area. It had inherited a number of depleted stocks from its predecessor ICNAF. Much of the overfishing in the 1980s was legal as the TACs set by coastal states (for EEZs) and by NAFO (for the Regulatory Area) were simply too high to be sustainable due both to poor scientific advice and to disregard of advice by the managers (both national and international). This was accompanied by a relatively ineffective management system, a lack of compliance with and enforcement of agreed management measures by Contracting Parties. Also the repeated use of the objection procedure by some Contracting Parties, in conjunction with the setting of unilateral quotas significantly in excess of their NAFO quotas and the subsequent overfishing of these unilateral quotas, and IUU fishing activity in the NAFO Regulatory Area (Day 1997).

In the early 1990s, NAFO started to address some of these problems. In 1990, NAFO established a Standing Committee on Fishing Activities of Non-Contracting Parties (STACFAC), set up to investigate IUU incidents in the NAFO Regulatory Area and to make recommendations to NAFO on specific measures such as inviting the states in question to join NAFO or diplomatic démarches. In June 1991, NAFO's Scientific Council concluded that unreported and misreported catches were so prevalent that it could no longer conduct proper scientific assessment of NAFO-managed stocks and that this situation was contributing to a further depletion of fish stocks in the Regulatory Area (Day 1995).

NAFO then decided to strengthen its monitoring and surveillance mechanism. To improve knowledge of the location of fishing effort, NAFO introduced an observer system as well as a hail system in 1992, under which all vessels of a Contracting Party were required to report on entry and exit to the NAFO Regulatory Area as well as when crossing from one sub-area to another. In 1996, this was extended to include the reporting of catch information upon entry and exit from the NAFO Regulatory Area. Regular position reports were introduced in 2002 with the introduction of Vessel Monitoring Systems (VMS) (and are now required on a 2 hourly basis). Since 2007 (or 2004 as a pilot program), NAFO has a voluntary scheme in place for daily catch reporting by vessel masters and observers. Contracting Parties using this scheme may reduce observer participation to a minimum of 25% of the time that the vessel(s) spent in the Regulatory Area during the year.

The state of the fisheries resources in the NAFO Convention Area reached critical levels. In 1992, the large northern cod stock (Divisions 2J3KL), which had until then by far been the most important fish stock in the area, collapsed. On the initiative of Canada a moratorium was placed on the stock in the NAFO Regulatory Area after Canada had imposed a moratorium on the stock inside its EEZ. By 1994, moratoria or severe restrictions had been placed on all the important straddling stock fisheries in the NAFO Regulatory Area; the ground fish stocks had collapsed. Some Contracting Parties

disregarded the moratoria and carried on fishing. This was, arguably, a low point of diplomatic relations within NAFO.

When the conflict was resolved, the political situation in NAFO improved and a number of changes to the NAFO control, monitoring and surveillance scheme were adopted. In 1998, the NAFO Observer Programme, aiming at achieving compliance of contracting party vessels with NAFO conservation and management measures, reached 100% coverage for all fishing vessels. In 2001, work began on implementing a vessel monitoring system (VMS), which became fully functional (*i.e.* 100% coverage) in 2003. In 2004, a framework for the implementation of the precautionary approach was adopted and the first annual compliance review report was issued. NAFO began to publish information about vessels engaging in IUU fishing activity (the "blacklist") in 2005 and in 2006 NAFO recognized non-contracting party vessels listed on the North East Atlantic Fisheries Commission's (NEAFC) IUU-list as presumably also engaging in fishing activities in the Regulatory Area. However, even though the Contracting Parties had been continuously reducing the TACs, many of the stocks in the NAFO Convention Area that declined so drastically in the 1980s and 1990s had still not recovered in 2008, and ten of the twenty NAFO managed stocks had been under moratoria for a number of years (NAFO 2008, Annex IA).

An in-depth discussion on reforming the organization did not start until 2005, although selected issues such as introducing a dispute settlement mechanism and the application of the precautionary approach had already been raised. The Contracting Parties and stakeholders had been expressing the need for a reform over a considerable period of time. Concerns focussed in particular on:

- NAFO's decision-making process (the need to limit the use of the objection procedure, lack of a dispute settlement mechanism);
- the lack of an ecosystem approach to fisheries management (although elements of an ecosystem approach had already been implemented, including the precautionary approach, closed areas for some seamounts, shark and turtle protection);
- the governance structure (General Council, Fisheries Commission);
- general allocation criteria (although NAFO has some allocation criteria for stock that are not yet under NAFO management); and
- the financial contribution formula.

Under the 1979 NAFO Convention, decision-making is rather cumbersome if not inefficient. All decisions in every NAFO body require a simple majority to be adopted. The Convention allows individual Contracting Parties to legally opt out of any management decision without having to face any further consequences (Article XII); when filing an objection, the objecting party is not bound by the management decision in question. Further, Contracting Parties have no option of resorting to any statutory procedure to settle their disputes, as is required by the UNFSA.

NAFO's governance structure of two decision-making bodies, both of them composed of basically the same representatives, has long been subject to criticism. There has been a call to streamline NAFO's structure by merging these two bodies. There was also a need felt for aligning the NAFO Convention to the relatively new developments in the legal framework for high seas fisheries, in particular the 1995 UN Fish Stocks Agreement, and for incorporating, among others, ecosystem considerations to fisheries management. With regard to the financial contribution formula, some NAFO members, in

particular the United States and Denmark (in respect of the Faroe Islands and Greenland), held the view that it was not well-balanced.

Table 5.2. Key dates in NAFO

Year	Event
1950	Establishment of the International Commission for the Northwest Atlantic Fisheries (ICNAF)
1977	Coastal states extend their EEZs to 200 nautical miles (Canada, Greenland (Denmark), St. Pierre et Miquelon (France), USA)
1979	Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries, entry into force
	Establishment of the Northwest Atlantic Fisheries Organization (NAFO)
1981	Joint International Enforcement Scheme
1988	Joint International Inspection Scheme, replacing the 1981 Joint International Enforcement Scheme
1990	Establishment of STACFAC (Standing Committee on Fishing Activities of Non-Contracting Parties in the Regulatory Area)
1992	Moratorium on Northern cod inside the Canadian EEZ and NAFO Regulatory Area
	Introduction of the NAFO Hail System
1994	Moratoria or severe restrictions placed on all the important straddling stock fisheries in the NAFO Regulatory Area
	Canada amends the Coastal Fisheries Protection Act, asserting jurisdiction over its continental shelf beyond the EEZ, and authorizing officials to implement this measure by force if necessary
1995	Canada seizes Spanish vessel *Estai* under the new legislation, resulting in the "*Turbot War*" and the Canada–EC Control and Enforcement Agreement
1998	NAFO Observer Programme (100% observer coverage for all fishing vessels)
2001	Vessel Monitoring System (VMS)
2004	First management implementation of the NAFO precautionary approach
	First annual compliance review report
2005	NAFO IUU-"blacklist"
	NAFO reform process starts
2006	NAFO recognizes NEAFC IUU-list
2007	Adoption of amendments to the convention (revised objection procedure; new dispute settlement procedure; commitment to an ecosystem approach; merger of the Fisheries Commission and the General Council to a "Commission")

At the 2005 annual meeting the Contracting Parties thus decided to make NAFO subject to a complete overhaul (NAFO 2005b). Canada made a proposal on changes to the governance of NAFO inspired by the Ministerial Declaration of the 2005 St. John's Conference (St. John's Declaration, Box 5.1). Norway also suggested that the NAFO Convention should be amended in view of new conservation approaches and the ongoing modernization of RFMOs. In the subsequent debate at the meeting, Contracting Parties expressed the need to strengthen the decision-making process, developing a more

integrated oceans management policy, developing dispute settlement procedures, streamlining the structure of the organization, enhancing the sharing of benefits and responsibilities, as well as various issues relating to the management of stocks and control, enforcement and follow-up to violations. The EU was one of the most important supporters of the Canadian position, and hence a Canada–EU joint proposal on NAFO reform was adopted (NAFO 2005c).

An *ad hoc* Working Group on NAFO Reform (WG Reform) was then established. In order to make NAFO a more streamlined and effective RFMO, the working group was to review the Convention and, if appropriate, make recommendations on amendments to the Convention, focussing in particular on the decision-making process as outlined in paragraphs 4A and B of the St. John's Declaration and the governance structure and operation of NAFO (NAFO 2005d).

Box 5.1. The St John's Declaration

The St. John's Declaration is the outcome of the *Conference on the Governance of High Seas Fisheries and the UN Fish Agreement – Moving from Words to Action*, which took place 1-5 May 2005 in St. John's, Newfoundland, Canada. The conference was attended by participants from 49 states, fishing entities, academic and other organizations.

The declaration outlines a shared vision for reforming high seas fisheries governance and sets out specific goals that the ministers strive to achieve. It was signed by nineteen ministers from around the world. These included ministers from seven of the twelve NAFO Contracting Parties, representing the holders of most of the NAFO quotas, *i.e.* Canada, the Home Rule Government of the Faroe Islands (Denmark), the European Union, Iceland, Japan, Norway and the United States (NAFO (2005a).

In paragraphs 4 A and B of the declaration ministers expressed their will to strengthen RFMOs through the implementation of a decision-making process which relies on the best scientific information available, incorporates the precautionary approach and ecosystem considerations in fisheries management, uses allocation criteria which properly reflect the interests and needs of coastal states and developing states, and which achieves compatibility between conservation and management measures established for the high seas and those established for the adjacent EEZs. Moreover, states committed themselves to ensure that the decision-making processes in RFMOs include dispute settlement procedures which provide for the review of conservation and management decisions and of behaviour following opting out of such decisions, and which are in accordance with UNCLOS and UNFSA.

At the 2005 annual meeting it was further decided that, in accordance with paragraphs 4C and D of the St. John's Declaration, the effectiveness of the existing NAFO monitoring, control and surveillance (MCS) regime should be reviewed to determine the changes needed to be introduced to strengthen such instruments and make them more efficient in terms of operation, results and cost. Guidelines on sanctions, the role of observers and follow-up on infringements were going to be established. At this meeting, NAFO also decided to go ahead with an ecosystem approach to fisheries management and extended its protection of vulnerable species from regulating skates (2004) to banning shark finning. The Scientific Council was requested to provide advice on the development of criteria for determining areas of marine biological and ecological significance and the identification of such areas in the NAFO Regulatory Area.

Contracting parties also agreed that the issues outlined in paragraph 5 of the St. John's Declaration would be addressed at the subsequent meeting, *i.e.* the issues of fishing effort and catches exceeding the established TACs and allocations, the use of the

precautionary approach with regard to unregulated stocks, and the capping and reduction of excess fishing capacity commensurate with the status of fish stocks.

At the annual meeting in 2006 the Fisheries Commission adopted a set of changes of the NAFO Conservation and Enforcement Measures (CEM). The new measures were part of the NAFO reform initiative in accordance with paragraph 4C of the St. John's Declaration, and covering the following specific areas:

- By-catch provisions (Article 9)
- Infringements and Serious Infringements (Articles 32 and 33)
- Follow-up actions under Joint Inspection and Surveillance Scheme (Chapter IV)
- Enforcement Measures (new Article) (NAFO 2006).

There was also a commitment to an ecosystem approach to fisheries management (including closure of the four seamounts found in the Regulatory Area to bottom fishing), revision of the NAFO objection procedure, and introduction of a new dispute settlement mechanism. Decision-making in NAFO moved from the majority vote as a general rule to a consensus-based voting. Only in cases where all efforts to reach consensus have been unsuccessful, decisions shall be taken by two-thirds majority. Furthermore, the structure of NAFO will be simplified by merging the Fisheries Commission and the General Council. The obligations of the contracting parties, flag states and port states have been increased. With regard to the budget formula, a small population clause has been added to the former formula. Under this clause, the annual contribution of a Contracting Party which has a population of less than 300 000 inhabitants shall be limited to a maximum of 12% of the total budget.

An amendment of the coastal state formula, however, was not agreed on. Moreover, no decision was taken on the establishment of allocation criteria regarding stocks already managed by NAFO. While NAFO has developed allocation criteria for stocks that are not yet managed, Contracting Parties are, understandably, reluctant to re-enter into negotiations regarding quota allocations for stocks that are already regulated.

After a two-year period of negotiations, the amendments to the 1979 NAFO Convention were adopted at the annual meeting in 2007. Once the revised Convention is ratified by Contracting Parties, the 1979 NAFO Convention will be replaced by the amended one.

The factors underlying the push for change

The push for change in NAFO came from a combination of factors that were both internal and external to the organization. A confluence of domestic political pressure within Contracting Parties, the development of new international legal norms for RFMOs, a well-timed international conference, and a lack of resource and economic sustainability worked to generate a groundswell of support for radically changing key aspects of the NAFO, culminating in the revision of the Convention.

As with other RFMOs analysed in this report, the 1995 ***UN Fish Stocks Agreement*** (UNFSA) provided a major impetus to reform efforts. All NAFO members, except Cuba, are parties to the UNFSA, which calls for the implementation of its principles mainly through RFMOs as the "vehicles" for fisheries governance on the high seas. Since virtually all NAFO members are parties to UNFSA and therefore committed themselves

to it, implementation of UNFSA through NAFO was not only a legal obligation but also a matter of political credibility. NAFO members began to undertake reforms to bolster the control and enforcement aspects of the organisation, and to work towards a more comprehensive review of the Convention. However, the 2005 St John's Conference (Box 5.1) was pivotal in generating sufficient support for a large-scale revision of the NAFO Convention. While Canada initiated the Conference in order to further the political and legal support for comprehensive RFMO reforms, there is no doubt that one of the objectives behind the conference was to push for specific changes in NAFO.

There was a considerable degree of non-compliance by vessels of some Contracting Parties with respect to catch limits and the obligation to correctly report data. For instance, the Scientific Council estimated that the catches of Greenland halibut between 2004 and 2006 exceeded the rebuilding plan TACs by 27%, 22%, and 27%, respectively, despite reductions in fishing effort (NAFO 2007a).

The IUU fishing by non-Contracting Parties and non-compliance by some NAFO vessels contributed to the poor state of the fish stocks in the northwest Atlantic (Box 5.2). At present, half of NAFO-managed stocks remain under moratoria, although there are signs of recovery in some stocks, including American plaice.

These factors combined to increase domestic political pressure for improving NAFO. In particular, Canada was pushing for reform in NAFO due to an immense political and economic pressure arising from its domestic industry and communities historically dependent on the groundfish stocks. For centuries, the livelihood of the people settling on Canada's east coast has been dependent on the rich fisheries resources of the Grand Bank (cod in particular). Hence, there is a considerable cultural, if not emotional, attachment to these resources. This is accompanied by a complex legal and economic situation in these regions (in relation to access rights and privileges of certain fishers) as a result of successive government decisions. Moreover, the value of the Newfoundland and Labrador fisheries has increased markedly in recent years as a result of more valuable resources (such as crab and lobster) being exploited by fewer fishers. In general, however, the Canadian public has not always been in favour of decisions taken in NAFO. In Canada, the general poor state of the straddling groundfish stocks in the Convention Area, a large part of which occurs in Canada's EEZ, was widely claimed to be the result of overfishing and mismanagement by NAFO.[1] To win or to ensure the support of Canadian voters it was crucial for policy-makers to demonstrate that action was taken.

All members of NAFO, including the EU, had been generally supportive of Canada's push for change and the strong support of all members was critical to the process. The international obligations that the members had entered into by becoming a party to the various legal and political instruments on high seas governance drove this support. In the case of the EU, it can also be argued that there is a strong historical and cultural attachment to the groundfish resources by some EU countries (such as Spain and Portugal) as a result of centuries of regular fishing in the area. There was also a high degree of political credibility on the national as well as on the international level at stake for the EU in terms of demonstrating its commitment to sustainable fisheries management both within the Common Fisheries Policy and in other RFMOs

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Box 5.2. State of the NAFO-managed stocks

At the annual meeting in September 2007 the NAFO Scientific Council summarized the state of the NAFO-managed fish stocks as follows:

"The finfish stocks on the Grand Banks and Flemish Cap are generally in a poor shape. Scientific Council continues to advise no directed fishing for cod, American plaice, witch flounder, Div. 3LN redfish, and capelin, and cautions to keep bycatch of these moratorium species to the lowest possible level. Concerns expressed by the Scientific Council with regard to continuous low levels of cod despite the decade-long strict moratorium led NAFO to devise a new recovery plan for Div. 3NO cod with the objective of increasing the spawning stock to 60 000 t. However, this will be a long and slow process as the current estimated spawning stock biomass (SSB) is only 7 500 t. On the positive side, American plaice in Div. 3LNO is showing some signs of a slow recovery and, at the current rate, the stock biomass should reach B_{lim} in a few years. The fishery remains viable for three redfish stocks, and yellowtail flounder, skate, white hake, squid and shrimp. Greenland halibut has been subject to a rebuilding plan since 2004 but nonetheless its SSB is declining, recruitment continues to be low, and the stock consists of a high proportion of immature fish. Scientific Council found that the rebuilding plan is hampered by captures being continuously about 25% over the total allowable catch (TAC) for the past few years; an issue that was addressed by NAFO at the Annual Meeting 2007"

Source: NAFO (2007).

Finally, the ***NAFO budget contribution formula*** had been subject to some dispute for quite a while and prompted certain Contracting Parties, the United States and Denmark (in respect of the Faroes Islands and Greenland) (DFG) in particular, to put the issue on the NAFO reform agenda. The United States has hardly any profitable fishing quota in NAFO due to a comparatively late accession, but contributes the full coastal state share, equalling 2.5% of the total budget, which has to be paid in addition to the regular Contracting Party share (making the US the second largest contributor to the budget after Canada). Further, the level of contributions all members have to pay is not dependent on the extent of quota allocations. DFG held that there was a need to introduce a small population clause and disapproved the fact that small fishing entities were treated equally compared to major fishing states. The potential for a broad reform push to also address this particular issue helped to gain support for change.

Addressing obstacles to reform in NAFO

Disagreement over scientific advice

One of the obstacles to change in NAFO was disagreement over scientific advice and its negative implications for the implementation of the precautionary approach to fisheries management. Conservation and management measures in NAFO are based on scientific advice from the Scientific Council. It establishes the scientific advice at the request of the Fisheries Commission for specific fish stocks within the NAFO Regulatory Area, or by coastal states which need information on stocks within their EEZs or on stocks that are straddling two jurisdictional areas. When setting the TACs and allocating fishing quota the Fisheries Commission does not always follow the advice of the Scientific Council, and TACs are occasionally set above the level recommended in the scientific advice. Since 2003, this has happened for Greenland halibut (Box 5.3), thorny skate (TAC set at

13 500 t, slightly above the recommended 11 000 t), and 3M redfish (increased from 5 000 t to 8 500 t for 2008 against scientific advice as the stock was showing signs of recovery). Mostly this is done for political reasons – to meet the expectations of the domestic fishing industries of Contracting Parties, or to facilitate "package deals" among Contracting Parties, and so on. However, in some cases scientific advice is not followed because Contracting Parties harbour doubts regarding the accuracy and reliability of the stock assessments, or because there is a degree of risk tolerance in the decision making process in some cases.

There has been some shift in recent years in the approach being taken by Contracting Parties to disagreements over scientific advice. This has been partly driven by the general agreement that the objection procedure, which allowed for unilateral opting out of any measures, needed to be updated to provide greater consistency with the objectives of the Convention (next section). There was also a greater willingness amongst participants to search for alternative solutions to lodging an objection. This is well illustrated by the case of the advice and recommendations for the Greenland halibut stock in Subarea 2 and Divisions 3KLMNO, and the recovery plan that was eventually put into place (Box 5.3). The extensive use of bilateral and multilateral discussions helped the most affected Contracting Parties to work through the issues surrounding the scientific advice and the implications for both their domestic industries and the long term health of the stock.

Box 5.3. Rebuilding the Greenland Halibut fish stock

This was most notably the case with regard to the advice and recommendations for the Greenland halibut stock in NAFO Subarea 2 and Divisions 3KLMNO for 2004. The Scientific Council's advice for Greenland halibut for 2004 was a TAC of 16 000t, whereas in the preceding year the advice had been a TAC of 36 000t. This unexpected reduction by more than 50% was the cause of much dispute and discussion at the 2003 NAFO annual meeting, both in plenary and in the heads of delegation meetings. Contracting Parties expressed doubts about the accuracy of the stock assessment. The Scientific Council explained its advice by stating that the basis of its advice for 2004 was the employment of a new formulation of the stock assessment model used for Greenland halibut. Following this model, all indicators for the Greenland halibut stock were negative, and only catches at 16 000t would maintain the stock biomass at its current level. The exploitable biomass of the Greenland halibut stock had been declining in the preceding years and the recruitment had been poor. The stock was estimated to be at its lowest level in 2003 (NAFO 2003a).

Given the implications of the advised marked decrease in maximum catches to fishers and the fishing industry particularly of the EU, Japan, Canada and Russia, numerous bilateral and quadrilateral discussions took place to reach resolution. The four Contracting Parties developed a fifteen year Greenland halibut rebuilding program, which included a TAC of 20 000t for 2004 and a continuous reduction of the TACs over the following years (NAFO 2003a). A catch limit of 16 000t was only to be reached in 2007. The recovery plan was eventually adopted by the Fisheries Commission. It was celebrated by NAFO as an important achievement and a big step towards the implementation of the precautionary approach, as it was developed primarily in the best interest of the stocks.

Dispute settlement

As noted above, a key obstacle to reform was the lack of an effective dispute settlement mechanism and the ability of Contracting Parties to unilaterally opt out of conservation and management measures by lodging an objection (Article XII of the 1979 Convention). As Parties that lodged an objection did not need to justify their decision, or

propose an alternative to the measure, this had the effect of undermining measures to rectify the poor state of the stocks. Note that the objection procedure has been used mainly in relation to TACs, quotas and effort regulations and has not been used to object to other measures such as area closures, monitoring, control and surveillance (MCS) arrangements, ecosystem approach, etc.

This obstacle has been overcome with the amendment of the objection procedure and the establishment of a new dispute settlement mechanism (although it has yet to be invoked as the amended Convention has not yet entered into force). Under Articles XIV and XV of the amended Convention, a Contracting Party is able to file an objection and must provide an explanation for the reasons for the objection and state what alternative measures it proposes to take. Either the Contracting Party or the Commission (subject to a majority vote) can refer the objection to an independent ad hoc panel. This panel will then review the objection and the alternative measure and make a recommendation to the Commission on whether the explanation provided by the Contracting Party is: well founded and, if so, whether the measure should be modified or rescinded; is not well-founded; and whether the alternative measures proposed under the objection are consistent with the objectives of the Convention. There is then a period of thirty days in which the Commission decides on the recommendation of the panel.

If any Contracting Party disagrees with the result of the objection procedure process, it then may notify of a dispute. This is heard by an independent ad hoc panel which searches for a negotiated non-binding negotiated settlement of the dispute under very tight deadlines. If no solution is found, then the dispute can move into the binding dispute settlement processes available under UNCLOS and UNFSA.

Recognition of the need to develop a new dispute settlement mechanism dates back, at least officially, to 1996 with the establishment of a Working Group on Dispute Settlement Procedures. The process by which the reform was initiated, progressed and agreed upon is instructive (Box 5.4). The key innovative feature of the new mechanism is the distinction drawn between an objection and a dispute, with clear procedures laid out for how each of these is to be dealt with. The new mechanism places an extra burden on individual parties that do not want to implement Commission decisions and uses impartial review panels and dispute settlement procedures. This preserves the sovereign rights of Contracting Parties, while ensuring that the processes for resolving objections and disputes do not undermine either the objectives or the functioning of the Convention. A common understanding of the need to address the adverse effects of the previous objection procedure, coupled with the benefits of the NEAFC experience in developing its own dispute settlement procedure (and in which several key NAFO members participated, most notably the EU, Norway, Iceland, Russia), helped to ensure that the reform was pushed through. It should also be noted that the changes to the dispute settlement provisions formed just one part, albeit an important part, of the total reform package.

Box 5.4. Building a coalition for establishing NAFO dispute settlement procedures

Discussions on establishing a new dispute settlement procedure in NAFO date back to 1996. NAFO set up a Working Group on Dispute Settlement Procedures (DSP) at the 1996 Annual Meeting. It met regularly until 2001. During the working group meetings it was mainly Canada and the EU who drove negotiations by tabling proposals and working papers; however, Denmark and Latvia were also among the more active Contracting Parties in this process.

At the working group meeting in 2001, the meeting discussed working documents tabled by the European Union delegation regarding the work on DSP by NEAFC and SEAFO. The European Union described the successful outcome of discussions that took place in NEAFC in April 2001 to develop dispute settlement procedures for that organization, based in great part on the documents of NAFO Working Group on DSP. The working group drafted a final version of the "Consolidated Text 2001" for its transfer to the General Council decision.

In 2002, the delegates exchanged their opinions on the status of the Working Group on Dispute Settlement Procedures and possible continuation of DSP discussions in the frame of a Working Group. The European Union proposed to organize consultations between Canada, the EU and the USA to identify possible avenues to achieve progress on this matter. The representatives of Canada and United States supported the EU suggestion. The other delegates noted all Contracting Parties should take active participation as DSP procedures would be very important not only for Canada, EU and USA.

The informal consultations between Canada, the EU, Latvia and the U.S. regarding the way forward for the NAFO DSP Working Group were held in April 2003. A Canadian letter of March 2003 addressed to the NAFO Secretariat was used as the discussion document for this informal meeting. Progress was made on identifying the remaining outstanding grounds for discussion.

Negotiations continued at the 2004 and 2005 Annual Meetings and, in 2005, Canada introduced a working paper that outlined proposed changes to the governance of NAFO, inspired by the Ministerial Declaration of the St. John's Conference. These changes included, among others, changes to the decision-making process and dispute settlement procedures. In the subsequent debate, Parties expressed support for the initiative to reform NAFO, and the EU and Canada subsequently tabled a joint proposal on NAFO Reform, which was adopted. It was also discussed how best to continue the work on the Dispute Settlement Procedures. The EU proposed to include this subject matter in the discussions of the Working Group for the modernization of NAFO. This was accepted by other Contracting Parties.

After two more years of negotiations, NAFO adopted the new convention in 2007, including the new provisions on the objection procedure and a dispute settlement procedure.

Source: Meeting reports from NAFO website www.nafo.int.

Institutional structure

There was also a need to improve the relatively cumbersome institutional structure which divided administrative and management functions between the Fisheries Commission and the General Council. The General Council is responsible for supervising and coordinating the organizational, administrative, financial and other internal affairs of NAFO, including the relations among its constituent bodies and external relations of the Organization. The Fisheries Commission is responsible for the management and conservation of the fishery resources of the NAFO Regulatory Area. All Contracting Parties are represented on both bodies and attendance at the meetings of each essentially works out to be the same people representing the same interests

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The revised Convention streamlines the institutional structure and brings it into line with those of other Regional Fisheries Management Organisations. The Fisheries Commission and the General Council will now be merged into a single NAFO Commission, supported by a Science Council and other subsidiary bodies. The decision-making mechanism has also been modernised. When the search for consensus is exhausted, decisions will be taken by two-thirds majority. An objection procedure has also been put in place, along with a disputes settlement mechanism in line with the UNCLOS and the UNFSA.

Divergent interests and historical distrust amongst Contracting Parties

One of the defining features of the history of fishing, the NAFO groundfish stocks has been a high level of conflict between Contracting Parties. This reflects the historically diverse interests among Contracting Parties and has been characterised by longstanding disputes over resource ownership and management, particularly between the EU (especially Spain and Portugal) and Canada as the two major historical powers within NAFO. The EU maintains a large distant water fishing fleet with a considerable fishing history in northwest Atlantic waters and has, naturally, sought to maintain fishing opportunities for these vessels. Canada, concerned about the fish stocks straddling its EEZ and the adjacent NAFO Regulatory Area, strived not only to achieve a stock management in NAFO that is consistent with its own policy and conservation and management measures, but also to meet the expectations of its domestic fishing industry.

This historical hangover was a considerable obstacle to overcome in the push for reform within NAFO. However, reaching agreement on the new Convention demonstrates that, while some tensions inevitably remain, the key Contracting Parties have found sufficient common ground to build trust and to push through reforms. Several factors have contributed to this. First, it was clear that for the groundfish stocks to be successfully rebuilt, NAFO would have to function effectively. The economic imperative to fix the stock situation, combined with international legal obligations and strong historical attachment to fishing in the region by key Contracting Parties, brought countries together to hammer out a cooperative solution to the problem.

Second, two key players in NAFO, the EU and Canada, had (and continue to have) domestic political economy agendas that they needed to manage. They both used the NAFO reform processes, and the support provided by other Contracting Parties to achieve the NAFO reforms, to help address these domestic issues.

Third, reform within the EU's Common Fisheries Policy to address overcapacity and strengthen monitoring and enforcement of its Member countries' fleets helped to improve the credibility of the EU position within NAFO negotiations.

Finally, both the EU and Canada put considerable effort into reinforcing the level of trust and cooperation between the two delegations, especially through the use of bilateral and multilateral meetings. Particularly during the two year NAFO reform process, Canada and the EU held frequent bilateral talks to supplement talks with all Contracting Parties in order to achieve agreement on key aspects of the reforms at the earliest stage possible, a technique which successfully prevented serious conflict when it came to the annual meetings and working group discussions. The process of building trust and credibility within the organisation should not be underestimated as a significant contributing factor to the eventual reform of NAFO.

Data coverage

Effective fisheries management in RFMOs depends crucially on a high degree of cooperation from Contracting Parties with respect to the availability and quality of data. Due to insufficient data submitted by Contracting Parties, it had long been difficult for the NAFO Scientific Council to carry out thorough assessments of the NAFO-managed fisheries resources. A lot has been done in the past years, such as the introduction of the VMS in 2001 and the annual review and update of the *NAFO Conservation and Enforcement Measures* (NCEM), which oblige Contracting Parties to record and report catch, stowage and fishing effort (by flag states). However, Contracting Parties comply with their obligation to submit data these provisions to a varying extent. While NAFO now receives relatively complete fishery statistical data in a fairly timely manner, it has been noted that the data collection process and data quality could still be improved. The reliability of statistical data was questioned by the Scientific Council in 2004, which recommended in 2005 that all Contracting Parties take measures to improve the accuracy of their catch estimates (NAFO 2007).

Sustaining reform in NAFO

Allocation criteria and new Members

One of the main pending issues is the fact that NAFO has still not established any quota allocation criteria. Allocations are therefore primarily based more on politics and history. Efforts in the past to establish allocation criteria applicable to all present and future NAFO managed stocks were not successful.

In 1997, NAFO formed a "Working Group on Allocation of Fishing Rights to the Contracting Parties of NAFO", which was to focus on a broad range of issues, including the following:

- considering the adoption of a broad strategy to guide expectations of future new members with regard to fishing opportunities in the Regulatory Area;
- the development of a broad strategy to allocate future fishing opportunities for stocks not currently allocated; and
- exploring in connection with stocks under TACs possible margins to accommodate requests for fishing opportunities (NOAA Fisheries 2005).

The working group's main outcome was a "Draft Resolution to Guide the Expectations of Future New Members with Regard to Fishing Opportunities in the NAFO Regulatory Area", which was adopted at the 1999 NAFO annual meeting (NAFO 1999). The resolution stipulates among others that "any new members should be aware that presently and for the foreseeable future, stocks managed by NAFO are fully allocated, and fishing opportunities for new members are likely to be limited, for instance, to new fisheries (stocks not currently allocated by TAC/quota or effort control), and the "Others" category under the NAFO Quota Allocation Table".

In the following years, the working group did not reconvene until it was (re-)established in 2002 in order to continue its work in 2003. At its 2003 meeting, the working group focused on the question whether NAFO should develop a comprehensive list of allocation criteria that would be applicable in all situations, similar to the principles previously adopted by the International Commission for the Conservation of Atlantic

Tunas (NOAA Fisheries, 2005). The working group chose not to do so, instead developing a list of four allocation criteria applicable only to stocks that are not now, and never have been, allocated by NAFO:

- historical fishing in accordance with NAFO rules;
- contribution to research and data collection on the stock concerned;
- needs of coastal communities which are dependent on fishing for the stock concerned; and
- contribution to the NAFO Conservation and Enforcement Measures. (NAFO 2003b).

Moreover, the working group agreed only to give a status report back to the Fisheries Commission, indicating the work that was done. It did not recommend adoption of that work or any next steps to be taken, although the Fisheries Commission did adopt the status report. One contracting party (United States) pointed out that it was disappointed that progress had not been made to achieve guidelines more broadly applicable to stocks in the Regulatory Area (NAFO 2003a). Although the working group decided to reconvene to discuss outstanding issues, it never did so; since 2003, the Fisheries Commission has not called for any further meetings of the working group.[2]

The issue of allocation has not played a significant role in the reform discussions to date. Nor has there been a long queue of countries wishing to join NAFO. Other concerns have tended to dominate the debate (such as Contracting Parties' adherence to conservation and management measures, IUU fishing, etc). As a result, the quota allocations between Parties are now relatively fixed, even if the basis for the existing allocation was decided a long time ago, and the door has been effectively closed to potential new members.[3]

However, it will be a test of the time consistency of the new NAFO arrangements if they can withstand future conflicts over resource allocation.

Transparency

The use of bilateral negotiations and closed "Heads of Delegation" meetings are an essential tool in resolving conflicts within any RFMO, and they have proved to be effective in helping to drive forward on reform. Indeed, the frequency of Heads of Delegation meetings has increased in NAFO in recent years. While this may be understandable during the difficult negotiations over reforms, such a tactic may be less justifiable in the post-reform phase. Hence, some balance is required in the use of such modalities over time. NAFO Contracting Parties might become subject to criticism of not complying with the new decision-making procedures and thus undermining the common efforts to achieve more transparency in RFMO decision-making. For the purpose of achieving efficiency as well as transparency, there is an obvious need to maintain flexibility in negotiating.

"Package deals"

Another issue that has arisen in NAFO (as well as in other RFMOs) is the negotiation of package deals on allocations and measures between Contracting Parties. These are generally concluded behind closed doors and so suffer from a lack of transparency. They might involve, for example, agreement between two Parties to trade-off support on a particular allocation issue by one Party for support on a conservation measure by the

other Party. Establishing a negotiated connection between allocations and conservation decisions can undermine efforts to ensure sustainable management and conservation of the NAFO fisheries resources. While packaging of positions is perhaps a natural means of tackling negotiations, there are issues of transparency and sustainability at stake. Attempts should be made to clearly delineate decisions on allocation from decisions relating to policies on conservation and management measures. Careful use of the objection procedure and dispute settlement mechanism should assist in trying to break such a nexus.

Adequate resourcing of the Secretariat

The NAFO Secretariat currently operates with a CAD 1.5 million budget. However, the responsibilities and functions of the Secretariat are increasing in line with the modernising of the organisation. The Secretariat is likely to have a greater role in managing dispute panels and timelines, management, research and enforcement, the application of an ecosystem approach, reducing and mitigating bycatch, and so on. Ensuring that the Secretariat is adequately resourced will be essential if the reforms are to be implemented and followed through. Finding mechanisms to spread and reduce costs will assist in ensuring that the reforms are sustained over time.

Key lessons learned

NAFO has undergone significant reform in recent years. The adoption of the amended Convention in September 2007 was rightly hailed as a major breakthrough, but the reform process had actually been underway for at least a decade. The momentum and support for reform gradually built up over this period, aided by a convergence of external and internal factors that helped to create the conditions for reform. However, it is far too early to assess the impact of the reform process on the sustainability of the NAFO fisheries resources and the profitability of the fleets that fish the stocks. Indeed, the amended Convention is yet to be ratified by the Contracting Parties and numerous challenges still remain (*e.g.* rebuilding moratoria stocks, reducing and mitigating bycatch of stocks under moratoria, improving Contracting Parties' compliance, etc). Nevertheless, it is useful to review the key lessons that have been learned from the NAFO reform experience.

Power of external drivers

The NAFO experience provides a very good demonstration of the potentially powerful influence of external driving forces in helping build a consensus and coalition for reform, especially in the face of difficult domestic agendas. The UNFSA and the St John's Conference provided substantial political impetus at the start and towards the end of the reform process. The St John's Conference in particular reinforced a high level political commitment to reforming RFMOs in general. The St John's Conference also served a domestic political function in Canada to try and generate support for large-scale fundamental reforms of NAFO and to bring the Canadian industry and key electorates into the coalition for reform.

Leadership, trust and credibility

A critical element in pushing for reform has been the development of increased levels of trust and credibility between Contracting Parties. In particular, the historical protagonists, Canada and the EU have managed to work through many of their differences and have formed a partnership in pushing the reform agenda. The extensive use of bilateral meetings has helped to resolve differences and reach common ground within the broader membership. Processes to understand the domestic circumstances of the other Parties can smooth the path to agreement within the organization. It has also provided the opportunity for particular countries to take leadership roles on policy changes within NAFO.

Building trust and credibility is helped by finding common ground amongst Contracting Parties. In the case of NAFO, this is helped by the fact that the bulk of the membership has broadly similar economic and cultural profiles (although the membership is less homogeneous than in the case of NEAFC). While there are divergent historical and cultural backgrounds, there remains an economic imperative which provides a uniting impetus for change.

Compliance is a prerequisite for change

A further essential element in building trust and credibility in the NAFO institution has been the effective enforcement of the conservation and management measures. This refers to both IUU fishing and fishing by Contracting Party fleets. Without effective enforcement, there is little incentive for Parties to meaningfully engage in any debate over reforms to the organisation or, indeed, in the more routine development of conservation and management measures. NAFO took early steps to strengthen the monitoring and control of the Regulatory Area. The introduction of 100% observer coverage in 1998 and compulsory vessel monitoring systems in 2001 have been backed up by port state and flag state measures. There are now obligatory port inspections and frequent at-sea inspections by licensed NAFO inspectors (under the joint inspection scheme, with most inspectors coming from Canada and the EU). IUU fishing is no longer a problem in NAFO.

However, work is still required to ensure full compliance by all vessels and by all Contracting Parties. It is virtually impossible to completely eliminate fraudulent behaviour by individual vessels and the fact that 4-6% of at-sea inspections uncover infringements and result in citations can be regarded as a good outcome. However, there is no benchmarking across RFMOs to determine what a "satisfactory" compliance rate might be. There may be room for improvement in terms of increasing penalties for infringements and tighter flag state controls. Further efforts to improve compliance by Contracting Parties (for example, timely reports on observer reports, follow-up actions on penalties, inspections, VMS hails, etc.) will also help to build on the trust between Parties and facilitate responsiveness to future reform challenges.

Innovative objection and dispute settlement mechanisms

It is necessary to also have clear rules and process to complement and support the improved monitoring and control mechanisms. It is also essential to allow countries to maintain sovereignty within the processes while not undermining the objectives of the Convention. In amending the existing objection procedure and developing a well-structured dispute settlement mechanism, NAFO has created a collective responsibility

amongst the membership to properly manage objections and disputes. The key innovation is the distinction between objections and disputes which provides a clear, comprehensive and structured mechanism for resolving issues at multiple points in the timeline. Even if the mechanisms are rarely used, they still provide Contracting Parties with the assurance of knowing that potential grievances can be fairly heard and assessed. In addition, the amended objection procedure places the onus on the objecting member to provide reasons for its non-acceptance of a NAFO decision, and to propose alternative measures. This changes the previous practice where the right of a member to object was not qualified, and which lead to significant opting out of conservation and management measures.

Dissemination of best practices

The reform process within NAFO benefited from the experiences of NEAFC, which had also been undergoing changes to modernize its operations. This is facilitated by the fact that about half the Contracting Parties of NAFO are also members of NEAFC, so the potential for cross-fertilisation of ideas, measures and processes is significant. The mutual recognition of the NAFO and NEAFC IUU-vessel lists and the shared model for dispute settlement are good examples of such synergies. To a large extent the dissemination of best practice principles amongst RFMOs will be facilitated by such cross-fertilisation. However, this does require that higher standards are being diffused, rather than lower standards.

One of the potential problems in this regard that needs to be addressed more generally than just in NAFO is the extent to which Contracting Parties have ratified the key international legal instruments such as UNCLOS and the UNFSA that provide a basis for clear rules and processes in the improvement of RFMOs. Of the NAFO Contracting Parties, only Cuba has not ratified the UNFSA, while Cuba, Iceland, Russia and the Ukraine have not ratified the FAO Compliance Agreement. The United States has not ratified UNCLOS.

Allocation not necessarily an obstacle to reform

As was the case in NEAFC, is instructive that the lack of agreement on fully addressing the quota allocation issue has not stymied reform efforts within NAFO. There appears to have been an implicit agreement to not tackle this issue during the reform process, and recent efforts have been dealt with on a bilateral basis. In addition, it may not be an issue at the present time due to the large number of stocks continuing under moratoria and the fact that all commercial stocks are fully allocated. While pushing the issue to the future, thereby potentially storing up the problem, it has been possible to undertake significant reform. This underscores the point made by Lodge *et al.* (2007) that there is significant scope for improving the structure and functioning of RFMOs without necessarily changing fundamental paradigms.

Streamlining and gaining clarity in decision making

Finally, the NAFO experience demonstrates the potential for streamlining the institutional structure of the organisation and providing greater transparency in decision making. Merging the Fisheries Commission and the General Council into a single NAFO Commission will reduce the transactions costs of taking decisions within NAFO. The shift to a consensus-based voting rule, combined with the new objection and dispute settlement provisions and the two-thirds majority voting rule for when consensus cannot

be reached, recognises that the previous majority voting process was not always conducive to the development of sound conservation and management measures. The push for consensus improves the prospects for buy-in from parties on measures, while putting the onus on any dissenting parties to clearly articulate the grounds for objection and proposed alternatives. While the new structure is yet to be tested, it radically improves the clarity in the agreed rules governing decision making and is a significant evolution in the thinking on effective decision making within RFMOs in general. The availability of an agreed, independent, well-structured grievance mechanism is crucial to facilitate greater acceptance of outcomes of objections and disputes.

Notes

1. It is worth recalling that the NAFO Regulatory Area is only a fraction of Convention Area with the EEZs within the NW Atlantic (USA, Canada, Greenland, France) making up the bulk of the area. Also, catches in the NAFO regulatory Area account for less than 10% of total catches in the NAFO Convention Area. While most of the biomass of the straddling stocks occur in continental shelves within EEZs, overfishing and non-compliance in the NAFO Regulatory Area has detrimental effects on these stocks.

2. However, the criteria are viewed as reflecting NAFO's intent when negotiating allocations. Since 2003, they played some role in the allocations of the following five additional stocks: redfish in 3M; redfish in 2/1F/3K; white hake in 3NO (new species); skates in 3LNO (new species); and shrimp in 3NO. In April 2008, quotas will be allocated for 3M shrimp (which is currently managed under effort allocation) and the allocation criteria will play a role.

3. ICNAF (NAFO's predecessor and the first RFMO to establish TACs and quotas) discussed and finally adopted allocation criteria. However, the actual allocation of quotas (presumably based on the criteria established) took place behind closed doors and ICNAF decided not to have an official record of the discussion process, so these are, in fact, lost. The ICNAF allocation criteria were not much different from the ones established by NAFO considering the changes in fisheries management between 1970 and 2000.

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Chapter 6

Strengthening RFMOs: key insights from the case studies

The analysis in this study highlights the challenges that RFMOs face in strengthening and modernising their structure and operations. Each RFMO is imbued with a different set of historical, cultural, social, environmental and economic circumstances that strongly influences the viability, stability and success of reform. Issues such as lack of political will, disparate national agendas, divergent economic priorities, different time horizons, and scientific uncertainty combine to hamper the ability of coalitions for change from developing and pushing through improved methods of operation. In recent years, however, a number of RFMOs have been moving forward to strengthen their organisations, with varying degrees of success in terms of ensuring stable cooperative agreements and improved management of fisheries resources.

The two tuna RFMOs in this study face different challenges to the two North Atlantic RFMOs. The fundamental difference lies in the membership of the RFMOs: tuna RFMOs are characterised by a larger number of distant water fishing nations within their memberships and with a growing interest from developing countries, while the North Atlantic RFMOs are dominated by developed coastal states. This key distinguishing characteristic is reflected in the approaches to, and success of, change across the RFMOs.

The two tuna RFMOs examined in the study, the CCSBT and ICCAT, have undertaken difficult changes which have had mixed results in terms of improving the sustainability of the resource stocks under their control. The CCSBT case study focuses on the expansion of the membership to include new countries and a Cooperating Non-Member. While the expansion was successfully achieved, this came at the cost of avoiding the resolution of issues such as reforming the TAC and allocation mechanisms.

In ICCAT, there have been a large number of Recommendations addressing specific issues. Although the Recommendations have been successful in improving the operations and outcomes of ICCAT in some cases (such as rebuilding plans for swordfish and marlin), the obstacles to undertaking more extensive changes have proven difficult to overcome. In particular, the political will to implement agreed conservation and management measures has, until recently, been inconsistent across Member countries. The diverse interests of the large membership in ICCAT have also been a major challenge. This is compounded by the lack of an agreed objection procedure and dispute resolution mechanism, making it difficult to generate momentum for further changes within the membership of ICCAT.

In contrast, the two North Atlantic RFMOs examined in the study, NEAFC and NAFO have undertaken more wide-ranging changes. In both these RFMOs, the process of change was made significantly easier by having a relatively small, homogeneous

membership, with considerable overlap of major fishing countries which facilitated cross-fertilisation of best practices. The changes in NEAFC were undertaken relatively speedily as there was a high degree of commitment by members to the changes. While issues still remain, the institutional structure is now much more likely to handle disputes without de-stabilising the organisation.

The rewriting of the NAFO Convention represents, arguably, the most far-reaching of all recent RFMO experiences. It is too early to assess the outcomes of the NAFO reforms, in terms of impacts on stocks, profitability and stability of the agreement, as the Convention amendments have yet to enter into force. However, the sweeping changes to the Convention incorporating many best practice mechanisms provide a strong foundation for moving towards improved resource and economic sustainability. It was, however, a long reform process and overcoming the obstacles to reforming NAFO required considerable efforts by members to generate the economic and political conditions for reform, in particular with respect to developing trust and credibility amongst member countries.

While the case studies highlight the range of experiences across the selected RFMOs, they also reveal strong recurring themes. These relate to the drivers for change, which strongly influence the political will to seek and embrace change, and to ways in which RFMOs can help to create economic and political conditions that are more conducive to change. It is clear that there are some basic features of RFMO institutional arrangements that make it easier for initiatives to strengthen RFMOs to take hold and flourish, and that these are common across RFMOs irrespective of their composition and species coverage.

Drivers for change

The power of external drivers

The power of external drivers to generate political pressure and will for attacking difficult challenges should not be under-estimated. The adoption of the UNFSA has been perhaps the major external driving force for efforts to strengthen and modernise RFMOs, and was particularly demonstrated in the push for the changes undertaken in NEAFC and NAFO. The UNFSA provides a common basis of principles for RFMOs from which to move forward on change, as well as providing a legal imperative for members to take action to modernise RFMOs. However, there is clearly a need for more countries to sign up to the UNFSA as, without this common frame of reference, it is difficult to get countries to agree on and comply with the rules and processes governing change or the goals of change. The fact that the majority of ICCAT members have not ratified the UNFSA illustrates this issue.

Other external drivers may also be significant in generating political will for change. For example, the 2005 St John's Conference provided a timely boost to the political importance attached to RFMO reform. This was effectively translated into action in the rewriting of the NAFO Convention in the two years following the Conference. The 2007 meeting of tuna RFMOs may also prove to have been a pivotal event in the strengthening of such RFMOs, although that particular meeting did not have as high a level of political commitment as might be derived from Ministerial-level attendance.

Public scrutiny of RFMO performance and failings through the network of environmental NGOs has also proved to be a powerful motivating force for change. While such ENGO campaigns may not always be directed at the most urgent or pressing

problems in particular RFMOs, they have tremendous power to raise the political stakes as the glare of publicity is shone on RFMOs. The most recent example of a WWF campaign for the eastern Atlantic bluefin tuna fishery is an example of pressure that may contribute to the push for strengthening ICCAT compliance.

Economic crisis, rather than resource crisis, drives change

It is clear that a resource crisis is not necessarily sufficient to generate consensus for change within RFMOs. The existence of overfished or depleted resource stocks did not lead to significant reform attempts in any of the case studies. Short-term fixes were sometimes put in place, but these do not generally provide lasting solutions to resource management problems. This is evident in the cases of ICCAT and CCSBT where specific stocks have been under threat for some years, but the underlying causes have not been fully addressed. In the case of NAFO, a large number of stocks were under moratoria for many years (as a result of a complex array of factors) before major reform was implemented.

In general, it is only when resource crises begin to affect the economic profitability and viability of member countries' fishing fleets that efforts to undertake change began to take shape. By this stage, however, much greater efforts to rebuild stocks are required, highlighting the potentially high economic costs of delaying action. Getting around this delayed reaction to resource crises is problematic due to the domestic political cost of potentially reducing fishing opportunities or addressing the domestic distribution of quotas, and none of the RFMOs examined (or, indeed, other RFMOs) has successfully found ways to address this. A stronger understanding of the costs of delaying action can help stakeholders to overcome reform inertia. This inevitably requires a stronger focus on the economic consequences of RFMO activities and policies, as well as of domestic policies that impact on RFMOs (such as subsidies and excess capacity), than is currently the case.

The use of well-defined, agreed management rules incorporating precautionary reference points can help to manage resource crises earlier than they otherwise might be, thereby reducing the economic costs of delayed action. However, the process of introducing such management measures in CCSBT and ICCAT has foundered on the inability of countries to agree on some basic reforms to scientific advice and dispute resolution procedures (although the CCSBT is investigating such management rules). This is a classic chicken and egg problem that may well mean that an economic crisis is perhaps inevitable to prompt initial reform efforts which, once undertaken, reduce the likelihood and severity of future economic crises.

Leadership matters

Successful reform requires strong leadership on the part of countries, individuals and coalitions of countries. Critical motivation for leadership on reform efforts and strong management measures arises from the fact that historically dominant countries tend to be economically worse-off under ineffective multilateral management. The St John's Conference provided broad political leadership at a critical juncture in the general RFMO reform process, and that of NAFO in particular. In the NEAFC reforms, individual countries championed specific reform measures while, in the CCSBT, Japan played a key role in bringing Korea into the membership.

A particular leadership challenge lies in incorporating new members into the reform process itself, as well as addressing their aspirations with respect to sharing the benefits of RFMO membership. Increasing the involvement of new members in the executive functions of RFMOs can help to instil a sense of inclusiveness that may reduce resistance to reforms. The case of ICCAT demonstrates how difficult it can be for clear leadership to emerge when the interests of the parties are so diverse and when the historically dominant countries are not sufficiently dominant to be able to bring other members along with major reform initiatives. The US, for example, has repeatedly expressed frustration at the slow pace of change within ICCAT and the reluctance of the membership to address pressing problems. Similar concern was expressed by the European Commission which has recently taken steps to improve the control of EU fleets fishing for Mediterranean bluefin tuna following several years of overfishing by EU fleets.

External performance reviews

The use of performance reviews for RFMOs has shown to be a powerful external tool for identifying possible directions for change and reinforcing the incentives to undertake change. The response to the NEAFC review has been positive while the ICCAT review provided a robust assessment of the performance of ICCAT. It is important that performance reviews be undertaken in an independent and transparent manner in order to ensure credibility both inside and outside the RFMO.

Within the context of performance reviews more generally, there may be scope for adopting regular reviews of RFMOs. This would recognise the dynamic nature of the political, economic, social and environmental context within which RFMOs operate. Regular reviews of performance, structure, operations, etc. would point to areas of improvement and avoid RFMOs from becoming locked into arrangements, thereby improving the prospects for future changes to respond to issues in a timely manner and reducing the costs of delaying action.

Demonstration effect and dissemination of best practices

A strong external influence on the push for and acceptance of change is the demonstration effect. Learning from successful experiences of RFMOs is a potentially useful mechanism for considering best practices across RFMOs. The benefits of such experience sharing were well-illustrated by the cases of NAFO and NEAFC. However, as was noted in the introduction, only 19 countries or economies belong to four or more RFMOs, meaning that there are many more countries (more than 80% of all RFMO members) with only limited exposure to multiple RFMOs. The task of disseminating best practice ideas therefore often falls to a relatively small handful of countries, most of whom are OECD countries. As was shown in the case of ICCAT in particular (but is also more generally applicable), this can create significant tension when there are diverse interests within an RFMO.

Creating the conditions for change

Ratification of legal instruments

The ratification of the basic legal instruments governing high seas fisheries, including the UNFSA and the FAO Compliance Agreement, by all RFMO members creates a common starting point for efforts to strengthen and modernise RFMOs. Agreement on the

basic rules and objectives within the membership of an RFMO is an essential ingredient for successful change to take place. Modernising the structure and operations of RFMOs to incorporate requirements such as the precautionary approach and ecosystem approaches to management will be difficult without agreement on basic principles from all members (and potential members). However, the experience of the CCSBT indicates that such agreement is a necessary, but not sufficient, condition for change to take place. All CCSBT Members have ratified the relevant international instruments and have moved forward on some issues, but further challenges remain.

Building trust and credibility

Commitment by participating countries to modernise RFMOs requires a high level of trust between member countries and credibility to countries' positions and commitments. Where this is lacking, no amount of leadership or legal imperative will be sufficient to get change underway, let alone be successfully undertaken.

Achieving trust and credibility can be challenging and may require fundamental relationship building between members of RFMOs. In NAFO, decades of historical dispute between members hampered reform for many years, until the economic and political costs of delaying action clearly showed that mutual gains could be achieved improving way in which NAFO functioned. There followed from this realisation a process of developing an improved understanding of the political and economic positions of the Contracting Parties and enabled a shared vision to be formulated and a strategy for reform to be agreed and enacted.

Agreeing on a dispute settlement mechanism is central to successful change

An essential ingredient in developing trust and credibility is agreement on a clear, well-structured dispute settlement mechanism. Negotiations need to be undertaken with the institutional support of clear process and rules for working through problems and issues, with little or no scope for opting out without consequence (i.e. proposing alternative measures the merits of which are independently assessed). NEAFC and NAFO both have developed highly regarded objection and dispute mechanisms that protect countries' sovereignty, but also provide a means of protecting the stock and meeting the RFMOs' objectives. In contrast, ICCAT has yet to develop a dispute settlement mechanism and this deficiency is reflected in the ease with which countries can, and do, opt out of inconvenient conservation and management measures.

Agreement on and adherence to scientific advice is critical

Agreement on, and adherence to, scientific advice is critical for efforts to generate the political and economic conditions for change. Agreement is needed on processes for developing credible, transparent and independent scientific advice, and this is linked to the need for a dispute resolution mechanism and to building trust and credibility between members. There may be a role for independent review of science assessments and some RFMOs (such as the CCSBT) have instituted such mechanisms.

Reduce IUU fishing

Removing external pressures on the resource stocks and increasing economic viability by controlling IUU fishing allows Contracting Parties to focus on addressing internal priorities for change. The use of port state measures, flag state controls, catch document schemes have been shown as being very effective in largely eliminating IUU fishing in some RFMOs. This provides the space for countries to focus on improving the economic viability of the fishery, knowing that any changes will, in all likelihood, improve the economic outcomes for their fleets.

Fix domestic overcapacity

Similarly, addressing domestic overcapacity problems may reduce some of the domestic political pressures that influence national positions in RFMO discussions. This would help to alter the nature of the economic imperatives driving countries' positions in RFMO negotiations from a focus on protecting or gaining short term advantages to a longer term focus on resource and economic sustainability. It also reduces the incentives for non-compliance by member countries' fleets as they are no longer driven by the need to cover operating costs in the short term. The abolition of subsidies that contribute to overcapacity and overfishing is necessary.

Ensuring compliance by Contracting Parties

Ensuring that all Contracting Parties comply with existing RFMO rules and recommendations is required to help create conditions of trust and credibility within the organisation to enable any further changes that may be required to take place. Failure to do so means that the potential benefits from future changes may be dissipated, reducing the incentives for Contracting Parties to join coalitions for change and push for improvements in the operations of the RFMOs. The review of ICCAT is particularly salient in this respect.

Addressing the allocation issue

The RFMOs examined in this study have not fully addressed the allocation issue. NAFO and NEAFC have deferred consideration of the problem for the time being and it does not appear to be on the agenda in the foreseeable future. ICCAT and CCSBT have dealt with the issue by merely increasing the TAC to accommodate new members (in the case of the CCSBT) or by countries opting out of allocation restrictions (in the case of ICCAT). In all these cases, this may have adverse effects on some resource stocks in the future. The political difficulty of tackling the allocation issue goes to the heart of international oceans law, sovereignty, the sharing of the commons, and so on, and cannot be underestimated. Indeed, "benefits sharing" is a particular issue in tuna RFMOs such as ICCAT, IOTC and IATTC due to the predominance of distant water fishing nations in the RFMO and the growing number of developing countries in these RFMOs.

But the case studies demonstrate that change can take place even when allocation disputes hang in the balance. For example, both NEAFC and NAFO have successfully undertaken extensive reform while avoiding the resolution of the allocation issue. The need to address the allocation issue should therefore not be used as grounds for deferring action on other substantive reforms, even large-scale changes to the RFMO structure and operations.

More generally, there is scope to explore innovative approaches to allocation. For example, it was demonstrated in the case of the CCSBT that a shift to proportional allocation could prevent the kind of over-allocation of resources that has marked the recent expansion in the membership. To a large extent, separating the conservation decision (i.e. setting the TAC) from the allocation decision (i.e. sharing the TAC) can reduce the influence of short-term political priorities on annual quota negotiations that are currently a feature of many RFMOs.

Avoid "package deals" within and across RFMOs

It is a truism that all international negotiations (not just in RFMOs) entail a delicate balancing of interests and outcomes and that there is an element of tradeoffs between parties to the negotiations in order to arrive at a mutually beneficial agreement. However, the prospects for strengthening the governance of high seas fisheries can be hampered by the packaging of deals both within and across RFMOs. For example, a clear distinction is required in negotiations between scientifically-based decisions on TACs and conservation and management measures on the one hand, and decisions regarding allocations and policy measures (such as dispute settlement mechanisms, port state controls, etc) on the other hand. Seeking tradeoffs between these two areas may be detrimental to sustainability.

Flexible and innovative solutions

Finally, there is scope for RFMOs to look for flexible and innovative solutions in order to overcome obstacles to change. Within the broad parameters of the UNFSA and the best practice principles elaborated in other fora, members should explore mechanisms that create the policy space for individual countries to "buy-in" to reform efforts. Examples include the treatment of non-members through innovative membership arrangements (such as the CCSBT Extended Commission), and the potential for market-based solutions such as tradable rights.

Key messages

The study highlights the fact that changes to strengthen RFMOs have been underway for some time and that there are significant success stories. The study also illustrates that change is feasible under a wide range of circumstances, with the pace of change depending on the characteristics of particular RFMOs. It also highlights the dynamic, long-term nature of efforts to strengthen RFMOs and, although there is no one recipe for this process, the study emphasises the importance of ensuring that the fundamental building blocks are in place to help create and maintain the economic and political momentum for change. In particular, altering the underlying economic incentives may help to ensure that the interests of member countries might be better aligned, allowing coalitions for change to develop within the membership.

The costs of delaying action on strengthening RFMOs can be significant in terms of both adverse impacts on stocks and reduced profitability. The case studies demonstrate that incremental progress within a particular RFMO, and demonstrated in other RFMOs, can be very effective in building the case for driving change within an RFMO. Moreover, the case studies demonstrate that this can take place even when some key issues remain unresolved. For example, the issue of allocation of resources between Contracting Parties

(and potential new members) is generally under constant discussion in many RFMOs and often involves effectively pushing the problem off into the future with potentially adverse effects on resource stocks and profitability. Yet, in many cases, this has not deferred action on other substantive changes to the RFMOs.

Moves to strengthen RFMOs should also be viewed as a package, with many interlocking parts that help to mutually reinforce changes to rules, structures and operations. For example, the use of port state measures, flag state controls, mutual recognition of vessel lists, statistical documentation or catch documentation schemes, dispute resolution mechanisms, and so on all work together to improve the effectiveness of RFMOs. A piecemeal approach to change in RFMOs may have the advantage of making it easier for countries to reach agreement on specific issues and may pave the way for more substantial reforms. They can also provide a prelude to more substantial changes that may be required: it gets countries accustomed to the idea of change; it can build trust in the process and outcomes of change; and it can demonstrate the potential and actual benefits of change. However, there are risks with such an approach due to possible reform fatigue, a possible lack of strategic direction, and stock collapse in the interim. Therefore, a strategic vision for the direction and endpoints of change within an RFMO (and even across RFMOs) is essential. Such a vision has been defined by the UNFSA principles and has been elaborated upon by the extensive work on a model RFMO and on best practice guidelines. Getting agreement on the goals for strengthening RFMOs has not been that difficult; overcoming the obstacles to change is the real challenge.

Annex

Membership of the ten main high seas RFMOs and ratification of key instruments

The following table provides information on the membership of the ten main high seas RFMOs by individual countries together with information on each country's ratification of UNCLOS, the UNFSA and the FAO Compliance Agreement. The table was prepared by Frank Meere, Sustainable Fisheries Management Ltd, Australia.

Annex Table 1. Membership of the ten main high seas RFMOs and ratification of key instruments

Country	UNCLOS	UNFSA	FAOCA	CCA MLR	CCSBT	GFCM	IATTC	ICCAT	IOTC	NAFO	NEAFC	SEAFO	WCPFC	Total
Albania	Y	N	Y			M								1
Algeria	Y	N	N			M		M						2
Angola	Y	N	Y					M				M		2
Argentina	Y	N	Y	M										1
Australia	Y	Y	Y	M	M				M				M	4
Barbados	Y	Y	Y					M						1
Belgium	Y	Y	Y	M										1
Belize	Y	Y	Y				CNM	M						1/1
Brazil	Y	Y	N	M				M						2
Bulgaria	Y	Y	N	CNM		M								1/1
Canada	Y	Y	Y	CNM			CNM	M		M			M	3/2
Cap Verde	Y	N	Y					M						1
Chile	Y	N	Y	M										1
China	Y	N	N	CNM			CNM	M	M				M	3/2
Comoros	Y	N	N						M					1
Cook Islands	Y	Y	Y	CNM			CNM						M	1/2
Costa Rica	Y	Y	N				M							1
Côte d'Ivoire	Y	N	N					M						1
Croatia	Y	N	N					M						1
Cuba	Y	N	N							M				1
Cyprus* **	Y	Y	Y			M								1
Denmark (Faroe Is and Greenland)	Y	Y	EC?							M	M			2
Ecuador	N	N	N				M							1
Egypt	Y	N	Y			M								1
El Salvador	N	N	N				M							1
Equatorial Guinea	Y	N	N					M						1
Eritrea	N	N	N						M					1
E.C.	Y	Y	Y	M	CNM	M	CNM	M	M	M	M	M	M	8/2
Federated States of Micronesia	Y	Y	N										M	1
Fiji	Y	Y	N										M	1

Country	UNCLOS	UNFSA	FAOCA	CCA MLR	CCSBT	GFCM	IATTC	ICCAT	IOTC	NAFO	NEAFC	SEAFO	WCPFC	Total
Finland	Y	Y	Y	CNM										0/1
France	Y	Y	Y	M		M	M	M	M	M			M	4
Gabon	Y	N	N					M						1
Germany	Y	Y	Y	M										1
Ghana	Y	N	Y					M						1
Greece	Y	Y	Y	CNM		M								1/1
Guatemala	Y	N	N				M	M						2
Guinea	Y	Y	N					M	M					2
Guyana	Y	N	N					CNM						0/1
Honduras	Y	N	N				CNM	M						1/1
Iceland	Y	Y	N					M		M	M			3
India	Y	Y	N	M					M					2
Indonesia	Y	N	N		(CNM?)				CNM				M	1/2
Iran	N	Y	N						M					1
Israel	N	N	N			M								1
Italy	Y	Y	Y	M		M								2
Japan	Y	Y	Y	M	M	M	M	M	M	M			M	8
Kenya	Y	Y	N						M					1
Kiribati	Y	Y	N										M	1
Lebanon	Y	N	N			M								1
Libya	N	N	N			M		M						2
Madagascar	Y	N	Y						M					1
Malaysia	Y	N	N						M					1
Malta	Y	Y	Y			M								1
Marshall Islands	Y	Y	N										M	1
Mauritius	Y	Y	Y	CNM					M					1/1
Mexico	Y	N	Y				M	M						2
Monaco	Y	Y	N			M								1
Morocco	N	N	Y			M		M						2
Namibia	Y	Y	Y	M				M				M		2
Nauru	Y	Y	N										M	1
Netherlands	Y	Y	Y	CNM										0/1
New Zealand	Y	Y	Y	M	M								M	3

FAOCA refers to the FAO Compliance Agreement; M refers to Member; CNM refers to Cooperating Non-Member (or equivalent); the total refers to the number of members and Cooperating Non-Members. The GFCM is not a full RFMO but is included here for completeness. *Source*: table compiled by Frank Meere (Sustainable Fisheries Management Ltd).

Country	UNCLOS	UNFSA	FAOCA	CCA MLR	CCSBT	GFCM	IATTC	ICCAT	IOTC	NAFO	NEAFC	SEAFO	WCPFC	Total
Nicaragua	Y	N	N				M	M						2
Niue	Y	Y	N										M	1
Norway	Y	Y	Y	M				M		M	M	M		5
Oman	Y	N	N						M					1
Pakistan	Y	N	N						M					1
Palau	Y	N	N										M	1
Panama	Y	N	N				M	M						2
Papua New Guinea	Y	Y	N										M	1
Peru	N	N	Y	CNM			M							1/1
Philippines	Y	N	N		CNM			M	M				M	3/1
Poland	Y	Y	Y?	M										1
Republic of Korea	Y	Y	Y	M	M		M	M	M	M			M	7
Romania	Y	N	N			M								1
Russia	Y	Y	N	M				M		M	M			4
Samoa	Y	Y	N										M	1
Sao Tome E Prinicpe	Y	N	N					M						1
Senegal	Y	Y	N					M						1
Serbia and Montenegro	Y	N	N			M								1
Seychelles	Y	Y	Y						M					1
Slovenia	Y	Y	N			M								1
Solomon Islands	Y	Y	N										M	1
South Africa	Y	Y	N	M	CNM			M	CNM					2/2
Spain	Y	Y	Y	M		M	M							3
Sri Lanka	Y	Y	N						M					1
St Vincent and the Grenadines	Y	N	N					M						1
Sudan	Y	N	N						M					1
Sweden	Y	Y	Y	M										1
Syrian Arab Republic	N	N	Y			M		M						2
Chinese Taipei	-	-	-		M		CNM	CNM					M	2/2
Thailand	N	N	N						M					1
Tonga	Y	Y	N										M	1

Trinidad /Tobago	Y	Y	N					M						1
Tunisia	Y	N	N			M		M						2
Turkey	N	N	N			M		M						2
Tuvalu	Y	N	N										M	1
Ukraine	Y	Y	N	M						M				2
United Kingdom	Y	Y	Y	M					M					2
United States	N	Y	Y	M			M	M		M			M	5
Uruguay	Y	Y	Y	M				M						2
Vanuatu	Y	N	N	CNM			M	M	M				M	4/1
Venezuela	N	N	N				M	M						2

***** *Footnote by Turkey:* The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognizes the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus" issue.

******_Footnote by all the European Union Member States of the OECD and the European Commission:_ "The Republic of Cyprus is recognized by all members of the United Nations with the exception of Turkey. The information in this document related to the area under the effective control of the government of the Republic of Cyprus."

FAOCA refers to the FAO Compliance Agreement; M refers to Member; CNM refers to Cooperating Non-Member (or equivalent); the total refers to the number of members and Cooperating Non-Members. The GFCM is not a full RFMO but is included here for completeness.

Source: Table compiled by Frank Meere (Sustainable Fisheries Management Ltd)

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Strengthening Regional Fisheries Management Organisations

With the development and entry into force of the United Nations Fish Stocks Agreement in 1995, the international community made a commitment to strengthen Regional Fisheries Management Organisations (RFMOs), established to deal with the management of shared high seas resources. This study takes stock of the changes made in RFMOs, highlighting a gradual process of improvement that has translated into significant success stories. While there is no single recipe for this process, ensuring that the fundamental building blocks are in place to help create and maintain the economic and political momentum for change is important. Altering the underlying economic incentives may help to better align the interests of member countries, allowing coalitions for change to develop within the membership. The study and its analysis is built on evidence from a range of case studies of RFMOs, most notably the Conservation of Southern Bluefin Tuna (CSBT), the International Commission for the Conservation of Atlantic Tunas (ICCAT), the Northwest Atlantic Fisheries Organisation (NAFO) and the North East Atlantic Fisheries Commission (NEAFC).

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